# Effects of communication training on veterinarians' motivational interviewing adherent and non-adherent behavior assessed by dairy herd health recordings

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## **INTRODUCTION**

As key information sources for dairy farmers, veterinarians have substantial impact on herd health management decisions. Becoming more advice-oriented, e.g., for preventive herd health procedures, is challenging, as most veterinarians have limited communication skills (CS) training. Motivational Interviewing (MI) could help develop advising skills; it promotes farmer's internal motivation to change behavior.

# **OBJECTIVE**

To examine effects of various communication education interventions on communication and motivational interviewing competencies in dairy veterinarians.

#### **MATERIALS AND METHODS**

- ▶ Twenty-eight dairy veterinarians (4 women, 24 men, 27-62 years, 3-38 years of clinical practice), enrolled in a randomized controlled trial to receive CS training interventions.
- ▶ They were allocated into 4 groups: **1)** control, no intervention; **2)** webinar, 1.5-days online webinar in a small-group; **3)** Veterinary DialogueTrainer (VDT), online training tool (**Fig. 1**); and **4)** blended, combining webinar and VDT. Pre- and post-intervention, participants audio recorded herd health management visits on dairy farms in Flanders, Belgium.
- ▶ CS and MI skills were assessed using a composite scoring system (Fig. 2), based on the Motivational Interviewing Treatment Integrity code and Calgary-Cambridge Communication Guidelines, and specifically designed for this study. A 20-minute fragment of recorded herd health visits that focused on advising farmers was assessed (MI global scores and communication behaviors).

Motivational Interviewing Behavior: Training did not seem to change global scores on Partnership, Empathy and Listening, but had a possible effect on MI adherent and MI non-adherent behavior.

Application of high-level MI skills post intervention is promising.





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# STUDY DESIGN

Phase	1	2	3	4
Control	Recording baseline	Recording	Break	Recording
Webinar	Recording baseline	Recording	Webinar	Recording
VDT	Recording baseline	Recording + VDT	Break + VDT	Recording + VDT
Blended	Recording baseline	Recording + VDT	Webinar	Recording + VDT

**FIGURE 1.** Screenshot of Veterinary DialogueTrainer (VDT), online training tool

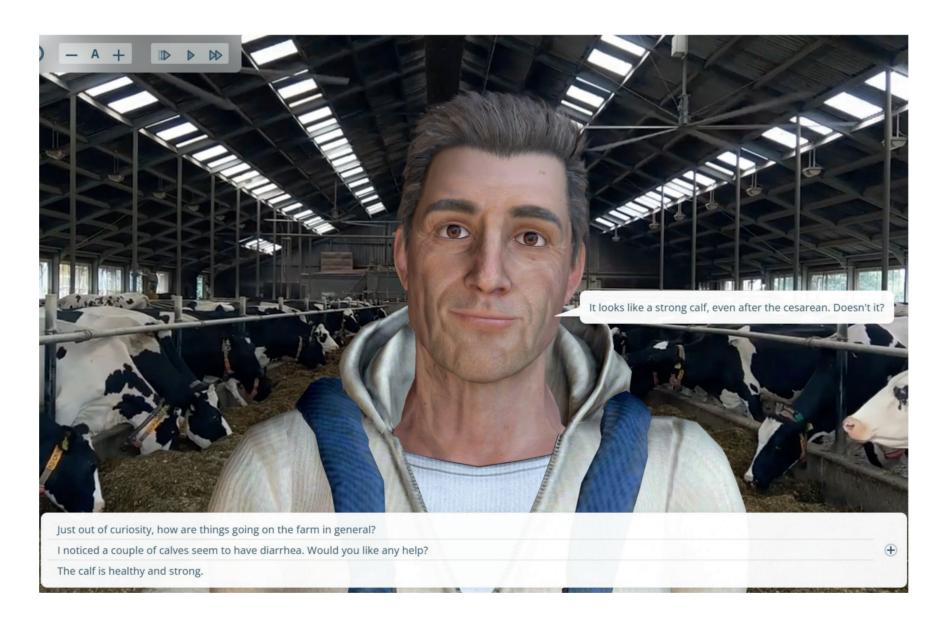


FIGURE 2. Motivational Interviewing: global scores

#### **Partnership**

Extent to which the veterinarian conveys an understanding that expertise and <u>wisdom about change</u> reside mostly <u>within</u> the farmer

#### **Empathy**

Extent to which the veterinarian <u>understands</u> or tries to grasp the <u>farmer's perspective</u> and experience

#### Listening

Extent to which the veterinarian demonstrates <u>active listening</u> skills Ordinal scale from 1 to 5, with 1 "not displaying the MI behavior at all", to 5 "exemplary MI behavior"

# **RESULTS**

- ► **Table 1:** Global scores on Partnership, Empathy and Listening were similar in the 4 groups.
- ► **Table 2 :** Groups 2 and 4 increased demonstrated MI-adherent behavior, groups 1 and 4 decreased MI non-adherent behavior, and group 2 increased MI non-adherent behavior.

#### **TABLE 1.** Results Global Scores

	Partnership		Empathy		Listening	
Intervention	Pre	Post	Pre	Post	Pre	Post
Control, n=3	2.9	3.1	3.2	3.0	3.0	3.1
Webinar, n=3	3.0	3.0	2.9	3.0	2.7	2.8
VDT, n=5	3.0	3.3	3.0	3.1	3.2	3.2
Blended, n=5	3.3	3.5	3.4	3.3	3.3	3.5

## **TABLE 2.** Results MI behavior

	MI Adherent Emphasize autonomy, Seek collaboration, Affirmation			MI Non-adherent  Persuade, Confront		
<u>Intervention</u>	Pre	Post	Δ	Pre	Post	Δ
Control, n=3	2	1.6	- 0.4	4.5	3.6	- 0.9
Webinar, n=3	0.2	3.2	+ 3.0	2.5	4	+ 1.5
VDT, n=5	1.7	1.4	- 0.3	2.3	2.4	+ 0.1
Blended, n=5	2.2	3.1	+ 0.9	3	2.2	- 0.8

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