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## It's Not About Ethical Dilemmas: A Survey of Bavarian Veterinary Officers' Opinions on Moral Challenges and an e-Learning Ethics Course

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## Abstract

The presented survey focused on moral challenges of Bavarian veterinary officers in their daily work and their expectations of an (e-learning) ethics module in their training program. The results suggest that Bavarian veterinary officers are confronted with morally challenging situations. However, they do not describe these challenges as dilemmas in which the veterinary officers do not know what the moral right choice would be. They are rather convinced to know what they should do from an ethical point of view but see difficulties with the realization as the crucial moral challenge of their profession. The participants in the study do not only expect ethics to help them to find a morally justified way of dealing with moral challenges, but also to gain a better understanding of essential conflicts. In regard to a possible e-learning course on ethics, most veterinary officers were skeptical or highly critical because, from their perspective, ethics needs personal exchange, promoting a dialogue with colleagues, and this is best possible in a classroom-based seminar. Therefore, according to the participants in the survey, if e-learning tools are used, this should only be in combination with classroom-based events.

Keywords E-learning · Moral challenges · Veterinary ethics · Veterinary officers

## Background

The job of veterinary officers has been described as an epitome of an ethically challenging profession (Weich et al. 2016; Dürnberger and Weich 2016). They regularly have to deal with decisions that incorporate moral aspects. One only needs to think of euthanasia of domestic animals, monitoring of animal welfare from stable to slaughter or culling of livestock when faced with animal disease

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outbreaks. However, there is still a lack of scientific work about how veterinary officers experience the moral challenges of their working lives. Academically, the discipline of veterinary ethics is still young. Although ethical reflection about veterinary medicine is becoming more and more established (Dürnberger et al. 2018; Springer and Grimm 2017; Weich and Grimm 2018; Magalhães-Sant'Ana and Hanlon 2016; Magalhães-Sant'Ana et al. 2014), the discipline cannot build on such a tradition as, for example, medical ethics. Furthermore, the focus, especially of empirical surveys following a descriptive approach to ethics (Scarano 2006; Lesch 2006), seems to be on veterinary practitioners and veterinary students (Clarke et al. 2017; Hartnack et al. 2016; Verrinder and Phillips 2014; Quinn et al. 2012), while veterinary officers have received comparatively little academic attention.

#### Aim

Against this background, the general aim of this survey was to provide an insight into the moral problems of veterinary officers: Do veterinary officers experience morally challenging situations in their everyday professional lives, and if so, how can these situations be described in more detail? Veterinary faculties increasingly integrate ethics courses into their degree programs; this is also true for training programs for veterinary officers (see below). However, which expectations do veterinary officers have towards the discipline of "ethics"? And finally, e-learning tools are emerging not only in the general context of ethics for veterinarians, but also particularly in training programs for veterinary officers (Dürnberger et al. 2018). E-learning (short for "electronic learning") combines learning as a "cognitive process for achieving knowledge" (Aparicio et al. 2016, 292) and a technology as "an enabler of the learning process" (ibid.) Fallon and Brown, for example, describe e-learning as "any learning, training or education that is facilitated by the use of well-known and proven computer technologies, specifically networks based on internet technology" (Fallon and Brown 2002, 4). Today, e-learning is often synonymous with online learning and understood as a process that takes place partially or entirely over the internet (cf. Sun et al. 2008). The potentials of e-learning are manifold (cf. Bora and Ahmed 2013, 10): Most prominent is the promise that it makes information available to users regardless of time restrictions and geographic proximity. Furthermore, e-learning tools can take advantage of a variety of attractive didactic tools, such as short films, graphical illustrations or interactive rating tasks, in order to present the content in an appealing, "easy-to-learn" way, thereby inviting the user to actively participate, for example via quizzes, short tests or votes. Against this background, the survey asked how veterinary officers rate possible e-learning offers concerning "ethics for veterinary officers". To sum up, the survey raised three guiding research questions: (a) Do veterinary officers experience morally challenging situations, and if so, how can these situations be described in more detail? (b) Which expectations do they have towards the discipline of "ethics"? And finally, (c) How do they rate possible e-learning offers concerning "ethics for veterinary officers"?

### Methods

The survey targeted Bavarian veterinary officers, mainly for pragmatic reasons: In 2015, the Bavarian State Office for Health and Food Safety (Landesamt für Gesundheit und Lebensmittelsicherheit) launched its redesigned training program for official veterinarians. This new course includes a mandatory module called "Professional Ethics" (Berufsethik). The author of this paper has been in charge of this module since 2015. Participants are veterinarians in the public veterinary service of Bavaria or other federal states of Germany. The participants in the survey discussed in this paper were participants in this training program. The survey covers 3 years of this course from 2016 to 2019. The survey was conducted in German. Participation in the study was voluntary and anonymous. No incentive was offered. The participants were informed about the aims of the study. The survey used a questionnaire, which was handed out in the described training program. This questionnaire presented three multiple choice questions, one open question and nine given statements requiring respondents to indicate the degree to which they agreed or disagreed on a 4-point Likert scale: (1) I totally agree, (2) I agree, (3) I disagree, (4) I totally disagree. The participants had the option to make comments on all closed and multiple choice questions. The given statements were generated on the basis of two main sources: (a) the "ethics" module of the redesigned training program, which started in July 2015 with a 11/2 day workshop with veterinary officers, discussing their moral challenges, and (b) the project 'VETHICS—Professional Ethics for Veterinary Officers', carried out between 2012 and 2015 at the Messerli Research Institute in Vienna. The ambition of this project, funded by the Austrian Ministry of Health, was to identify the wide range of ethical issues in the professional lives of veterinary officers. During the project, 81-day workshops with five to ten veterinary officers each were organized (Dürnberger et al. 2018; Weich and Dürnberger 2017; Dürnberger and Weich 2016; Weich et al. 2016). On the basis of these two sources, ideal-typical statements of veterinary officers were developed.

Answers to the open question were evaluated according to qualitative content analysis, following Mayring (2015) and Kuckartz (2012, 78): (a) an initial round of work on the texts in which important passages are marked is followed by (b) the preparation of a first draft setting out a system of main categories. The first test run checks the general adequacy of this system. (c) The material is coded to reflect the categories. (d) All text passages coded with the same category are compiled together. (e) Working directly on the raw material, subcategories (if appropriate) are obtained inductively, and further tests are conducted to check and refine the system of main categories and subcategories. Finally, (f) the material as a whole is coded using the differentiated system. At this point, (g) discussion of the results can begin. In regard to the open questions, the current survey followed these steps.

The limitations of the study mainly concern the small number of participants. Furthermore, future research should make an international comparison of the Bavarian results with results from other regions in the world as well as

Table 1 Confronted with           morally challenging situations in	(1) I totally agree	(2) I agree	(3) I disagree	(4) I totally disagree
professional life	55%	30%	12.5%	2.5%

Table 2 Description of moral challenges
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58%	"My personal	convictions	contradicted	the legal	or professional	requirements"

- 48% "I was sure about what the morally right thing to do was, however, I could not or only partially put it into practice"
- 44% "I can try to act in a morally right way 'on a small scale', but the 'big system' is partly wrong, and I can't change that"
- 25% "I wasn't sure what the moral right thing was in this situation"
- 9% "No matter how I decided... there were always good moral reasons against this decision"

a comparison between veterinary officers and practicing veterinarians: Are there any differences when it comes to vital moral challenges and their expectations towards ethics? In exploring the three described research questions, the survey wanted to create an initial database that permits hypotheses to be framed, points towards further (representative) studies and raises new research questions.

## Results

A total of 81 participants took part in the study. No significant differences were observed between the years of the training program. In the following, the results are presented with a view to the three leading research questions (see chapter 1). In every table of this section, the answers are sorted by frequency of consent. The numbers are rounded.

#### Moral Challenges

The participants were asked to state the extent to which they have been confronted with morally challenging situations in their professional lives so far. The corresponding statement gave an average value of 1.625 (SD $\pm$ 0.796; n: 80), with 55% totally agreeing and 30% agreeing that they have been confronted with such situations (see Table 1).

In order to describe these situations in more detail, the participants were confronted with given statements and asked to agree or disagree with these statements. Table 2 reads as follows: XY% of the participants agreed with the following description of a morally challenging situation... (n=63).

<sup>6% &</sup>quot;I knew what would have been morally right, but the implementation would have meant a considerable extra effort beyond the daily work"

Table 3 Expectations of ethics from the perspective of veterinary officers

84%	"Ethics should help to find a morally justified way of dealing with dilemmas of the profession"
74%	"Ethics should help to better understand moral conflicts of the profession"
47%	"Ethics should show other perspectives (e.g. historical, sociological, etc.) on veterinary issues"
31%	"Ethics should promote exchange with colleagues in a protected space"
28%	"Ethics should analytically clarify important terms (such as responsibility, fellow creature, professional ethics)"
17%	"Ethics should help to deal with media and public"
1501	

15% "Ethics should improve the communication skills"

# **Table 4** Importance of topics of<br/>an ethics module for veterinary<br/>officers from the perspective of<br/>veterinary officers

88%	Animal ethics
59%	Development of a code of conduct for veterinary officers
42%	Introduction to ethical schools
37%	Dealing with the media and the public
27%	Adequate interpretation of legal requirements
17%	Communication and rhetoric skills
15%	Preparation for civil service
14%	Promoting good cooperation with colleagues
-	

## **Expectations of Ethics**

The participants were asked about their expectations of ethics for veterinary officers: When they heard that ethics is now a mandatory module in the new training program, what kind of expectations and hopes of this module did they have? There were seven given statements and the participants were asked to choose the three most important ones from their perspectives. XY% of the participants chose... (see Table 3; n = 80).

The participants were also asked which topics should be addressed in the ethics module of the training course. Once again, they were asked to select the three most important ones of the given topics. XY% of the participants chose... (see Table 4; n=81).

#### Ethics as an e-Learning Course

The participants were asked if they would like to use an e-learning tool about ethics for veterinary officers, and if so, what they would expect from such an e-learning course. This was asked in an open question. When veterinary officers are quoted in the text below, these statements were translated from German into English by the author and a translator.

Most participants stressed that they were skeptical or even highly critical about such an e-learning course. The main reason for this skepticism was almost the same

in all the answers: the participants pointed out (a) that ethical reflection required a face-to-face communication situation (or at least that this kind of reflection worked best in such a situation). A veterinary officer wrote: "In my opinion, personal exchange particularly about conflict-prone topics is much more important than a digital medium in front of which I'm sitting alone." Another participant stated: "Such online courses lack active dealing with the topic and also discussion with colleagues." Ethical reflection is "more fun and makes more sense in a group (...)". Ethics, so another answer, "comes to life' (...) particularly through interactivity, discussions and work in the group". In other words, the face-to-face debate in a classroom-based seminar is described as "irreplaceable" and "indispensable". Why is this personal exchange so important for the participants in the survey? Various reasons could be identified. A classroom-based seminar is preferred because (aa) it promotes "exchange with colleagues" and (bb) exchange "with the lecturer", who can moderate and structure the discussions. Generally, such a seminar (cc) is more "spontaneous" than any e-learning module could be. It also (dd) helps to gain a better understanding of the reasoning of other opinions. As a participant of such a classroom-based seminar, it is easier to "get other views explained". (ee) Personal exchange also avoids misunderstandings. One exemplary answer was: "Personally, I would prefer a classroom-based workshop to an online module (...) because misunderstandings tend to arise more easily in online discussions". Finally, classroombased events were also described (ff) as an opportunity to vent one's anger. One participant stated that veterinary officers do not have any kind of supervision where they could get all the bad things off their chests (in the German original, the participant wrote "auskotzen", which literally means "to vomit"). Against this background, classroom-based events can be "an important opportunity" to do so. There were two more arguments why a possible e-learning course is seen rather skeptically: (b) one participant stated that being a veterinary officer meant to "sit too often in front of the PC to acquire knowledge" anyway. (c) Finally, other participants said that they would never do such an e-learning course if it was voluntary since there was simply no time for such a course. Implicitly, these participants may have assumed that an e-learning course would take more time than a classroom-based course. One veterinary officer spoke of the "extreme time pressure" they were exposed to in their professional lives. Another one wrote: "Theoretically I would like to do such a course on ethics, it interests me. But practically there is no time to deal with soft skills (workload, lack of personnel, etc.)".

Although most participants stressed that they were rather skeptical about an e-learning course on ethics for veterinary officers, their answers also included positive aspects. The most important argument in this context was that replacing the classroom-based workshop with an e-learning module was not a good idea, however, a *combination* of both approaches could make sense. An exemplary answer was: "Perhaps the 'basics' (theory) could be taught online, followed by a classroombased discussion." Generally, most participants argued that an e-learning course should be used "only in combination" with classroom-based events.

Responding to this question, the veterinary officers also described features such an e-learning course should ideally comprise. The identified features can be divided into the categories technical, content-related and didactic. (a) Technically, (aa) the e-learning course should be independent of time and place. (For example, it should not be a webinar in the sense of an online lecture that starts at a certain time and at which you can only ask questions to the lecturer within a certain period of time). Furthermore, (bb) its implementation should be as simple as possible, for example without any specific software to be installed. (b) In regard to content-related aspects, (aa) the course should be clearly "practically relevant", which means that its content should focus on the actual daily work of a veterinary officer. (bb) It should be a tool for self-reflection, that means it should function as a "stimulus for independent thinking". But more than that, (cc) the e-learning module should support veterinary officers in their decision-making in the face of difficult situations. In other words, it should not only discuss moral conflicts but also present "possible solutions". (c) Didactically, (aa) the e-learning course should include "interactive exercises". This means that the user should not only passively listen and see content, but they should also have the option to be active. E-learning should not only be "teacher-centered instruction". The whole course should (bb) have a clear structure and (cc) a lot of "visual contents". It should (dd) include a kind of online platform, promoting the "opportunity for discussion with colleagues". In the best case, (ee) this forum is moderated by the provider of the course, in other words by the ethicists. Finally, (ff) there should be the "option to put one's own ethical questions up for discussion".

After the just described open question, the participants were also asked in a closed question about (un)important features of an e-learning module. More precisely, certain content-related and didactical elements were mentioned and the participants were asked whether an e-learning course *should* include this element (see Table 5).

## **Discussion and Conclusion**

The study underlines the diagnosis according to which veterinary officers can be considered an epitome of an ethically challenging profession (Dürnberger and Weich 2016). A majority of the participants stated that they had been confronted with morally challenging situations in their professional lives so far. However, in the comments on this closed question, some participants who (rather) disagreed with this statement pointed out that they were working in the laboratory (e.g. in the field of food safety testing) and that they did not have the feeling that moral challenges were an essential part of their job. Therefore, the mentioned diagnosis does not seem to be adequate for all tasks of veterinary officers.

The study tried to understand these moral challenges in more detail by requiring respondents to agree or disagree with typical statements. These given statements can be distinguished according to an important differentiation: (a) some statements sketched a situation in which the veterinary officer believes that *they do know what the moral right choice is, however, its implementation is difficult or impossible* because the veterinary officer has the feeling that they are working in a "big system" that is partly wrong and cannot be changed; because the legal requirements contradict their personal moral convictions, or finally, because the implementation would mean a considerable extra effort beyond the daily work. In the tradition of

	I totally agree I agree (2) (1) (%) (%)	I agree (2) (%)	I disagree (3) (%)	I totally disagree (%)
Opportunity to discuss one's own ethical dilemmas $n = 78$ ; average value: 1.32; SD $\pm$ 0.581	73	23	3	1
Case studies for autonomous discussion $n = 68$ ; average value: 1.39; SD $\pm 0.646$	69	24	6	1
Opportunity for exchange with colleagues $n = 79$ ; average value: 1.65; SD $\pm$ 0.931	61	19	14	6
Opportunity for <i>anonymous</i> exchange with colleagues $n = 77$ ; average value: 1.84; SD $\pm$ 0.896	44	32	18	5
Playful elements $n = 77$ ; average value: 2.23; SD $\pm 0.827$	19	44	30	6
Basic introduction to philosophy $n = 80$ ; average value: 2.34; SD $\pm 0.893$	21	33	39	8
Rhetoric training $n = 77$ ; average value: 2.35; SD $\pm 0.953$	21	36	30	13
Scientific papers $n = 79$ ; average value: 2.73; SD $\pm$ 0.773	5	32	48	15

Table 5 Importance of features of an e-learning course about ethics from the perspective of veterinary officers

🙆 Springer

Kant, this last example can be subsumed under the conflict "(moral) duty versus inclination" (Kant, Grundlegung zur Metaphysik der Sitten, 396ff.). (b) The other statements sketched a different situation: a situation in which veterinary officers *do* not know what the moral right choice is, but are confronted with an open ethical question they do not know the answer to and/or with a kind of ethical dilemma that can be characterized as the way Williams did (Williams 1978, 91ff.): There are good moral reasons to do x, but there are also good moral reasons to do y; however, you cannot do both at the same time. That means, whatever you decide, you are going to violate an important good.

The results of this study indicate that the participating veterinary officers situate their most important moral challenges in the described area (a): they are convinced that they do know what the moral right decision would be, however, they are faced with difficulties in the realization. The top answer in this context, gaining the highest level of approval, focused on a kind of conflict that could be described as an inner conflict: The veterinary officer is obliged to fulfil certain legal requirements that sometimes contradict their personal moral believes. The top responses following this one in the ranking document a certain feeling of powerlessness: The veterinary officers often feel like small cogs in a big machine. In other words, when the veterinary officers participating in this survey described essential moral challenges of their profession, they did not talk about ethical dilemmas or open ethical issues, but their answers rather focused clearly on *difficulties in the realization*. That means that, in regard to moral challenges, they usually assume that they do know what the morally correct decision would be, but they find its implementation difficult for various reasons. This result is in line with a thesis that Springer developed on basis of her empirical study on moral challenges of veterinarians in small animal practices, namely: "Contrary to the dominating argument in the literature that moral stress is caused by the colliding principles to protect life and end suffering, it is argued that external factors are more likely to urge veterinarians into morally challenging situations." (Springer 2018, 41).

The study also presented statements—on the basis of the described workshops with veterinary officers and literature about (veterinary) ethics-that represented four different understandings of ethics. These understandings can be summarized briefly and in a simplifying way as follows: (a) in a normative understanding, ethics tries to answer what people should do in a specific situation from an ethical point of view (Sturma 2017, 1325; Düwell 2008, 36). In this understanding, the ethicist is something like an expert for answering moral questions. (b) In a *descriptive* understanding, ethics tries to describe a moral problem not only in its ethical framework but also in its historical and cultural tradition in order to gain a better understanding of the conflict (Fischer 2001, 165ff.; Lesch 2006). In this context, the ethicist is less an expert answering moral questions, but more like a travel guide through the world of moral problems (Reiss 2005). (c) In a third understanding, ethics acts as a moderator, providing a protected platform that allows veterinary officers to talk openly with colleagues about specific problems (Millar 2018). (d) Finally, ethics can also be understood as a facilitator of soft skills (like, for example, communication skills) to better deal with media and the public. Although such a *functional* understanding, in which philosophy/ethics is (again) degraded to be a type of "handmaid", is hardly

to be found in the philosophical literature, the workshops—and also the results of the survey—showed that veterinary officers do associate the term "ethics" with this expectation.

The results indicate that veterinary officers expect ethics to be, above all, helpful in the areas (a) and (b): the top answer in this context, gaining the highest level of approval, represented a normative understanding: Ethics should help veterinary officers to find a morally justified way of dealing with moral challenges. Ethics should therefore show solutions to moral problems. In this context, it can also be mentioned that 59% of the participants expect ethics to develop a code of conduct for veterinary officers. However, it is remarkable that also the descriptive approach received high approval. An approach which "merely" describes and analyzes a morally relevant situation is often seen as deficient. However, the veterinary officers also seem to value an adequate description of a moral conflict. This fits in with a thesis that was published elsewhere (Dürnberger and Weich 2016): Especially when moral conflicts are the rule and not the exception and there is hardly any easy solution to moral challenges (possibly also because the implementation of what seems to be morally right is difficult), a better *understanding* of these conflicts could be the best possible target. Generally, the role of the descriptive approach should not be underestimated whenever the role of ethics in the context of veterinary officers' profession is discussed. Finally, although these answers were not the top answers, it should be not underestimated that some veterinary officers also expect "ethics" to provide a protected space in which they can discuss specific problems with colleagues, and that some of them also expect ethics to increase their communication skills in order to deal with media and the public in a better way. [The results of the survey can also be seen in the light of a different theoretical framework: Sant'ana (2016) distinguishes between three different approaches in veterinary ethics education: (a) a professional rules approach that is about a transmission of moral principles and social norms; (b) a moral virtues approach, aiming at an inculcation of desirable moral behaviours; and (c) an ethical skills approach that aims at a promotion of moral reasoning abilities. All three approaches can be found in the answers of participants, however, the results of the survey tend to focus on (c) and (a) and indicate that veterinary officers have expectations towards ethics that go beyond the three approaches.]

In regard to ethics as an e-learning course, the judgement of the participating veterinary officers was rather clear: most of them were skeptical or even highly critical about an "e-learning only" approach. The main reason can be found in their appreciation of face-to-face communication when it comes to an ethical reflection of their profession: from the participating veterinary officers' point of view, ethics needs personal exchange, and this is best possible in a classroom-based seminar. More precisely, the participants gave various reasons: In a classroom-based event, (a) it is easier to discuss questions with colleagues, and (b) it is easier to discuss them with the lecturer/ethicist. Also, such an event (c) allows more spontaneity, (d) helps to gain a better understanding of the reasoning of other opinions and (e) helps to avoid misunderstandings (like they are typical for online communication). Finally, (f) classroom-based events were also described as a better opportunity for veterinary officers to vent their anger about specific aspects of their job compared to e-learning courses. The answers to the question why the participants oppose an "e-learning only" approach reads like an emphasis of an understanding of ethics that was described above as the *moderator* role. To point it out: from the veterinary officers' perspective, an ethics module is not only—perhaps not even primarily—about teaching certain contents but about promoting a dialogue: The veterinary officers want to discuss certain morally relevant questions with colleagues, moderated by an external expert.

Although most participants stressed that they were skeptical/critical about an e-learning course on ethics, they stated that they could imagine that such tools *might* be helpful in their training program, namely in a type of combination of classroombased events with online tools. Hereby, the corresponding literature speaks of "blended learning" concepts (Hrastinski 2019). In this context, the participants also described features such an e-learning course should ideally comprise. Technically, the answers indicate that such a tool should be independent of time and place and as easy as possible. In regard to contents, the above-discussed normative and descriptive approaches dominated again: Some answers focused on ethics as a discipline presenting possible solutions to moral problems, other answers focused on ethics as a stimulus for independent and structured thinking, aiming at a better understanding of these problems. Didactically, such an e-learning course should ideally include (a) interactive exercises; the veterinary officers do not want to follow content only passively but want to have the option to be active themselves. Furthermore, the course should have (b) a clear structure, (c) comprise visual contents and (d) a kind of "forum" as an opportunity for discussion with colleagues. This feature was also seen as crucial in the closed questions, with 80% totally agreeing or agreeing that such a forum would be an important element. In their answers to the open question, the participants did not mention anonymous exchange as a decisive function. However, in the closed questions, 44% totally agreed and 32% agreed that this forum should provide the option of anonymous exchange with colleagues. Furthermore, this online forum should be (e) moderated by the provider of the course and also allow the user (f) to put their own ethical questions up for discussion. This last option was also stretched in the closed questions, where the opportunity to discuss one's own ethical dilemmas was the top answer, with 96% of participants agreeing or completely agreeing with its importance. The mentioned features emphasize that veterinary officers expect from an e-learning course on ethics, first and foremost, that such a tool also promotes dialogue in the profession. Their expectations are not so much about ethics-related content but about a lively, structured discussion. Accordingly, the wish for scientific papers that are shared on this online portal gained the lowest approval.

The results of this paper suggest that any ethics module for veterinary officers, independent of whether e-learning or classroom-based, (a) should not only focus on ethical dilemmas or open ethical questions (like, for example, the concrete moral status of an animal in a specific situation), but rather make conflicts between legal requirements and personal convictions an issue, as well as questions of personal responsibility within a system: How do you deal with the fact that, in certain situations, you have to make decisions that you do not consider to be entirely morally correct? What is the reason when legal requirements and personal convictions diverge? When a "best-case" decision does not seem to be possible in the face of a

difficult situation, is a "best possible" decision only a "bad compromise", or more than that?

Furthermore, (b) although there are tendencies, it is important to note that there is no homogeneous expectation of ethics from veterinary officers' perspective, but rather different hopes. Ethics modules, again independent of whether e-learning or classroom-based, will hardly meet all the mentioned expectations. (More than that: a descriptive approach, for example, will maybe oppose developing and presenting a code of conduct which should be internalized by veterinary officers.) Therefore, it seems particularly important that each ethics module for veterinary officers clearly defines its own understanding of ethics from the outset and explicitly discloses it in order to avoid false expectations and corresponding disappointments.

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## References

- Aparicio, M., Bacao, F., & Oliveira, T. (2016). An e-learning theoretical framework. *Educational Technology and Society*, 19(1), 292–307.
- Bora, U.J., & Ahmed, M. (2013). E-learning using cloud computing. International Journal of Science and Modern Engineering (IJISME), 1(2), 9–13.
- Clarke, N., Main, D. C. J., & Paul, E. S. (2017). Students' beliefs in animal sentience: No decline across veterinary education. *Veterinary Record*, 180(15), 378. https://doi.org/10.1136/vr.104165.
- Dürnberger, C., & Weich, K. (2016). Conflicting norms as the rule and not the exception. Ethics for veterinary officers. In I. A. S. Olsson, S. M. Araújo, & M. F. Vieira (Eds.), *Food futures: Ethics, science* and culture (pp. 285–290). Wageningen: Wageningen Academic Publishers.
- Dürnberger, C., Weich, K., Springer, S., & Wipperfürth, M. (2018). Log-in for VEthics. Applying E-learning in veterinary ethics. In S. Springer & H. Grimm (Eds.), *Professionals in food chain* (pp. 317–322). Wageningen: Wageningen Academic Publishers.
- Düwell, M. (2008). Bioethik. Methoden, Theorien und Bereiche. Stuttgart and Weimar: Metzler.
- Fallon, C., & Brown, S. (2002). e-Learning Standards: A Guide to Purchasing, Developing, and Deploying Standards-Conformant E-Learning (12th revised ed.). Boca Raton: CRC Press.
- Fischer, J. (2001). Die Begründungsfalle. Plädoyer für eine hermeneutisch ausgerichtete theologische Ethik. Zeitschrift für Evangelische Ethik, 46, 163–167.
- Hartnack, S., Springer, S., Pittavino, M., & Grimm, H. (2016). Attitudes of Austrian veterinarians towards euthanasia in small animal practice: impacts of age and gender on views on euthanasia. *BMC Veterinary Research*, 12, 26.
- Hrastinski, S. (2019). What do we mean by blended learning? *TechTrends*. https://doi.org/10.1007/s1152 8-019-00375-5.
- Kant, I. (1986) [1785]. Grundlegung der Metaphysik der Sitten. Stuttgart: Reclam.
- Kuckartz, U. (2012). Qualitative inhaltsanalyse. Methoden, Praxis, Computerunterstützung. Weinheim and Basel: Beltz Juventa.
- Lesch, W. (2006). Hermeneutische Ethik. Narrative Ethik. In M. Düwell, C. Hübenthal, & M. H. Werner (Eds.), Handbuch Ethik (pp. 231–242). Stuttgart: J.B. Metzler.
- Magalhães Sant'Ana, M. (2016). A theoretical framework for human and veterinary medical ethics education. Advances in Health Science Education, 21, 1123–1136.

- Magalhães-Sant'Ana, M., & Hanlon, A. (2016). Straight from the horse's mouth: Using vignettes to support student learning in veterinary ethics. Journal of Veterinary Medical Education, 43(3), 321–330.
- Magalhães-Sant'Ana, M., Lassen, J., Millar, K. M., Sandøe, P., & Olsson, I. A. S. (2014). Examining why ethics is taught to veterinary students: A qualitative study of veterinary educators' perspectives. *Journal of Veterinary Medical Education*, 41(4), 350–357.
- Mayring, P. (2015). Qualitative Inhaltsanalyse. Grundlagen und Techniken. (12th revised ed.). Weinheim: Beltz Verlag.
- Millar, K. (2018). Let's talk about veterinary ethics: Developing tools, finding spaces and recognising institutional responsibilities. *Veterinary Record*, 182, 662–663.
- Quinn, C., Kinnison, T., & May, S. A. (2012). Care and justice orientations to moral decision making in veterinary students. *Veterinary Record*, 171(18), 446. https://doi.org/10.1136/vr.101003.
- Reiss, M. (2005). Teaching animal bioethics: Pedagogic objectives. In M. Marie, S. Edwards, G. Gandini, M. Reiss, & E. Von Borell (Eds.), *Animal bioethics: Principles and teaching methods* (pp. 189–202). Wageningen: Wageningen Academic Publishers.
- Scarano, N. (2006). Metaethik und deskriptive Ethik. In M. Düwell, C. Hübenthal, & M. H. Werner (Eds.), *Handbuch Ethik* (pp. 25–35). Stuttgart: Metzler.
- Springer, S. (2018). Moral challenges of euthanasia in small animal practice. An empirically informed analysis in veterinary medical ethics. Dissertation at the Vetmeduni Vienna, Vienna.
- Springer, S., & Grimm, H. (2017). Hightech-Tiermedizin: Eine Herausforderung f
  ür die professionseigene Moral? Tierärztliche Umschau, 72, 280–286.
- Sturma, D. (2017). Ethik. In L. Kühnhardt & T. Mayer (Eds.), Bonner Enzyklopädie der Globalität (Vol. 1, 2, pp. 1325–1334). Wiesbaden: Springer.
- Sun, P. C., Tsai, R. J., Finger, G., Chen, Y. Y., & Yeh, D. (2008). What drives a successful e-learning? An empirical investigation of the critical factors influencing learner satisfaction. *Computers & Education*, 50(4), 1183–1202.
- Verrinder, J. M., & Phillips, C. J. C. (2014). Identifying veterinary students' capacity for moral behavior concerning animal ethics issues. *Journal of Veterinary Medical Education*, 41(4), 358–370. https:// doi.org/10.3138/jvme.1113-153r.
- Weich, K., & Dürnberger, C. (2017). Wandel der Mensch-Tier-Beziehung und amtstierärztliche Verantwortung. Rundschau für Fleischhygiene und Lebensmittelüberwachung, 2017(69), 1–3.
- Weich, K., Dürnberger, C., & Grimm, H. (2016). Ethik in der Amtstierärztlichen Praxis. Ein Wegweiser. Erlangen: Harald Fischer Verlag.
- Weich, K., & Grimm, H. (2018). Meeting the patient's interest in veterinary clinics. Ethical dimensions of the 21st century animal patient. *Food Ethics*, 1(3), 259–272.
- Williams, B. (1978). Ethical consistency. In J. Raz & T. Mayer (Eds.), *Practical reasoning* (pp. 91–109). Oxford: Oxford University Press.

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