



Universiteit Utrecht



Dutch veterinarians not working in veterinary practice: Motivations, competencies and characteristics



L. Dorrestein, BSc

Dr. G.J. Bok

Dr. N.J.J.M. Mastenbroek

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Chair Quality improvement in veterinary education

Royal Netherlands Veterinary Association, Group 'Veterinarian in Business'

Masters' research project:

"Dutch veterinarians not working in veterinary practice: Competencies, motivations and characteristics"

Report of masters' research project

Dutch veterinarians not working in veterinary practice: Competencies, motivations and characteristics

Researcher and author

L. Dorrestein, BSc

Student number

3501647

Supervision

Dr. G.J. Bok
Chair Quality improvement in veterinary
education

Dr. N.J.J.M. Mastebroek
Chair Quality improvement in veterinary
education

Location and date

Faculty of Veterinary Medicine
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Abstract

Introduction and rationale

The purpose of this study was to obtain information about veterinarians that have a career outside, or besides, veterinary private practice. The information obtained can be used to assess the veterinary professional framework, to manage career expectations of veterinary students and to show, both students and veterinarians, what career options are possible.

Methodology

A questionnaire was developed and emailed to all Dutch veterinarians working outside veterinary private practice. Responses were collected anonymously and results were expressed numerically where possible, but in words where needed since some of the questions allowed textual responses.

Results

1. Most of the participants worked in industry, government and education. The most common positions were veterinary inspector, manager and researcher. The big majority of the functions was still related to veterinary medicine.
2. In a ranking that has been made, the competency domains collaboration and personal development were seen as the most important, followed by entrepreneurship, communication, health and welfare, evidence based veterinary medicine and veterinary expertise. Required competency profiles vary according to the job description; therefore no fixed set of competencies which is applicable to every position outside of veterinary practice could be given.
 - a. Settings where skills and knowledge were obtained varied between the different competency domains. In general the competencies were developed either in post graduate education or (semi)government. The veterinary curriculum was not perceived as the most important occasion in any of the given items.
3. The most important motivations to pursue a career outside veterinary practice were possibilities for self-development, a good balance between work and private life, a bigger challenge and working in a multi-disciplinary environment.

Conclusion

The group studied was working in greatly diverse organisations and positions, mostly in industry, government and education. The majority had clinical experience and advises to gain some experience in veterinary practice before pursuing a different career. The primary motivation for a non-clinical career was not that veterinary practice is seen as negative, but that the opportunities outside are more interesting compared to the clinical career. The competencies needed outside veterinary practice do not necessarily need to diverge substantially from those needed in veterinary private practice. However, outside veterinary practice the importance of different domains may be different.

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Preface

This document aims to provide more insight into a diverse group of veterinarians in the Netherlands. It gives an impression of the importance of various competencies and motivations of veterinarians who have a career outside or in addition to veterinary private practice. This research was done in the context of a master research project of 12 weeks conducted in the 6th year of the study veterinary medicine.

During my study, I participated in several projects and a honours programme outside the veterinary curriculum. Because I liked these challenges and thrived in a multidisciplinary environment, I became interested in the multidisciplinary work that veterinarians do outside veterinary practice. Since little was known about the group of Dutch veterinarians working outside veterinary practice, I decided to start my own research. The goal was to learn more about this group, their work and what is required to work outside veterinary practice, enabling students and veterinarians to gain more insight in the different career possibilities. Thanks to the input I have received during this project, I am convinced that we as (future) veterinarians are trained for many more types of work than just veterinary practice. Next to that I learned that it is useful to start working in veterinary practice to understand the daily veterinary reality and to find out whether it fulfils ones expectations. Everyone should follow the career that suits him/her best, so I hope that this research can help (future) veterinarians to broaden their horizons.

I would like to thank my first supervisor dr. A. Spruijt, for her encouragement and inspiration in setting up my own research project. I also want to express my thanks to dr. G.J. Bok and dr. N.J.J.M. Mastebroek, who helped me to walk the path I had taken and who managed to supervise me in spite of their busy schedules. The Royal Netherlands Veterinary Association's (KNMvD/RNVA) group 'Veterinarian in Business' took part in this study as well. The board members of the 'Veterinarians in Business' group gave me useful ideas and feedback for the content of the questionnaire. Thanks to mr. J.J. Bekhuis for letting me work at the KNMvD office and helping me to get access to the membership information of the KNMvD. Sjouke and Gitte helped me with their fantastic SurveyMonkey skills, without you them would not have been such a great questionnaire! Before the questionnaire was sent out several people reviewed it critically. Therefore I would like to thank drs. B. De Leeuw (veterinarian in business), drs. D de Rooij (veterinarian in education), dr. R.S. Schrijver (veterinarian in business), S. Hueskes (MSc in Social Sciences) and M.E. Frijters (MSc student Medicine). In the process of writing an English report I received help from native speaker M.E. Carrière (veterinarian in practice) and Katinka DeBalogh (veterinarian in intergovernmental organisation). Thanks for your effort in helping me create a correct and readable report. All 343 respondents are thanked for the completion of the questionnaire. Without this effort, there would have been no data and therefore no report. Last but not least I would like to thank Sven and my dear girls of P.P.O. for the moral support during this research.

Linda Dorrestein

Introduction

Veterinary medical education has traditionally focused on veterinary medical expertise, i.e. specific veterinary knowledge and skills. Changing societal and educational demands require veterinarians to be more than just medical experts¹. The importance of non-technical knowledge and skills, such as communication, collaboration with other stakeholders, and entrepreneurship is increasingly important². This urged researchers and curriculum developers to develop a veterinary competency framework¹ called the VetPro competency framework.

Apart from the changing circumstances that call for other competencies, certainly not every veterinarian wants to be a veterinary practitioner. Twenty-five percent of them prefer a job in industry, governmental positions or in research and education at some point in their careers and this percentage is increasing³⁻¹¹. It is not clear what competencies within the competency framework are most important for alternative careers and whether the veterinary curriculum provides ample opportunity for veterinarians to develop these competencies. Insight in the importance of the various competency domains that are required for different positions outside veterinary practice might be helpful in preparing veterinary students for the entire width of the veterinary field and in achieving a better person-job fit for (future) veterinary professionals. Education could be customized to the needs that exist in order to create this optimal fit. Hinami et al.¹² showed that physicians with an optimal person - job fit had a tendency to participate in activities that needed a wider set of their competencies. Compared to physicians with optimal person-job fit, their colleagues with suboptimal person-job fit were more likely to report poor performance in their work¹². This might be the case for veterinarians as well, as they work in environments that are similar to the setting in human medicine in many respects.

Like other professionals, veterinarians sometime prefer to change jobs and choose for a career outside veterinary practice. Little is known about the motives to choose an alternative career. In earlier research^{5,7} among veterinarians not engaged in veterinary practice, motives to change career were amongst others: changed interests, the desire for a greater challenge, poor wages and a declined interest in veterinary practice. The emotional background of this decision, i.e. whether it is a positive decision or not has not been studied so far. Decisions concerning a career switch benefit from knowledge about the different options that exist. Unfortunately, knowledge amongst career advisors about alternative career opportunities can be patchy and studying veterinary medicine is sometimes seen as “a one-track-career-path”⁴. However, numerous employment options are offered by organisations outside veterinary private practice^{8,9,11}, and both veterinary students and veterinarians seem to be hardly aware of the different possibilities. This could contribute to the fact that most veterinarians in the Netherlands start their career in veterinary practice. To create the before mentioned person-job fit, insight in the different career options is needed in order to obtain more knowledge about the different required competency profiles.

This study was conducted to find an answer to the following research questions.

1. What career possibilities are available for veterinary graduates in the Netherlands not working in veterinary practice?
2. What competencies from the VetPro competency framework are important for veterinarians who pursue a career outside veterinary practice?
 - a. In what context are these competencies obtained?
3. What are the motives of veterinarians to pursue a career outside veterinary practice?

Materials and method

Method of collecting data

Participants received an online questionnaire (appendix 2). The questionnaire consisted of both multiple choice and open-ended items to obtain information about the demographics (10 items), occupational content (25 items), motives (1 item) and competencies (15 items) of veterinarians working outside veterinary practice.

For the item concerning motivation respondents were asked to indicate 5 to 7 motives that display important reasons to start working outside of veterinary practice. This item had 27 possible options and one 'other' option was given. Respondents could select 5 up to 7 motivations that corresponded with their situation.

Respondents were asked to rank the importance of different competencies on a 5-point Likert-scale (1= very unimportant to 5 =very important).

The context in which the competencies were obtained was also asked. Participants could select a maximum of two, the options were: curriculum, extracurricular activities, post graduate education, veterinary practice, (semi) government and for profit organisation.

Participants

Participants were veterinarians registered at the Royal Dutch Veterinary Association (KNMvD, Koninklijke Maatschappij voor de Diergeneeskunde) as veterinarians not working in veterinary practice. The membership information data was filtered to select the members who are tagged as 'veterinarian' and 'not working in veterinary practice'. The list that resulted consisted of 1129 KNMvD members. The email addresses were obtained by the KNMvD and these members received the online questionnaire.

Procedure

Data were collected between the 22nd of September and the 6th of October 2014. After inviting the possible respondents by email, a reminder was sent to increase the total response on September 29th. Because of the manual filtering process and some inconsistencies in the membership data it was possible that some of the respondents did not belong to the target group. They could indicate that in the first question and were then guided to the last page of the questionnaire. On the last page of the questionnaire respondents could indicate whether or not they would like to receive the results of the study.

Data analysis

The data were analysed by using SPSS 22 and Microsoft Excel 2010. Only participants that completed the questionnaire were included in the analysis. Descriptive statistics were used to compare different items.

'Working outside veterinary clinical practice', (VP) as it is used in this study, is defined as not working in clinical practice in any form, i.e. the primary to tertiary veterinary care for patients. The definition for 'competency' as it is used in this study, refers to the ability to integrate knowledge, skills and attitudes required to perform complex professional tasks¹.

Results

Participants

In total 1129 questionnaires were sent; response was 459 of which 343 respondents completed the questionnaire. Retired veterinarians (n= 6) and veterinarians that did not fully complete the questionnaire (n=110) were excluded. Response rate was 30%, (male / female: 160 / 183), mean age 48 years (SD 11, male/female: 53/43), mean years after graduation (YAG) 21 years (SD 11, male/female: 26 / 17). Figures 3 and 4 in Appendix 1 show the age, graduation and gender distribution of the participants.

Experience in veterinary clinical practice

Respondents that have worked in a veterinary practice form a group of 81%. The mean number of years before switching careers is 7 years (SD 6, male/female: 8,5/5,5). Figure 5 (Appendix 1) shows work experience with different animal species. Work experience in veterinary practice was perceived as useful for their current job by 74% of the participants. The most useful aspect of having worked in practice that was mentioned was a gained understanding of veterinary clinical practice and being able to adapt products, communication, classes etc. to the needs of veterinarians and clients. Other reasons why working in practice was perceived as useful were personal development, knowledge of human nature and analytical thinking.

Work outside veterinary practice

The results that are presented in this section were analysed based on the respondents' positions. A total of 375 positions were included because 32 respondents (out of the 343), worked in more than one organisation.

Figure 1 shows the different types of organisations in which the participant were employed. In the 11% of the organisations determined 'other' different options were combined such as research, education and patient care. Other types of companies that were mentioned were companies related to breeding, NGO's and human healthcare. Whether the organisations were for profit or not for profit is shown in figure 6 in appendix 1.

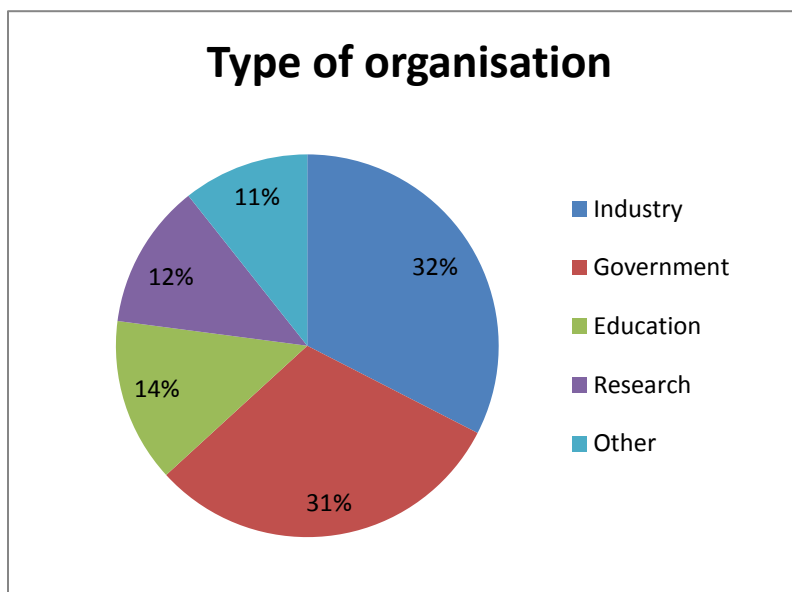


Figure 1 Type of organisation (%) of veterinary professionals outside VP. N=375)

Figure 2 shows that the biggest group in which veterinarians found employment is the Netherlands Food and Consumer Product Safety Authority (NVWA) (23%), mostly as veterinary inspectors. The rest of the top 3 consists of managers (19%) and researchers (17%). Whether or not the positions in which veterinarians worked still had a relationship with veterinary medicine is illustrated in figure 7, Appendix 1.

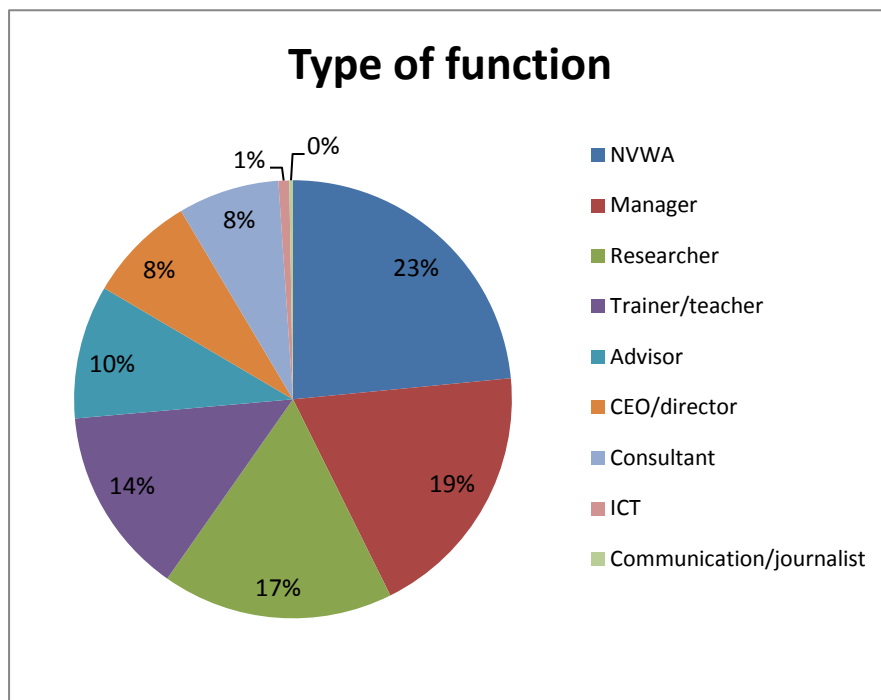


Figure 2 Type of function (%) of veterinary professionals outside VP. N=375

Motives

The top 10 motivations to pursue a career outside veterinary practice is shown in table 1. In figure 8, Appendix 1, the complete ranking is shown.

There are more reasons to work outside veterinary practice than those that were in the response options, which is demonstrated by the option 'other' as being most chosen (75%). Other reasons included interests in research or education, mere coincidence, veterinary practice becoming a routine without intellectual challenge, being creative in another field, idealistic reasons, more suited to ones competencies and the high workload in veterinary practice.

Motives to pursue a career outside VP	Male N	Male % N=160	Female N	Female % N=183	Total N	Total % N=343
Possibilities for self-development	94	59	111	61	205	60
Good balance between work and private life	75	47	108	59	183	53
Bigger challenge	94	59	87	48	181	53
Working in a multidisciplinary environment	83	52	79	43	162	47
Working internationally	76	48	63	34	139	41
Regular working hours	45	28	74	40	119	35
Career opportunities	45	28	61	33	106	31
Working with a big number of colleagues	38	24	58	32	96	28
Changed interests	49	31	42	23	91	27
Working in a big(ger) organisation	39	24	48	27	87	25

Table 1 The top 10 motives for veterinarians to pursue a career outside VP. N=343

Competencies

The competencies from the Vetpro¹ competency framework were rated on a Likert-scale ranging from 1 (very unimportant) to 5 (very important). Table 2 summarises the importance of different competency domains as perceived by the participants. Except for 'Adequately execute veterinary acts', 'Adequately perform in veterinary emergency situations' and 'Adequately transfer patient information', all competencies were seen as (very) important. The full table can be found in table 5 in the appendix. In table 3 the context in which these competencies were obtained is illustrated.

Competency domain	Average score
Veterinary expertise	3,1
Communication	4,3
Collaboration	4,4
Entrepreneurship	4,1
Health and Welfare	4,3
Scholarship	3,8
Personal development	4,4

Table 2 Summary of the importance of different competencies

Competency Domain	Curriculum	Extra-curricular activities	Post graduate education	Veterinary practice	(Semi) government	For profit organisation
Veterinary expertise	54	14	25	62	17	9
Communication	8	20	47	29	42	33
Collaboration	10	18	39	31	46	36
Entrepreneurship	6	9	38	31	43	43
Health and welfare	36	6	26	32	48	29
Scholarship	41	8	48	14	47	23
Personal development	9	11	46	29	46	36

Table 3 Context in which competencies were obtained (%). Green color: most chosen items, red=least chosen item. N=343

Highlighted skills and abilities

In one item of the questionnaire, participants could name additional skills they considered necessary for working outside veterinary practice. Most participants (N=262) mentioned skills and abilities that were needed either in their own job or for working outside VP in general. A part of them stated that the focus on the competency domains differed based on the job description, therefore no fixed set of competencies can be given that applies to every position outside veterinary practice. The participants that filled in specific competencies mostly mentioned abilities and skills that can be grouped into the competency framework (table 4). Being able to think out of the box, to keep an open mind and to think analytical were among the most mentioned. Also knowledge of the English language (and preferably more languages) was seen as an advantage.

Competency in Vetpro framework	Skill/ability highlighted by participants
Communication	People skills, networking, being customer oriented
Collaboration	Being collaborative, working in a multidisciplinary environment
Entrepreneurship	Commercial and financial competencies, having a sense of what happens in the organisation/society/politics, project management, time management and prioritisation
Scholarship	Coaching/teaching, leadership
Personal development	Enthusiasm, perseverance, being critical and courageous, flexibility, trustworthiness and integrity, confidence and independence, eagerness to learn about yourself and the work field

Table 4 Skills for working outside VP highlighted by participants.

Conclusion and discussion

The outcome of this questionnaire has given an useful insight in the characteristics, motivations and competencies of the group of interest. To the extent possible, the research questions have been answered.

The different organisations and functions that are identified by the participants are seen in various studies on the subject⁸⁻¹⁰. In this study the top 3 consisted of industry, government and education. It is perceived as useful to have initially worked in veterinary practice.

There is a wide range of motivations to work outside veterinary practice. Most chosen options include more possibilities for self-development, a good balance between work and private life, a bigger challenge and working in a multidisciplinary environment. These findings are consistent with the study of Heath⁷ in which changed interests and the need for a greater challenge were the most important reasons to quit veterinary practice. Some of the items in this study reveal interesting gender differences. The items 'Good balance between work and private life' and 'regular working hours' are both chosen 12% more often by women than by men. The wish of women to balance work and family responsibilities is also seen in a study¹³ among medical specialists in The Netherlands. The preference for a career change in respect of working hours is higher among full time medical doctors compared to part-time doctors and is especially seen in women. This might be the case for veterinarians as well, as they work in environments that are similar to the setting in human medicine in many respects. A gender difference is also seen in the results of a study among entrepreneurs that suggests women are motivated to a higher degree than equally qualified men to become entrepreneurs for family-related lifestyle reasons¹⁴. Female veterinarians working in a more entrepreneurial setting might also use entrepreneurship as a flexible career choice to manage family obligations. Heiliger et al. stated that generally male medical specialists may experience a greater urge to acquire status and income than female specialists¹³. This is also found by a study that showed that male entrepreneurs differ from female entrepreneurs in that they are primarily motivated by career advancement and wealth creation¹⁴. Some ways to obtain higher status and income could be working internationally and/or seeking a bigger challenge. Therefore this might be an underlying reason why men in this study have chosen the items 'working internationally' and 'bigger challenge' more frequently, the difference between men and women being 14% and 11% respectively.

Concerning the motivation the option 'other' was chosen by a big number of participants. The assessment of the various answers revealed that the primary motivation to work outside veterinary practice is not that it is seen as negative but that there are plenty of opportunities outside veterinary practice with many exciting opportunities to be explored by veterinarians. This is underlined in the ranking of the motivations, with negative motivations like 'expectations of veterinary practice have not been fulfilled' and 'no pleasure in working with clients' at the bottom half of it. However, the majority of the answer options were formulated in a neutral to positive way, which might have led to a bias in the results. The selection of the positive option 'greater challenge', for example, could also signal the negative motivation 'lack of challenge in practice'. In order to obviate this, the textual answers were analyzed. Out of the textual responses approximately 15% were negative motivations for working in veterinary practice, commenting on the lack of appreciation and intellectual challenge, working long hours in stressful circumstances, ethical dilemmas, being on duty, high workload, burn out amongst colleagues and discussion with clients about veterinary services being too expensive.

This underlines that even though this study shows the decision to quit veterinary practice is mostly perceived a positive one, negative factors also play a substantial part. This is also seen in a study¹⁵ amongst Dutch veterinarians within 10 years after graduation, which showed that 14% of the respondents in this study suffered from burnout and 27% of veterinarians scored above the cut off score for emotional exhaustion of which high workload and work-home interference turned out to be the strongest predictors.

Almost all competencies in the competency framework for the veterinary professional were seen as important. Collaboration and personal development are seen as the most important competencies, followed by entrepreneurship. This is equivalent to a study of Black et al. (2001) which showed that verbal and written communication skills, teamwork skills and business management skills were perceived as critical skills in a non-clinical career¹⁶. The competencies needed outside veterinary practice do not necessarily need to diverge a lot from those needed in veterinary practice. However, the balance between the competencies might vary when analysed per group of functions, e.g. managers, researchers and teachers. Identifying competency profiles has been done before, for example for managers, one of the major groups in this study. The competency profile of a unit general manager was studied by McCredie et al.¹⁷. The profile that resulted consisted of ‘results orientation’, ‘intellectual abilities’, ‘interpersonal abilities’ and ‘resilience and adaptability’. Teachers also form a group in this study and were studied by Sutkin et al.¹⁸. The profile of good clinical teachers might also be applicable for veterinary clinical teachers due to the working environment that is similar to the setting in human medicine in many respects. The competency profile consisted of ‘medical/clinical knowledge’, ‘clinical and technical skills/competence, clinical reasoning’, ‘Positive relationships with students and supportive learning environment’, ‘communication skills’ and ‘enthusiasm’. A competency profile for people who work in government has also been developed. This profile for senior civil servants has been developed by the senior public service (Algemene Bestuursdienst)¹⁹. It can be seen that a number of the previously mentioned competencies also appear in the competency profile for the veterinary professional. By analysing the competencies needed for specific types of functions outside veterinary medicine, it would be possible to create specific competency profiles and facilitate an optimal person-job fit.

Where skills and knowledge were acquired varied between the different competencies. The competencies are generally gained in post graduate education and (semi)government. This might be related to the big number of participants that worked in (semi)government, which might have caused a bias in the results. The veterinary curriculum is not appreciated as the main context in any of the items. This is not necessarily a negative result. The veterinary curriculum serves to teach the basics of the veterinary profession and it seems obvious that additional professional development in the chosen direction needs to take place afterwards. The mean number of years after graduation in this study is 21 years, therefore it is not surprising that competencies were acquired mainly in a different context than the veterinary curriculum.

Limitations

The participants were veterinarians working outside veterinary practice registered at the Royal Dutch Veterinary Association (KNMvD). However, a part of the veterinarians that worked outside veterinary practice was no longer a member of the KNMvD, these veterinarians were therefore not targeted in this study. This might have caused a selection bias.

Because of the manual filtering of the membership data of the KNMvD the possibility arises that we did not include all veterinarians that worked outside veterinary practice, so error due to the manual filtering cannot be ruled out. The response rate of 30% shows that we did not reach the whole interest group, which could have led to a bias.

Since all results are generated from the perception of the participants of the questionnaire items, it must be considered that this is not an objective tool.

There were some inconsistencies in the questionnaire that might have influenced the results.

Concerning the jobs, the position ‘Veterinarian working for the NVWA’ was created, which was not given in the questionnaire. It was created after the data analysis due to receiving numerous remarks that the NVWA-veterinarian did not feel that any of the given options fit his/her function.

In the question about motivation respondents had to select a minimum of 5 items that were important for them to pursue a career outside veterinary practice. However, 5 items may not have applied to every participant, and filling in extra motivations to be able to continue the questionnaire might have influenced the results.

Recommendations

The results indicate that there are different motivations to choose a career outside of veterinary practice. An interesting topic to explore would be the motivation to stay in veterinary clinical practice compared to motivations to have a career outside of it. A study with this perspective might give useful insights on what these aspects are. It can give veterinary students more information and helps them build realistic expectations of working both in and outside veterinary practice.

This study gives a glance on the competencies that are needed for working outside veterinary practice. A very interesting subject for future research would be a comparison between the competencies needed in veterinary practice and those needed outside veterinary practice. Different functions in- and outside the practice might need different competency profiles. Profiling might help students and job seekers to search for functions that match their own profile and might help organisations to attract the best candidates for vacancies.

Concerning the context in which certain skills and knowledge were obtained, it might be useful to do more research on what competencies are exactly acquired in which context. Information obtained in such a study would be useful in veterinary curriculum development.

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Appendix 1 Graphs and tables

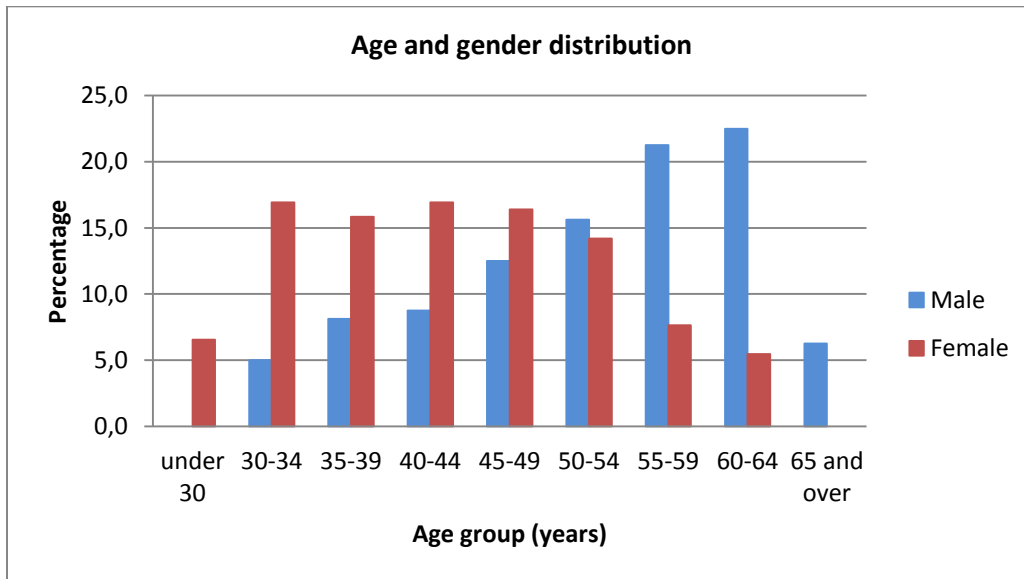


Figure 3 Age and gender distribution of participants (%) N=343

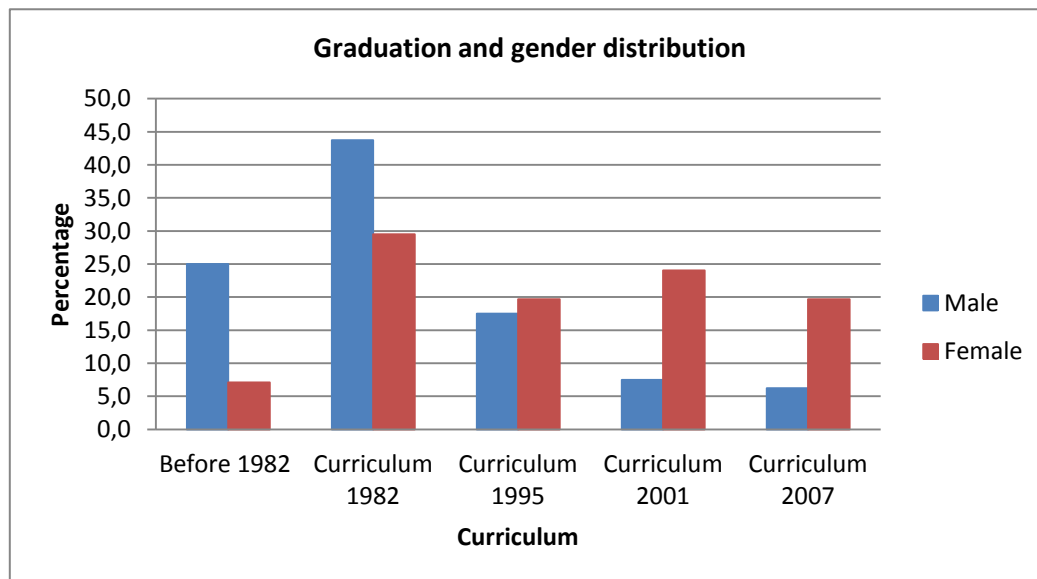


Figure 4 Graduation and gender distribution of the respondents. N=343

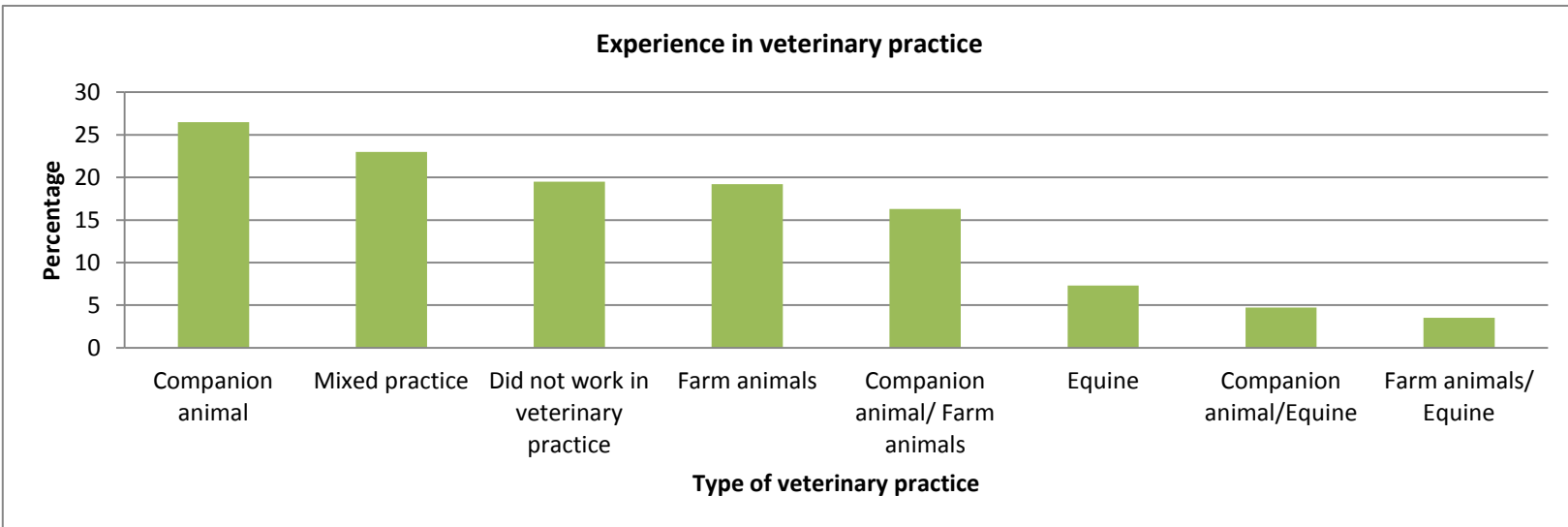


Figure 5 Work experience of participants in veterinary practice . N=412

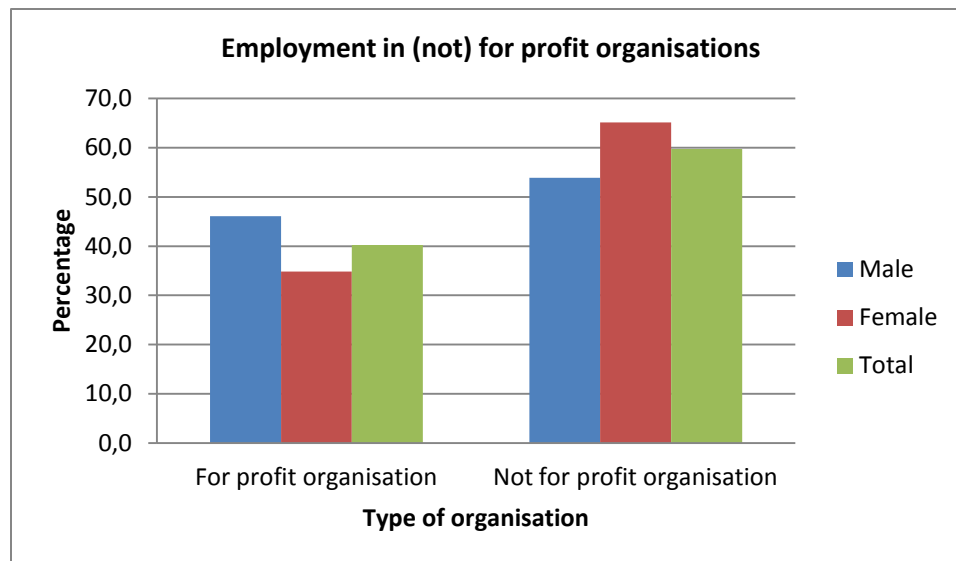


Figure 6 Employment in (not) for profit organisations. N=375

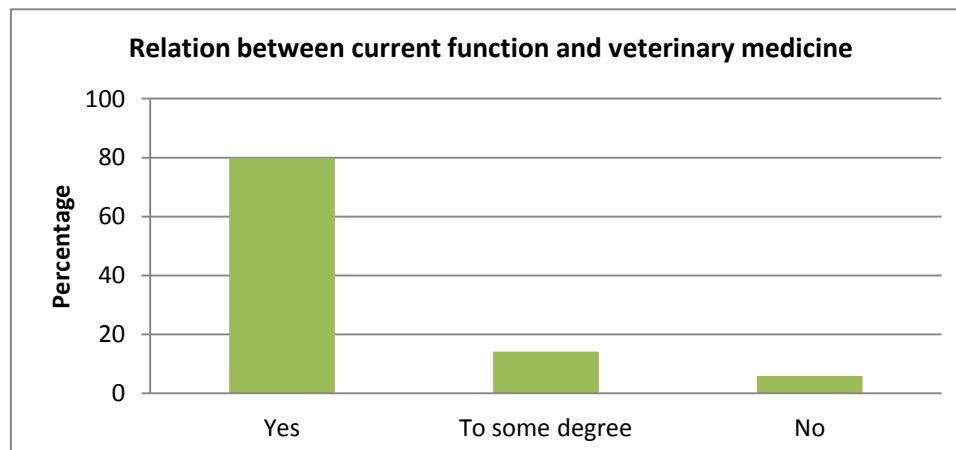


Figure 7 Relation between current function and veterinary medicine. N=375

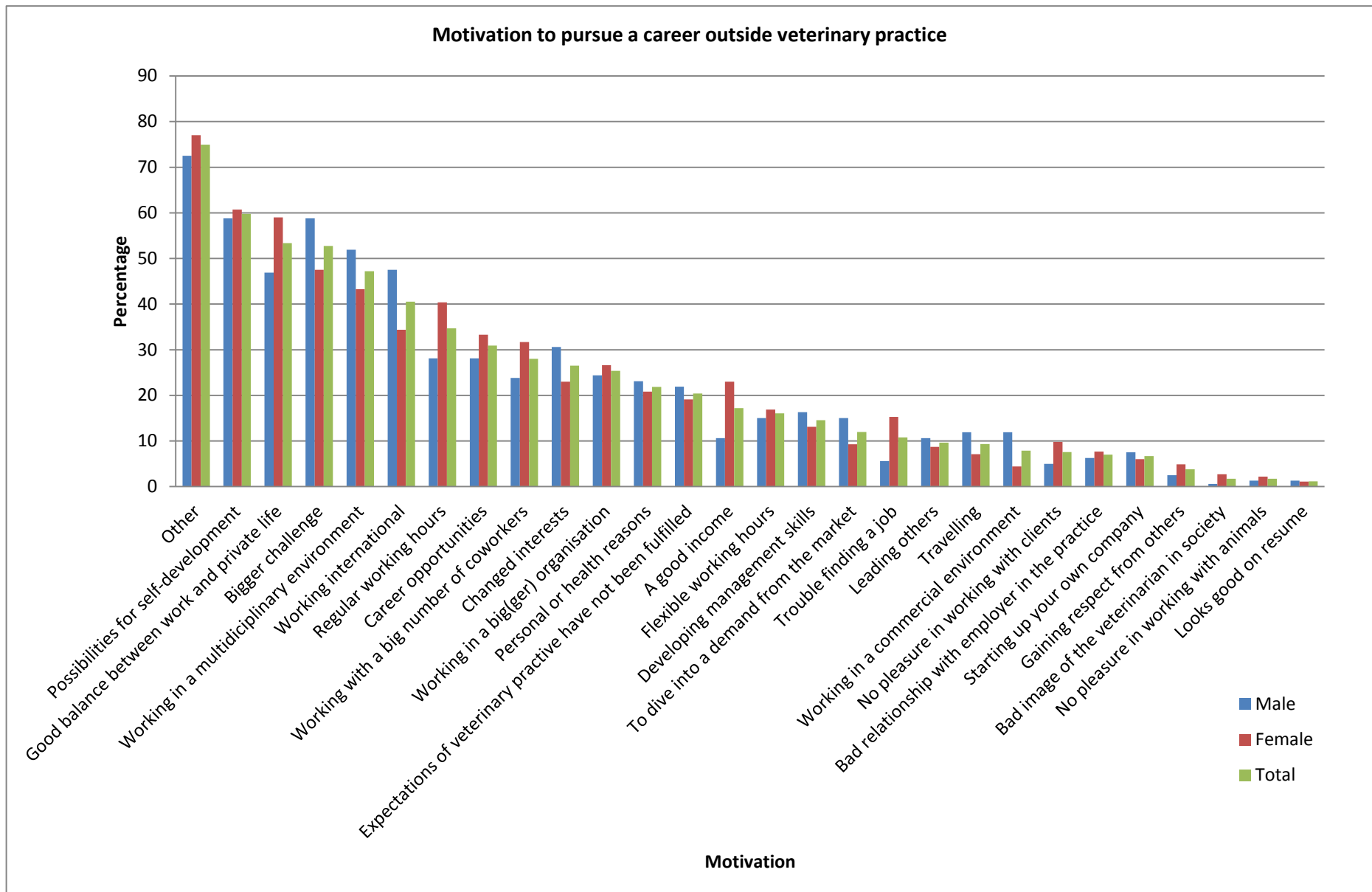


Figure 8 Motivation to pursue a career outside veterinary medicine. N=343

Competence	Average score (SD)	N
Veterinary expertise	3,1	
Apply veterinary knowledge	4,1 (0,8)	343
Adequately execute veterinary acts	2,8 (1,1)	342
Adequately perform in veterinary emergency situations	2,8 (1,3)	343
Adequately transfer patient information	2,6 (1,3)	342
Communication	4,3	
Effective communication	4,8 (0,5)	343
To report, both written and oral	4,6 (0,6)	343
To inform, both written and oral	4,6 (0,6)	341
To advise, both written and oral	4,5 (0,6)	342
To develop and maintain functional relationships	4,4 (0,6)	342
Bad news conversation	3,8 (0,9)	343
Responsible use of social media	3,7 (0,9)	342
Collaboration	4,4	
Collaborate effectively with colleagues and third parties	4,7 (0,5)	342
Take responsibility	4,7 (0,5)	342
Make and stick to agreements	4,6 (0,5)	342
Conflict management	4,3 (0,6)	341
To delegate	4,1 (0,7)	343
To lead	4,0 (0,8)	342
Entrepreneurship	4,1	
Planning and time management	4,3 (0,7)	343
To work result oriented	4,3 (0,6)	341
Networking	4,2 (0,7)	343
Being innovative	4,2 (0,8)	337
Effectively contribute to the business management	4,0 (0,8)	342
To work according to protocol	3,8 (0,8)	341
Process oriented management	3,8 (0,9)	340

Table 5 Importance of different competencies for working outside VP as perceived by participants. N=343

Health and welfare	4,3	
Act according to law and regulations	4,5 (0,6)	341
Balance interests in dilemma's concerning animal health, animal wellbeing and public health	4,3 (0,8)	341
Take responsibility concerning public health	4,3 (0,8)	343
Take responsibility concerning animal health	4,3 (0,9)	343
Take responsibility concerning animal welfare	4,3 (0,8)	343
Scholarship	3,8	
Coaching skills	4,0 (0,8)	343
To find, consider and discuss scientific literature	4,0 (0,8)	343
To apply evidence based veterinary medicine	3,5 (1,1)	343
Design and conduct scientific research	3,5 (1,2)	340
Personal development	4,4	
Professional conduct	4,5 (0,6)	341
Problem solving attitude	4,5 (0,7)	341
Flexibility	4,4 (0,6)	340
Being self-critical	4,4 (0,6)	342
Guard own physical and mental health	4,4 (0,6)	342
Providing and receiving feedback	4,4 (0,6)	343
Take action to improve own performance	4,4 (0,6)	343

Table 5 (continued) Importance of different competencies for working outside VP as perceived by participants. N=343

Masters' research project:

"Dutch veterinarians not working in veterinary practice: Competencies, motivations and characteristics"

Appendix 2 Questionnaire

The format of the questionnaire does not allow it to be implemented in this report. It is attached as a separate PDF file instead.