Playing a role - but which one? : how public service motivation and professionalism affect decision-making in dilemma situations

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Chapter 7

QUANTITATIVE RESULTS: PUBLIC SERVICE MOTIVATION AND PROFESSIONALISM IN THE CONTEXT OF DILEMMA SITUATIONS[1]

1 Parts of this chapter are based on Schott, C., Kleef van, D. D., & Steen, T. (2014). The combined impact of professional role identity and public service motivation on decision-making in dilemma situations. *International Review of Administrative Science*. (forthcoming)

In this chapter, which is divided into four sections, the results of the quantitative analysis are presented. Throughout the chapter I will indicate which parts of the quantitative analysis provide additional data that help to answer the separate secondary research questions, and whether these data verify or contradict them. First, the descriptive statistics of all variables under study are discussed (7.1). Second, the correlations between the independent variables are investigated, and the problem of multicollinearity is considered (7.2). In the third section, the question of what it means to be public service motivated is addressed using statistical methods (7.3). In Section 7.4 I test hypotheses H2 and H3, claiming that professional role identity and 'commitment to the inspectee' influence public service professionals' decision-making in the context of dilemmas. Section 7.5 focuses on the question of whether any additional predictors of decision-making (next to PSM and professionalism) in dilemma situations can be identified. In the final section (7.6), I test the conceptual model presented in the theory chapter, intended to answer the primary research question *what is the combined impact of PSM and professionalism on public service professionals' decision-making in dilemma situations?* All subsections end with a paragraph summarizing the research findings.

7.1 Descriptive statistics of dependent and independent variables

I will start by describing the three core concepts of this study: PSM, professional role identity, and decision-making. PSM and professional role identity were normally distributed. Decision-making was measured at a categorical level. Next, the concepts of professional identification and work-related tensions are discussed, which help us to get a better understanding of the case under study.

7.1.1 Public Service Motivation

Table 7 provided evidence of a high PSM among veterinary inspectors. The mean score for inspectors' PSM was 3.78, which is higher than, for example, the mean score for PSM found in a national survey of Dutch civil servants working in the public administration, public security, defence, education, and academic hospitals subsectors (Leisink & Steijn, 2009). The means of the three PSM dimensions, i.e., 'attraction to public service', 'commitment to public values' and 'compassion' were also high: they were clearly above 3.5 (3 is the centre of the scale), with the mean for 'commitment to public values' the highest (4.18). Only the dimension 'self-sacrifice' scored slightly under 3.5 (3.37). These findings are in line with the results of the qualitative analysis. All dimensions of PSM were reflected in the interviews,

except for 'self-sacrifice'. The standard deviation varied from .40 to .61, which indicates a relatively low variation in the responses to the items measuring PSM.

The level of PSM is generally found to be higher among civil servants ('regular' veterinarian inspectors) than among other individuals working in the private sector (e.g., Rainey, 1982; Houston, 2000). There are two possible explanations for this assumption. First, highly public service motivated individuals are attracted by the public sector. Second, the PSM of those working in the public sector is boosted by socialization effects. (For a theoretical discussion of socialization and attraction-selection mechanisms see Subsection 2.3.2). The sample in our study consisted of both practitioners and 'regular' veterinary inspectors. Practitioners often have two professional roles: as a veterinary inspector and as a veterinarian in private practice. By contrast, most 'regular' veterinary inspectors worked only in the public sector. Slightly more than half (56 %) of the practitioners indicated that they also have a private practice as a veterinarian; by contrast, this applied to only 8 % of the 'regular' veterinary inspectors. Therefore, we may expect 'regular' veterinary inspectors to be more socialized by values inherent in PSM, and hence to have higher levels of PSM than practitioners. In order to investigate this assumption, I performed a *t* test. The results showed that there was no difference in level of PSM between 'regular' veterinary inspectors and practitioners ($t(256) = -1.081$, $p = .281 > .05$).

It is also interesting to compare PSM levels of veterinary inspectors who are also employed in private practices with PSM levels of inspectors who work exclusively for the NVWA. Advocates of the crowding-out theory argue that working in the private sector and being confronted with principles based on market mechanisms and extrinsic incentives might 'cancel out' PSM. (For more information on this theory see Subsection 2.3.2). Our results suggested that veterinary inspectors without additional employment were not significantly less public service motivated than employees who also work in the private sector ($t(256) = .287$, $p = .774 > .05$).

In the qualitative analysis I found that newcomers' PSM vanished over a period of 15 months. This led me to expect that respondents who have worked at the NVWA for a long time are less public service motivated than respondents who only recently entered employment. In order to find out if the number of years worked at the organization are negatively related to the level of PSM, I performed a linear regression analysis. The results showed that years of employment had a negative, but non-significant effect on PSM ($\beta = -.003$, Beta = -.055, $p = .377 > .05$).

Conclusion

Overall, the quantitative results are in line with the qualitative findings. All findings indicated that PSM is high among veterinary inspectors. This was true for both PSM measured as overarching construct and for three of its separate dimensions. Different groups of veterinary inspectors had the same mean PSM scores. 'Regular' veterinary inspectors did not score higher than practitioners. Employees without additional employment were no more public service motivated than employees with an additional contract. Contrary to what I expected on the basis of the qualitative results, PSM did not decline significantly with more years of employment.

7.1.2 Professional role identity

The descriptive statistics for the different dimensions of the construct *professional role identity* were varied. The mean score was highest on the dimension 'commitment to public health' (3.60), lowest on 'strict rule enforcement' (2.33). 'Commitment to economic interests' scored only slightly higher (2.46). This means that on average respondents agreed that safeguarding public health was an important aspect of their work, while they disagreed on whether this was also true for safeguarding economic interests. They also indicated that they preferred rule compliance over strict rule enforcement. The mean score for 'commitment to economic interests' was lower than 3, the centre of the scale and indicating a neutral opinion. The remaining dimension 'commitment to animal welfare' scored in-between the other dimensions (3.32). This means that veterinary inspectors saw standing up for the welfare of animals as an important aspect of their work, albeit less important than public health. The standard deviations for the different dimensions were relatively large, varying between .62 and .67. This supports the qualitative finding that veterinary inspectors differ in the ways they perceive their professional role. Some respondents, for example, indicated that 'strict rule enforcement' was an important aspect of their job, while others disagreed (SD .62).

On the basis of the results of the qualitative analysis it can be argued that there are differences in professional role identity between inspectors with and inspectors without additional employment, and between practitioners and 'regular' veterinary inspectors. In the qualitative analysis 'regular' veterinary inspectors without additional employment were found to be more rigid enforcers of rule and regulations than employees from other groups. One explanation for this might be that they have fewer reasons to fear resentment from inspectees. With regard to the other dimensions of professionalism, the differences found were less 'black-and-white'. I saw individuals from both groups of employees who

considered 'commitment to economic interests' part of their work. A series of *t* tests were performed to test whether the qualitative findings could be verified by the quantitative data. The results indicated that there are no differences between employees with and without additional employment, and between practitioners and 'regular' veterinary inspectors regarding their mean scores on the professional role identity dimension 'commitment to economic interests' ([(additional employment/no additional employment) $t(256) = -.637$, $p = .527 > .05$), ('regular' veterinary inspector/practitioner) $t(172) = -1.058$, $p = .292 > .05$)] and 'strict rule enforcement' [(additional employment/no additional employment) $t(253) = -.959$, $p = .339 > .05$); ('regular' veterinary inspector/practitioner) $t(170) = -.848$, $p = 398 > .5$)]).

The mean score for *professional identification* was 3.36, with a standard deviation of .77, which implies that respondents scored slightly above the centre of the scale. As mentioned before, practitioners often are both inspector and veterinarian and, on average, work far fewer hours for the NVWA than veterinary inspectors (13 hours against 24, respectively). Because of this 'double role' and the limited number of working hours at the NVWA, practitioners can be expected to have a lower level degree of professional identification than 'regular' veterinary inspectors. To an even larger extend this may also be expected from inspectors who also have a private practice. In order to investigate if the degree of professionals' identification differs between these groups of respondents (practitioners vs. 'regular' inspectors; additional employment vs. no additional employment), two *t* tests were performed. The results of the analysis showed that my assumptions were unjustified. On average, there was no difference between the degrees of professional identification in respondents who are employed as practitioners, and in respondents employed as 'regular' veterinary inspectors ($t(256) = -.211$. $p = .833 > .05$). The same was true for employees with and without additional employment: the two groups did not differ regarding the degree of professional identification ($t(256) = -.756$. $p = .451 > .05$). However, because of the low reliability of the instrument measuring professional identification (6.2.3), these results must be treated with caution.

Conclusion

Veterinary inspectors vary as regards the importance they attach to different aspects of their work. The mean scores indicated that most respondents agree that safeguarding public health is an important aspect of their work. Safeguarding economic interests, on the other hand, was considered much less important. The two remaining dimensions, 'commitment

to animal welfare' and 'strict rule enforcement', scored between 'commitment to public health' and 'commitment to economic interests'. Against my expectations, employees with additional employment outside the NVWA and practitioners did not significantly differ from employees without additional employment and 'regular' veterinary inspectors regarding the aspects they find important in their work and degrees of professional identification. Practitioners did not score higher on 'commitment to economic interests', or lower on 'strict rule enforcement'. In the Chapter 8 I will discuss how this can be explained.

7.1.3 Decision-making in dilemma situations

Table 9 is a frequency table for the variable 'decision-making'. The results provide us with additional insights that help to answer the question *what kind of decisions do public service professionals make in dilemma situations?* (SRQ2). Our first step in analysing decision-making was to code the last response category ('Something else, namely …'). If the answer was in line with one of the existing response categories, it was coded accordingly. Answers that could not be assigned to an existing response category were combined into a new response category or – if only mentioned once – coded as 'missing'. For the statistical analysis, only those response categories which contained more than ten reactions were used, because categories with fewer than ten reactions are too small for statistical analysis (Hosmer & Lemeshow, 2000). I will first describe in general terms what I found striking about the decisions veterinary inspectors make, and then discuss each of the three dilemmas separately.

In general, a great variation was found in *types* of response categories chosen across all three dilemmas, whereas the *frequency* of each category varied for each dilemma. This indicates that veterinary inspectors do have the discretion to make their own decisions. In none of the three situations was one response category chosen by the absolute majority of all respondents. Clear rules and regulations seem not to be the primary guidelines of veterinary inspectors' decision-making. A very small number of respondents – even though strongly opposed to the NVWA's mission – chose the response category about enabling them to safeguard economic interests. For Dilemma 1, three respondents (1%) indicated that they would certify all cattle. For Dilemma 2, six respondents (2%) answered that they would not do anything. With all three dilemmas, the most drastic decision in terms of heavy financial consequences for the entrepreneur was frequently chosen. For Dilemma 1 this was indicated by the response category 'I disqualify the cattle', for Dilemma 2 by 'I stop the production process', and for Dilemma 3 by 'I order the cow to be shot and disqualify it'. Another response category frequently found in all three dilemmas was the option 'I defer

the decision until I have talked to my supervisor'. Also, for all three vignettes respondents came up with an additional response category. For Dilemma 1 six respondents (2%) indicated that they would perform a thorough medical examination. For Dilemma 2 two individuals (1%) said that they would slow down the production process, and for Dilemma 3 54 respondents (21%) chose to combine two existing response categories: 1) order the cow to be shot and slaughtered and try to predate the fracture, and 2) require additional food chain information.

As explained above, small response categories had to be excluded from the statistical analyses (Hosmer & Lemeshow, 2000). I therefore decided to exclude response categories that contained fewer than ten responses from my discussion of the separate dilemmas. For Dilemma 1, after these small response categories had been excluded, the number of reactions was more or less balanced between the two remaining response categories: 57 % of the respondents indicated that they would slaughter the animals instantly, and 47 % answered that they would defer the decision and talk to their supervisor first. This implies that slightly over half of the respondents immediately chose the option that enabled them to safeguard public heath immediately. For Dilemma 2, one response category was more dominant. Almost 65 % of the respondents indicated that they would defer the decision until they had had contact with their supervisor. The remaining two response categories were chosen about equally often: 12 % of the respondents indicated that they would make a written report, 13% chose the most drastic measure, indicating that they would stop the production process. Both of these decisions were in the interest of animal welfare. The former entailed administrative tasks and was more time-consuming, the latter had an immediate effect.

For Dilemma 3, respondents most often indicated (36 %) that they would slaughter the animal and wait for additional information about its vaccination history before they made a decision. This decision enabled them to stand up for public health but at the cost of animal welfare (no attention is paid to the cause of the fracture). Other respondents, 23 %, said they, too, would slaughter the animal. However, they would not wait for additional food chain information but would rather try to find the cause of the animal's suffering, which means that they chose an option associated with animal welfare. Next to this, there was also a relatively large group of individuals who would do both: wait for additional information and assess the animal's suffering (21 %). They came up with a solution that enabled them to safeguard both animal welfare and public health. Only 6 % of the respondents indicated that they would impose a serious penalty by destroying the animal right away.

Table 9 Frequency table for decision-making in dilemma situations ('vignettes')

	No	**%**
Dilemma 1		
I certify the cattle*	3	1
I disqualify the cattle	128	50
I defer the decision until I have talked to my supervisor	98	38
I perform a thorough medical examination*	6	2
Missing	23	9
N	258	100
Dilemma 2		
I do not do anything*	6	2
I defer the decision until I have talked to my supervisor	167	65
I make a written report	25	10
I stop the production process	25	10
I slow down the speed*	2	1
Missing	33	12
N	258	100
Dilemma 3		
I order the cow to be shot and disqualify it	14	5
I order the cow to be shot and slaughtered and try to predate the fracture so that I can act if necessary	59	23
I order the cow to be shot and slaughtered and defer my decision until I receive the additional food chain information I requested	94	36
I order the cow to be shot and slaughtered and try to predate the fracture AND make my decision on the basis of the additionally requested food chain information	54	21
I defer the decision until I have talked to my supervisor*	10	4
Missing	27	11
N	258	100

* Frequency ≥10 and therefore not included in statistical analysis

Conclusion

On the basis of these findings, and in accordance with the qualitative results, we can conclude that public service professionals make different kinds of decisions in dilemma situations: they use different coping strategies. Veterinary inspectors often decoupled values; in other words, they favoured certain values above others or used the coping strategy of 'biasing'. In both dilemmas that involved public health (Dilemmas 1 and 3) the response category enabling the inspector to safeguard public health was chosen most frequently. By contrast, if there was a conflict between economic interests and public health or animal

welfare, only very few respondents made decisions that would have a positive effect on the entrepreneurs' economic interests. Next to this, many respondents made use of the deliberate coping strategy 'building firewalls', which is characterized by avoidance. In the two situations in which a lot of money was involved (Dilemmas 1 and 2), a large group of respondents indicated that they would defer the decision until they had talked to their supervisor. Finally, the coupling strategy 'hybridization' was also reflected in the data. In Dilemma 3, 21% of the respondents chose a response category that enabled them to realize two values (animal welfare and public health) at the same time.

7.1.4 Considerations in decision-making

In this subsection I try to take an additional step towards answering the question *what kind of decisions do public service professionals make in dilemma situations?* (SRQ2). By analysing the three most important considerations in decision-making respondents, I double-checked whether the kind of decisions veterinary inspectors make does indeed match the considerations that are expected to underlie certain coping strategies (or more information of coping strategies see Section 2.2). Tables 10a, 10b, and 11c are cross-tabulations displaying the frequency distributions of the variable 'decision-making combined with the three most important considerations in decision-making in Dilemma's 1, 2, and 3. After describing some conspicuous features of considerations in decision-making in general, I will discuss considerations in decision-making for each dilemma separately.

As shown in 10a, 10b, and 11c, almost all respondents indicated both their first and second most important consideration in decision-making, but considerably fewer respondents also indicated their third most important consideration. For Dilemma 1, 226 respondents specified their first and second most important consideration, but only 145 respondents also indicated a third. This means that 76 (33% of the entire sample) fewer respondents gave their three most important considerations than the respondents who gave their two most important considerations. For Dilemma 2, the difference between the number of respondents mentioning two and mentioning three considerations was 62 (30% of the entire sample), and in Dilemma 3 this was 78 (36% of the entire sample).

It is noticeable that in all three dilemma situations respondents made the same decisions for different reasons. For example, in Dilemma 1, 83 respondents said that they would disqualify the cattle first of all because that is what the rules said. However, there were also some who did this because they wanted to avoid rule enforcement-related trouble in the future. For Dilemma 2, 41 respondents chose the option 'I defer the decision until I have

talked to my supervisor', primarily because rules had not been strictly enforced in the past, and 38 respondents did the same 'because they want to safeguard animal welfare'.

However, respondents not only made the same decisions for different reasons, they also did different things for the same reason. As shown in Table 10a, 34 respondents disqualified the cattle because they wanted to safeguard public health, and 22 respondents for the same reason deferred their decision and talked to the supervisor first (Dilemma 1). A similar situation is given in Dilemma 2 (Table 10b). Here, 31 respondents chose to defer their decision, 12 made a written report, and 7 stopped the entire production process, all because they felt this was what the rules prescribed.

A combination of 'rule enforcement' (consideration 'because that's what the rules say') and 'safeguarding public health' (Dilemma 1) or 'safeguarding animal welfare' (Dilemma 2), or both (Dilemma 3), was mentioned as covering the most important considerations in decision-making in all three dilemma situations. This was to be expected because rules and regulations are meant to safeguard public health and animal welfare. For Dilemma 1, 'rule enforcement' was most frequently mentioned (n = 108, 48%), followed by 'safeguarding public health' (n = 56, 25%). For Dilemma 2, 'safeguarding animal welfare' (n = 58, 27%) and 'rule enforcement' were frequently mentioned (n = 50, 23%). For Dilemma 3, 'safeguarding animal welfare' (n = 106, 48%) was most frequently mentioned as the primary reason for a decision, followed by 'safeguarding public health' (n = 61, 28 %) and 'rule enforcement' (n = 49, 22%).

Having discussed the general tendencies regarding decision-making in dilemma situations on the basis of 10a, 10b, and 11c, I will now elaborate on each dilemma separately. The desire to play safe (n = 30, 13%) is another primary consideration frequently cited with Dilemma 1 (10a). Next to this, the fact that the inspectee was known as a 'good guy' was frequently mentioned as second or third most important consideration (n = 48), as was the 'desire to avoid a negative working climate' (n = 25), to 'avoid rule enforcement-related problems in the future' (n = 33), and to 'avoid wasting good meat' (n = 31). The 'willingness to limit financial damage' also played a role (n = 13).

For Dilemma 2 (Table 10b), the considerations 'because there was no strict rule enforcement in the past' (n = 45, 21%) and 'because I want to play safe' (n = 33, 15 %) were also often mentioned as primary considerations in decision-making. The second and third most important considerations in decision-making with Dilemma 2 were similar to those for Dilemma 1 in some respects, but different in others. Respondents also frequently indicated that they made their decision because the inspectee was a 'good guy' (n = 60). By contrast, the considerations 'because I want to avoid a negative working climate' (n = 2) and 'because I want to avoid rule enforcement-related problems in the future' (n = 0) were rarely

chosen. This also goes for the consideration 'because I want to limit financial damage' (n = 2).

For Dilemma 3 (Table 10c), the variety of considerations chosen was smallest. Respondents primarily chose a certain decision because of three considerations: to safeguard animal welfare, to safeguard public health, or because that option was what the rules and regulations decreased. Other considerations such as 'because he is a 'good guy'', or the desire to 'avoid a negative working climate' or to 'limit financial damage' were mentioned hardly or not at all.

Conclusion

The tables show a number of tendencies that apply to all three dilemma situations. First of all, most respondents mentioned their first and second most important considerations in decision-making, but considerably fewer also give their third. Respondents make the same decision for different reasons, but also make different decisions for the same reason. Finally, 'because that is what the rules say' and the willingness to safeguard public health and animal welfare are the considerations in decision-making mentioned most frequently for all three dilemma situations. This means that inspectors' considerations were inconformity with organizational objectives. Next to similarities there were also differences between considerations in decision-making between the three dilemmas. 'Because I want to play safe' is another primary consideration frequently mentioned with Dilemmas 1 and 2, but not with Dilemma 3. This is not really surprising because the financial implications of the decision are much smaller in Dilemma 3, which means that considerations in decision-making are context-dependent.

Altogether the results provided additional insights that helped to answer the question of *what kind of decisions do public service professionals make in dilemma situations?* (SRQ2). Most of the time the kind of decision made was in conformity with the individual's considerations. For example, individuals disqualified cattle because they wanted to safeguard public health/enforce rules and regulations: they coped by 'biasing'. However, the results also indicated that the decisions individuals made – the coping strategy they applied – can deviate from considerations expected to underlie coping strategies, as discussed in the theory chapter (2.2). For example, inspectors said they would defer the decision – to follow the avoidance-related coping strategy 'building firewalls' – not only because they wanted to play safe, but also because of the inspectees' characteristics or because they wanted to limit financial damage.

Table 10a Frequency table of considerations* in decision-making (Dilemma 1)

Decision-making	Considerations in decision-making										
	Rules and regulations	Safeguarding public health	Avoid negative working climate	Avoid troubles with rule enforcement in the future	Colleague overslept	Avoid financial damage	Good meat	Inspectee good guy	Playing safe	Other	Total no of valid observations of N=258
Most important											
I disqualify the cattle	83 64.8%	34 26.6%		5 3.9%	0 0.0%		0 0.0%	0 0.0%	2 1.6%	4 3.1%	128 100.0%
I defer the decision until I've talked to my supervisor	25 25.5%	22 22.4%		3 3.1%	2 2.0%		6 6.1%	2 2.0%	28 28.6%	10 10.2%	98 100.0%
Total	108 47.8%	56 24.8%		8 3.5%	2 .9%		6 2.7%	2 .9%	30 13.3%	14 6.2%	226 100.0%
Second most important											
I disqualify the cattle	40 3.5%	63 5.2%	1 .8%	10 8.1%	0 0.0%	0 0.0%	2 1.6%	0 0.0%	6 4.9%	2 1.6%	128 100.0%
I defer the decision until I've talked to my supervisor	17 17.5%	30 30.9%	3 3.1%	1 1.0%	3 3.1%	2 2.1%	12 12.4%	12 12.4%	15 15.5%	28	98 100.0%
Total	57 25.9%	93 42.3%	4 1.8%	11 5.0%	3 1.4%	2 .9%	14 6.4%	12 5.5%	21 9.5%	30 13.3%	226 100.0%
Third most important											
I disqualify the cattle	4 5.5%	4 5.5%	10 13.7%	23 31.5%	3 4.1%	6 8.2%	4 5.5%	17 23.3%	2 2.7%	4 5.5%	73 100.0%
I defer the decision until have I've to my supervisor	12 16.7%	8 11.1%	11 15.3%	0 0.0%	1 1.4%	6 8.3%	13 18.1%	19 26.4%	2 2.8%	12 16.7%	72 100.0%
Total	16 11.0%	12 8.3%	21 14.5%	23 15.9%	4 2.8%	12 8.3%	17 11.7%	36 24.8%	4 2.8%	16 11.0%	145 100.0%

*For the complete text of the considerations see Subsection 6.1.2.5

Table 10b Considerations* in decision-making (Dilemma 2)

	Considerations in decision-making											
Decision-making	Rules and regulations	No strict rule enforcement in the past	Avoid troubles with rule enforcement in the future	Safeguarding animal welfare	Avoid negative working climate	Avoid financial damage	Safeguarding public health	Inspectee 'good guy'	Inspectee is doing his best	Playing safe	Other	Total no of valid observations of N=258
Most important												
I defer the decision until I've talked to my supervisor	31 18.6%	41 24.6%	0 0.0%	38 22.8%			5 3.0%			31 18,6%	15 9.0%	167 100.0%
I make a written report	12 48.0%	3 12.0%	1 4.0%	7 28.0%			0 0.0%			1 4,0%	0 0.0%	25 100.0%
I stop the production process	7 28.0%	1 4.0%	2 8.0%	13 52.0%			1 4.0%			1 4,0%	0 0.0%	25 100.0%
Total	50 23.0%	45 20.7%	3 1.4%	58 26.7%			6 2.8%			33 15.2	15 9.0%	217 100%
Second most important												
I defer the decision until I've talked to my supervisor	30 18.5%			49 30.2%			1 .6%	40 24.7%	3 1.9%	12 7.4%	27 16.67	162 100.0%
I make a written report	8 34.8%			7 30.4%			2 8.7%	3 13.0%	1 4.3%	0 0.0%	2 8.7%	23 100.0%
I stop the production process	10 40.0%			3 12.0%			1 4.0%	8 32.0%	1 4.0%	1 4.0%	1 4.0%	25 100.0%
Total	48 22.9%			59 28.1%			4 1.9%	51 24.3%	5 2.4%	13 6.2%	30 14.1%	210 100.0%

Table 10b Considerations* in decision-making (Dilemma 2) *(Continued)*

Decision-making	Considerations in decision-making											
	Rules and regulations	No strict rule enforcement in the past	Avoid troubles with rule enforcement in the future	Safeguarding animal welfare	Avoid negative working climate	Avoid financial damage	Safeguarding public health	Inspectee 'good guy'	Inspectee is doing his best	Playing safe	Other	Total no of valid observations of N=258
	Third most important											
I defer the decision until I've talked to my supervisor	30 26.1%			21 18.3%	1 .9%	2 1,7%	8 7.0%	18 15.7%	3 2.6%	16 13.9%	16 13.9%	115 100.0%
I make a written report	1 6.7%			6 40.0%	0 0.0%	0 0,0%	213.3%	4 26.7%	1 6.7%	1 6.7%	1 6.7%	15 100.0%
I stop the production process	2 11.1%			4 22.2%	1 5.6%	0 0,0%	4 22.2%	0 0.0%	5 27.8%	0 0.0%	0 0.0%	18 100.0%
Total	33 22.3%			31 20.9%	2 1.4%	2 1.4%	14 9.5%	22 14.9%	9 6.1%	17 11.5%	17 11.5%	148 100.0%

*For the complete text of the considerations see section 6.1.2.5

Table 10c Considerations* in decision-making (Dilemma 3)

Decision-making	Considerations in decision-making								
	Rules and regulations	Avoid troubles with rule enforcement in the future	Avoid negative working climate	Safeguarding public health	Safeguarding animal welfare	Avoid financial damage	Playing safe	Other	Total no of valid observ-ations of N=258
Most important									
I order the cow to be shot and disqualify it	6 42,9%	0 0,0%		7 50,0%	1 7,1%			0 0,0%	14 00,0%
I order the cow to be shot and slaughtered and try to predate the fracture so that I can act if necessary	12 20,3%	0 0,0%		5 8,5%	41 69,5%			1 1,7%	59 100,0%
I order the cow to be shot and slaughtered and defer my decision until I receive the additional food chain information I requested	20 21,3%	2 2,1%		29 30,9%	42 44,7%			1 1.1%	94 100,0%
I order the cow to be shot and slaughtered and try to predate the fracture AND make my decision on the basis of the additionally requested food chain information	11 20,4%	0 0,0%		20 37,0%	22 40,7%			1 1,9%	54 100,0%
Total	49 22,2%	2 ,9%		61 27,6%	106 48,0%			3 1.4%	221 100,0%
Second most important									
I order the cow to be shot and disqualify it	0 0,0%	1 7,1%	0 0,0%	2 14,3%	10 71,4%		1 7,1%	0 0,0%	14 100,0%
I order the cow to be shot and slaughtered and try to predate the fracture so that I can act if necessary	17 28,8%	3 5,1%	0 0,0%	29 49,2%	8 13,6%		2 3,4%	0 0,0%	59 100,0%
I order the cow to be shot and slaughtered and defer my decision until I receive the additional food chain information I requested	23 25,6%	10 11,1%	0 0,0%	30 33,3%	26 28,9%		1 1,1%	0 0,0%	90 100,0%
I order the cow to be shot and slaughtered and try to predate the fracture AND make my decision on the basis of the additionally requested food chain information	6 11,1%	2 3,7%	1 1,9%	21 38,9%	22 40,7%		0 0,0%	2 3,7%	54 100,0%
Total	46 21,2%	16 7,4%	1 ,5%	82 37,8%	66 30,4%		4 1,8%	2 9%	217 100,0%

Table 10c Considerations* in decision-making (Dilemma 3) *(Continued)*

Decision-making	Considerations in decision-making								
	Rules and regulations	Avoid troubles with rule enforcement in the future	Avoid negative working climate	Safeguarding public health	Safeguarding animal welfare	Avoid financial damage	Playing safe	Other	Total no of valid observ-ations of N=258
	Third most important								
I order the cow to be shot and disqualify it	2 22,2%	2 22,2%	0 0,0%	4 44,4%	1 11,1%	0 0,0%	0 0,0%	0 0,0%	9 100,0%
I order the cow to be shot and slaughtered and try to predate the fracture so that I can act if necessary	17 51,5%	1 3,0%	0 0,0%	5 15,2%	8 24,2%	0 0,0%	2 6,1%	0 0,0%	33 100,0%
I order the cow to be shot and slaughtered and defer my decision until I receive the additional food chain information I requested	25 42,4%	5 8,5%	4 6,8%	9 15,3%	9 15,3%	0 0,0%	6 10,2%	0 0,0%	59 100,0%
I order the cow to be shot and slaughtered and try to predate the fracture AND make my decision on the basis of the additionally requested food chain information	19 50,0%	2 5,3%	3 7,9%	5 13,2%	5 13,2%	1 2,6%	3 7,9%	2 3,7%	38 100,0%
Total	63 45,3%	10 7,2%	7 5,0%	23 16,5%	23 16,5%	1 ,7%	11 7,9%	2 ,9%	139 100,0%

*For the complete text of the considerations see Subsection 6.1.2.5

The quantitative results are generally in accordance with the findings from the interviews (5.6). Veterinary inspectors indicated that a variety of considerations play a role in decision-making, while the relative importance of these considerations were found to be context-dependent. Additional considerations (in the qualitative analysis we called them inspectee-related and inspection-related considerations) primarily matter in situations in which animal welfare and public health are not seriously threatened. Because at least one of these two core values was at risk in each of the three dilemmas, it is not surprising that any of the additional considerations was mentioned far less frequently as the number one consideration in decision-making in the dilemma situations studied here.

7.1.5 Work-related tensions

In this section I provide an analysis of the additional data that helped me to gain a better understanding of the question *what are the dilemma situations public service professionals are frequently confronted with?* (SRQ1). In particular, I discuss an open question in which I asked respondents to indicate in which situations they experienced work-related tensions. If we can assume that work-related tensions are a consequence of dilemma situations, we may expect the answers to this question to provide additional relevant information. Of the respondents, 65% (n = 168) provided us with concrete situations in which they experienced work-related tensions. These situations also included those I identified as 'dilemma situations' in the qualitative part, including a) conflicting demands from various stakeholders, b) animal welfare – one subjective aspect of 'the public interest' – as a guideline for decision-making, and c) unworkable rules. Situations including value pluralism were not explicitly mentioned as causing tensions. Next to this, respondents mentioned many other situations as tension-inducing; in particular, situations involving aggression, time pressure, and lack of organizational support and of uniform decision-making. Table 11 summarizes the situations in which respondents indicated they experienced work-related tensions.

Analysis of the mean score for the construct 'work-related tensions' showed that veterinary inspectors experience medium-level job stress (mean = 5.68 on a scale from 1 to 10). However, in this case the mean score is not a good indicator of the tensions because the scores were bimodally distributed. There was a small group of respondents who indicated they experienced few tensions, and a larger group who experienced many tensions. The skewed distribution of the variable was also reflected in the median and mode scores, which were '6'and '7', respectively. In order to investigate whether there were differences in the levels of job stress experienced between certain groups of respondents a number

of *t* tests were performed. The results indicated that there was a significant difference regarding the level of tension experienced between men and women ($t(258) = 8.680$. $p = .00 < .05$), practitioners and 'regular' veterinary inspectors ($t(258) = 5.019$. $p = .00 < .05$), and respondents who have an additional private practice and respondents who have no additional employment ($t(258) = -3.362$ $p = .00 < .00$). The latter groups were found to experience a lower level of work-related tensions is compared to the former: women more than men; 'regular veterinarian inspectors' more than practitioners; and inspectors without an additional contract more than those without. I will provide a possible explanation for this finding in the last chapter. Also, because the gender distribution in this sample was not representative of the entire population of veterinary inspectors, the effect of gender must be treated with some caution.

Table 11 Frequency table for reasons for work-related tensions

Reasons for work-related tensions	No	%
Aggression	37	14
Lack of organizational support	31	12
Time pressure	28	11
Conflicting demands	26	10
Lack of uniform decision-making	15	6
Other	12	5
Decisions related to animal welfare	7	3
Faulty decisions	5	2
Problems with ICT	4	2
Unfeasible rules	3	1
Missing	90	34
Total	258	100

Conclusion

These findings generally support the proposition that *public service professionals experience dilemmas in situations in which equally important values clash, various stakeholders' demands are in conflict, or the 'public interest' is the guideline of behaviour* (P1). Situations characterized by multiple demands from various stakeholders, and situations in which animal welfare – one aspect of 'the public interest' – is the guideline for decision-making were mentioned as causing work-related tensions. Only situations including value pluralism were not explicitly mentioned as situations in which respondents experienced tensions.

7.1.6 Commitment to the inspectee

In the qualitative analysis it was found that the degree of 'commitment to the inspectee' played an important role in the decisions that veterinary inspectors make in dilemma situations (5.6). Individuals indicated that they experienced trouble and even acted differently if they knew the inspectees well and were on good terms with them. On the basis of this qualitative result I formulated the hypothesis that *commitment to the inspectee influences decision-making in dilemma situations* (H3), I and included items measuring 'commitment to the inspectee' quantitatively in the survey (6.2.4). The variable 'commitment to the inspectee' was normally distributed and had a standard deviation of .82. The mean score was 2.96, which is close to the centre of the scale (3).

Because, employees who have an additional employment contract as veterinarian can be expected to be more committed to the inspectee than employees without an additional contract, a *t* test was performed. On average, there was no difference between the degree of commitment to the inspctee in respondents with and without additional employment ($t(254) = -.014$. $p = .989 > .05$).

7.2 Correlations between the variables and multicollinearity

In this section I will discuss two correlation tables which contain all independent and dependent variables included in this study. I will start by explaining Table 12a, which presents the correlations between PSM, the separate PSM dimensions, the different dimensions of the concept of professional role identity, professional identification, work-related tensions, and the dependent variable decision-making. The correlations between the different dimensions of the concept of professional role identity and those between professional role identity and PSM are especially interesting because they provide us with additional data that help to answer the secondary research questions *how can the meaning and behavioural consequences of professionalism be clarified* (SRQ4)? and *what is the relationship between PSM and professionalism* (SRQ5)? Next, the correlations between PSM and decision-making in three dilemma situations are very interesting, as are the correlations between the dimensions of the concept of professional role identity and decision-making. They provide us with some insights that help to answer the primary research question *what is the combined effect of PSM and professionalism on decision-making in the context of dilemma situations?* The correlations between different dimensions of the concept of professional role identity and the different considerations in decision-making are summarized in Table 12b.

As shown in Table 12a, the different dimensions of PSM correlated closer with each other and with the overall PSM construct: the lowest correlation was .34 (self-sacrifice and commitment to public values) and the highest .83 (attraction to public service and PSM). The problem with high correlations is that they increase the risk of multicollinearity, which refers to strong correlations between two or more predictors in a regression model (Field, 2009). However, because the different dimensions of PSM are never included in one single regression model this risk is not relevant here.

Analysis of the correlations between PSM and different dimensions of the concept of professional role identity showed that PSM and its separate dimensions positively correlate with the two professional role identity dimensions 'commitment to animal welfare' and 'commitment to public health'. (The only exceptions are the correlation between the PSM dimension 'commitment to public values' and the professional role identity dimension 'commitment to public health', and the correlation between the PSM dimension 'self-sacrifice' and the role identity dimension 'commitment to animal welfare'). By contrast, PSM correlated negatively with the professional role identity dimensions 'commitment to economic interests.' The same was true for the relationship between the PSM dimensions 'commitment to public values' and 'commitment to the inspectee', and the relationships between 'compassion' and 'strict rule enforcement' on the one hand and 'self-sacrifice' and 'strict rule enforcement' on the other. Overall, this implies that being public service motivated is positively associated with a focus on both public health and animal welfare, but negatively with economic interests and strict rule enforcement (even though the relationship between 'rule enforcement' and 'economic interests' was not significant).

The results provided some support for our observation (5.4 and 5.5) that there are different types of inspectors, who combine different interpretations of work aspects. There was a negative correlation between 'commitment to economic interests' and 'strict rule enforcement'. This is in accordance with the distinction between an organization-focused and a veterinary medicine-focused professional role identity. Against my expectations, veterinary inspectors who strongly focus on public health did not focus on strict rule enforcement. Neither did respondents who pay a lot of attention to economic interests pay any attention to animal welfare. Nevertheless, there seemed to be differences between veterinary inspectors regarding their 'commitment to the inspectee' and the way they perceive their work. 'Commitment to the inspectee' was positively related to the professional role identity dimensions 'commitment to economic interests' and 'commitment to animal welfare', and negatively to 'strict rule enforcement'. In other words, veterinary inspectors who had strong sympathy for their inspectees, and who experienced stress if they were

forced to make a decision that implied adverse consequences for the inspectee also thought that safeguarding animal welfare and economic interests was important.

Next, the table shows some significant correlations between decision-making in three dilemma situations, the separate dimensions of the concept of professional role identity, and the concept of commitment to the inspctee. In Dilemmas 1 and 2, 'commitment to the inspectee' was positively related to those response categories of decision-making that are associated with deferring the decision to a higher level. The same was true for the dimension 'commitment to economic interests' in Dilemma 1. In Dilemma 3 the 'commitment to public health' was negatively related to deferring the decision. In none of the three dilemma situations included in this study were correlations between PSM and decision-making found. In Sections 7.4 and 7.6, I will analyse the relationship between PSM, professionalism and decision-making more deeply by making use of logistic regressions models.

The correlation table also show that professional identification is positively correlated with the separate PSM dimensions and the overall PSM construct. These findings support the idea that professional organizations could play a positive role in fostering public norms and values among their members. By contrast, professional identification was not, or only weakly, associated with the different dimensions of the concept of professional role identity, which suggests that the degree of identification with the profession of veterinary inspector is not associated with the way veterinary inspectors interpret their work.

Finally, significant correlations between work-related tensions and the variables 'self-sacrifice', 'willingness to enforce', and 'professional identification' were found. All correlations, however, were very small: below .15.

As illustrated in Table 12a, *muticollinearity* seemed not to be a problem. No extreme correlations between two independent variables included in one of the multiple regression models were found. The highest correlation was $r = .243$, between PSM and the professional role identity 'commitment to public health'. This is important because it is difficult to assess the individual importance of the separate predictors in a regression model if they are highly correlated. Also, the standard error and β confidence intervals tend to be inflated in models which are affected by multicollinearity (Field, 2009).

The results listed in the second correlation table (Table 12b) indicate that – in general – the way people interpret their professional role and their considerations in decision-making were positively linked. Respondents who made their decision on the basis of the consideration 'because I want to safeguard public heath' also view 'safeguarding public health' as an important aspect of their work. The same was true for the relationship between

the considerations 'because I want to limit financial damage' and 'commitment to economic interests', and between 'because I want to ensure animal welfare' and 'commitment to animal welfare'. The consideration 'that is what the rules say' did not significantly correlate with the professional role identity dimension 'strict rule enforcement': if respondents considered rules and regulations in the decisions they made, this did not they did not necessarily mean that they thought strict rule enforcement as an important aspect in their work. However, as expected, a significant and negative relationship between 'strict rule enforcement' and the consideration 'because he usually is a 'good' guy' was found.

Next, Table 12b also provides evidence of some structure among the considerations: some considerations were positively related, others negatively. The highest correlations involved 'because that is what the rules say' and 'because I want to avoid financial damage'. I will focus on the correlations involving these two considerations when describing possible correlation patterns. Respondents who made their decision on the basis of rules and regulations also made their decision because they want to safeguard animal welfare and public health. Because rules and regulations are designed to assure these values, this finding is not surprising. On the other hand, economic damage-related considerations, and considerations linked to the fact that someone dislikes wasting good meat were negatively related to the consideration 'because that's what the rules say'. This means that if people indicated that rules and regulations were important considerations in their decision-making, they were less concerned with limiting financial damage or meat possibly being wasted.

In contrast, if respondents scored high on the consideration 'because I want to avoid financial damage', they also scored high on a large number of alternative considerations. Considerations positively related to the desire to avoid financial damage are 'because I want to avoid a negative working climate', 'because I want to avoid future problems related to rule enforcement in the future', 'because it was my colleague's fault', 'because I don't like wasting good meat', and 'because the inspectee is usually a good guy'. In other words, this group of veterinary inspectors seemed to be more loyal to colleagues and sensitive to the character of the inspectee.

Conclusion

On the basis of the two correlation tables, three important results should be highlighted. First, PSM and its separate dimensions are positively related to the professional role identity dimensions 'commitment to animal welfare' and 'commitment to public health', but negatively to 'commitment to economic interests' and (though not significantly so) to 'strict rule enforcement'. These findings contribute to our understanding of the relationship between PSM and professionalism (SRQ5).

Table 12a Full Pearson's correlations[2] table of all core variables included in this study

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. PSM	1																	
2. ATPS	.84**	1																
3. CPV	.65**	.45**	1															
4. COM	.77**	.54**	.44**	1														
5. SS	.83**	.61**	.34**	.83**	1													
Professional role identity																		
6. Commitment to economic interests	-.12*	-.05	-.11	-.05	-.12	1												
7. Commitment to AW	.13*	.13*	.13*	.18**	.05	.06	1											
8. Commitment to PH	.24**	.26**	.11	.14*	.24**	-.02	.05	1										
9. Strict rule enforcement	-.11	-.21**	-.15*	.09	.02	-.30**	.07	.01	1									
10. Commitment to the inspectee	-.12	-.05	-.13*	-.02	-.11	.39**	.17**	-.01	-.21**	1								
11. Professional identification	.29**	.25**	.13*	.30**	.24**	.07	.11	.15*	-.11	.00	1							
12. Work-related tensions[3]	-.09	-.04	-.09	-.15*	-.06	.10	.06	.02	.02	.10	.15*	1						
13. Decision-making Dilemma 1[4] (0 = I disqualify 1= I defer the decision)																		
	.11	.06	.06	.13	.10	.15*	.10	-.01	-.02	.14*	-.01	-.15*	1					
Decision-making Dilemma 2[4]																		
14. Dummy 1 (D2)	-.03	-.02	.00	-.02	-.07	.12	-.04	.04	-.08	.20**	.08	.19**	.01	1				
15. Dummy2 (D2)	-.01	-.00	-.04	-.01	.01	-.01	-.03	.02	.05	-.13	-.12	-.19**	.01	-.66**	1			
Decision-making Dilemma 3[4]																		
16. Dummy1 (D3)	-.05	-.07	-.02	.01	-.07	.04	.02	-.14*	.05	.04	-.03	-.09	.09	.06	-.02	1		
17. Dummy2 (D3)	-.06	-.05	-.08	.02	-.03	-.06	-.04	.00	.08	-.03	-.01	-.10	-.17*	-.01	-.06	-.52**	1	
18. Dummy 3 (D3)	.09	.09	.10	-.05	.07	.01	.00	.06	-.13	.02	-.03	.21**	.02	.00	.07	-.34**	-.49**	1

Dummy 1 (D2) = I stop production vs. I defer decision; Dummy 2 (D2) = I stop production vs. I make a written report; Dummy 1 (D3) = I disqualify vs. I predate the fracture; Dummy 2 (D3) = I disqualify vs. decision based on vaccination info; Dummy 3 (D3) = I disqualify vs. I predate the fracture and make a decision based on vaccination info * Significant at < 0.1 (2-tailed)

** Significant at < 0.05 (2-tailed)

Interestingly, the quantitative results partly contradict the results of the qualitative analysis, in which we were able to demonstrate that professional role identity helps to clarify the meaning and consequences of PSM. In the qualitative analysis (5.5) I found that 'public interest' can be interpreted as 'strict rule enforcement' or 'commitment to economic interests', and that this is reflected in the behaviour of public service professionals. I will refer to this contradiction in the Discussion chapter (Chapter 8).

Second, the results indicate that the way people interpret their professional role (professional role identity) and in general their considerations in decision-making are general positively linked. These findings are interesting because they support our assumption about the explanatory value of professional role identity.

Third, if we combine the results of both correlation tables we find additional support for the proposition that *Individuals holding the same profession differ regarding the way they interpret their professional role: they have different professional role identities* (P4). The correlation tables provide evidence for two different types of veterinary inspectors: those who rely on rules and who want to safeguard animal welfare and public health (organization-focused professional role identity), and those who consider the financial damage their actions might cause, who are committed to the inspectee, and influenced by the inspectee's character (veterinary medicine-focused professional role identity). The only relationship that could not be verified by means of quantitative data was that between 'commitment to economic interests' and 'animal welfare'. This might point to the existence of a large group of individuals with mixed professional role identities.

2 Correlations including dummy variables are point-biserial correlations

3 Measured on a Likert scale ranging from 1 to 10. All other constructs were measured on a scale ranging from 1 to 5.

4 For a complete formulation of the response categories for Dilemmas 1, 2 and 3 see Subsection 6.1.2.5

Table 12b Pearson's correlations table of professional role identity and considerations in decision-making in dilemma situations

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Professional role identity																
1. Commitment to economic interests	1															
2. Commitment to animal welfare	.056	1														
3. Commitment to public health	-.020	.050	1													
4. Strict rule enforcement	-.295*	.069	.014	1												
5. Commitment to the inspectee	.392**	.171**	-.006	-.207*	1											
Consideration in decision-making[45]																
6. Because that's what the rule say	-.241**	-.001	.101	.108	-.161*	1										
7. Because I want to safeguard public health	-.286**	.093	.288**	.155*	-.168*	.266**	1									
8. Because I want to limit financial damage	.259**	.104	.010	.014	.244**	-.144*	.062	1								
9. Because I want to avoid a negative working climate	.233**	.236**	.013	-.089	.244**	-.065	.065	.660**	1							
10 . Because I want to avoid future problems related to rule enforcement	.078	.188**	.036	-.042	.141*	.044	.018	.382**	.535**	1						
11. Because I want to be certain of the decision by contacting supervisor(s)	.201**	.138	.158*	.075	.231**	-.137	.203**	.414**	.473**	.262**	1					
12. Because it was my colleague's fault	.143*	.085	.049	.048	.051	-.121	.071	.508**	.426**	.243**	.200**	1				
13. Because I don't like wasting good meat	.216**	.108	.075	.017	.238**	-.186**	.045	.529**	.438**	.270**	.326**	.457**	1			
14. Because the inspectee is usually a good guy	.256**	.062	.112	-.214**	.266**	-.116	-.024	.487**	.418**	.118	.216**	.298**	.578**	1		
15. Because we didn't enforce this in the past either	.117	.003	.050	-.131	.212**	.149*	-.049	.018	-.005	.117	.124	.039	.124	.020	1	
16. Because I want to ensure animal welfare	-.202**	.215**	.096	.110	.063	.252**	.379**	-.008	.025	-.053	.207**	.097	.138*	.132	.148*	1

* Significant at < 0.05 (2-tailed); ** Significant at < 0.01 (2-tailed)

5 The different consideration scores were calculated by combining the scores for the same consideration for all three dilemmas (provided the consideration was relevant to the dilemma)

6 For a complete formulation of the considerations see Subsection 6.1.2.5

7.3 Linking the meaning of 'public interest' to different roles

In this section, I will go one step further towards finding an additional empirical answer to the question of *how the meaning and behavioural consequences of PSM can be clarified* (SRQ3). Assuming that the concept of public interest is an inherent aspect of PSM I included an additional open PSM question in the survey, asking respondents to identify in one word what they associate 'public interest' with in their roles of A) citizen, B) veterinarian (with an academic education), and C) veterinary inspector. This question is important as it helps to verify the proposition that *the meaning of public service motivation, and its behavioural implications, depend on the interpretations individuals bring to the different roles they occupy in society* (P2). I will start by describing the frequency of the different interpretations in relation to the different roles. Interpretations that were only mentioned once were coded as 'other'. Second, I investigate if specific combinations of interpretations of 'public interest' can be identified.

As shown in Table 13, there were many different interpretations of the concept of public interest. For the 'civilian' role 18 different interpretations could be differentiated, 15 for veterinarian, and 15 for veterinary inspector. Ten interpretations were mentioned in all three roles (e.g., social welfare, honesty and public health), but there were also interpretations which were only mentioned in two or just one role. For example, 'solidarity' and 'to show a social conscience' were frequently mentioned in the 'civilian' role, but not in the veterinarian nor in the veterinary inspector role. By contrast, 'service provider' was only mentioned for veterinarian and 'rule enforcement' only in for veterinary inspector.

In spite of the large variety of interpretations, several frequency patterns could be distinguished among the three roles. For the role of civilian, specific interpretations were mentioned with fairly equal frequencies. Four interpretations were mentioned more than twenty times (social welfare, society, security, to show a social conscience) and four interpretations were mentioned more than ten times (honesty, justice, public health, civic duty). For the roles of veterinarian and veterinary inspector one interpretation was dominant in each case. For the veterinarian role this was animal welfare (n=129), followed by public health (n=16), being a service provider (n=15), and social welfare (n=13). All other interpretations were mentioned less than ten times. If we look at the interpretation of 'public interest', we see a similar picture for the role of veterinary inspector in the sense that a different interpretation was clearly dominant. Here, 'public health' is the interpretation most frequently mentioned by far (n=127); second is 'animal welfare' (n=29), followed by 'rule enforcement' (n=20) and 'legislation' (n=16).

Table 13 Frequency table for different interpretations of 'public interest'

	Role					
	Civilian		Veterinarian		Veterinary inspector	
	No	%	No	%	No	%
Social welfare	31	12.0	13	5.0	5	1.9
Society	28	10.8	3	1.2	5	1.9
Security	24	9.3	1	.4	1	.4
To show a social conscience	23	8.9				
Honesty	15	5.8	5	1.9	6	2.3
Justice	15	5.8			3	1.2
Public Health	13	5.0	16	6.2	127	49.0
Civic Duty	11	4.2	1	.4	1	.4
Solidarity	10	3.9				
Respect	9	3.5	3	1.2	2	.8
Helpfulness	8	3.1	2	.8		
Norms and values	6	2.3	2	.8	1	.4
Responsibility	5	1.9	2	.8	3	1.2
Equality	4	1.5				
Legislation	4	1.5	1	.4	16	6.2
Health care	2	.8				
My own interests	2	.8				
Humanism	2	.8				
Animal welfare/health			129	49.8	29	11.2
Economic interests			6	2.3	3	1.2
Professionalism			7	2.7	3	1.2
Providing service			15	5.8		
Rule enforcement					20	7.7
Other	21	8.1	23	8.9	14	5.4
Missing values	25	10.0	29	11.6	19	7.7
Total	258	100	258	100	258	100

In a second step I investigated if different patterns of interpretation could be distinguished, and how these related to the level of PSM and to work-related tensions. The mean score can be misleading if the distribution of the variable is skewed. Work-related tensions are distributed bimodally (see also Subsection 7.1.5). For this reason, I here present not only the mean score but also the median. In Table 14 interesting and frequent combinations of interpretations are summarized. For the sake of clarity, unique combinations were excluded from the table.

For the role of veterinarian the combination most frequently mentioned by far was animal welfare, plus public health for the role of veterinary inspector, plus a varying interpretation (e.g., social welfare, security, justice) for the role of civilian. This combination occurred 85 times and is given in the first row of the table below. Interestingly, by contrast the combination of animal welfare and public health never occurred. For the role of veterinarian the interpretation 'public health' was never given in combination with the interpretation 'animal welfare' for the role of veterinary inspector. This could support the proposition that interpretations of the concept of public interest are role-dependent (P2). However, we also found that respondents interpreted 'public interest' in the same way in both their roles of veterinary inspector and veterinarian. Twenty-one individuals indicated that animal welfare is what 'public interest' meant to them in both roles, and 12 individuals said the same of 'public health'. This result might suggest that the roles influence each other with respect to the interpretation of the concept of public interest, with a stronger effect from the role of veterinarian. Animal welfare – the dominant interpretation for the role of veterinarian – was mentioned as their interpretation of 'public interest' in both roles by almost twice as many respondents than those mentioning public health, which was the dominant interpretation for the role of veterinary inspector (21:12). An explanation for this strong effect might be that the respondents had first been socialized as veterinarians. Prior to their contact with the NVWA they studied veterinary medicine, and most of them had worked as practicing veterinarians for many years[7].

Another interesting observation was that eight individuals gave the same interpretation of 'the public interest' for all three roles. Further analysis of the data showed that in none of these cases did individuals refer to either public interest or animal welfare. Rather, when interpreting the concept of public interest these respondents referred to classic values such as 'honesty', 'respect', 'society', and 'social welfare'. One respondent referred to 'values' in general. This could imply that there is also a small group of individuals whose interpretation of 'public interest' is a static core trait.

Next to this, there was also a small group of respondents (n = 6) who gave inherently conflicting meanings to the concept of public interest, namely 'providing service' for the role of veterinarian and 'strict rule enforcement' for the role of veterinary inspector. This is very interesting because it puts these individuals in situations in which it is often impossible to act in line with both interpretations.

7 Practitioners had been working as practicing veterinarians for 23 years on average. Unfortunately, I do not have data available for the number of years the 'regular' veterinary inspectors had been working in private practices before they joined the NVWA.

It is noticeable that, no matter what combination of interpretations of the concept of public interest people subscribed to, all respondents scored high on PSM, and the group of individuals who had conflicting views of PSM even scored highest. This could support the argument that the meaning of PSM – assuming that the public interest is an important aspect of it – is fuzzy, and also supports our finding from the qualitative analysis (5.5) that PSM may be associated with both 'strict rule enforcement' and 'economic interests'. Knowing that an individual is public service motivated is not sufficient, because this does not tell us how he or she will behave. Another interesting finding/observation was that individuals who have conflicting views on 'public interest' in their different roles experienced the lowest amount of work-related tensions. Respondents who interpreted the meaning of the concept of public interest in the same way regardless of the role they held experienced the highest level of stress.

Table 14 Frequent and interesting combinations of interpretations of 'public interest'

	No	Mean PSM	Median/mean Work-related tensions
Animal welfare[8]/ public health[9] + 'X'[10] + 'X' = Social welfare (n = 12) + 'X' = Security (n = 11) + 'X' = Civic duty (n = 4) + 'X' = Solidarity (n = 4) + 'X' = Justice (n = 5) + 'X' = Society (n = 9) + 'X' = To show a social conscience (n=13) + 'X' = Varying values (n = 26)	85	3.85	6/5.49
Public health[8]/animal welfare[9]+ 'X' [10]			
Animal welfare[8]/animal welfare[9] + 'X'[10]	21	3.63	6.5/5.85
Public health[8] /public health[9] + 'X'[10]	12	3.90	6/5.70
Service provision[8]/rule enforcement[9] + 'X[10]	6	4.01	5.5/5.33
Same interpretation of public interest for all three roles	9	3.77	7/6.05

Conclusion

The results support the theoretical argument that 'public interest' is a fuzzy concept: the data reflected no general agreement on what 'public interest' actually means. The respondents delivered 23 different interpretations of the concept in total. Next to this, the results supported my argument in section 2.7.1 that if we want to clarify the meaning and behavioural consequences of the concept (SRQ3), PSM had better be approached as

8 Role of veterinarian
9 Role of veterinary inspector
10 Role of civilian

a role identity-dependent construct rather than an ideal. Almost 50 % of the respondents interpreted 'public interest' as animal welfare for the role of veterinarian, and as public health for the role of veterinary inspector. Only 10 (< 4%) individuals accorded one and the same meaning to 'public interest' for all three roles. This provides additional support for the first part of the proposition *the meaning of public service motivation, and its behavioural implications, depend on the interpretations individuals bring to the different roles they occupy in society* (P2). However, it also means that there might be a small group of people for whom PSM is more like a stable core trait.

7.4 Professional role identity, commitment to the inspectee, and decision-making

Earlier (Sections 5.4 and 7.2) I discussed the proposition that *individuals holding the same profession differ regarding the way they interpret their professional role: they have different professional role identities* (P4). In this section I will go one step further and investigate if professional role identity has behavioural consequences in dilemma situations. In other words, I test the hypothesis that *decision-making in dilemma situations is influenced by professional role identity, i.e., the way individuals interpret their professional role* (H1). This will make it possible to fully verify our theoretical argument that if we want to clarify the meaning and behavioural consequences of professionalism (SRQ4) professionalism had better be approched as professional role identity. I also investigate if the results presented in Section 5.6 – i.e., 'commitment to the inspectee' is an important consideration and hence also an explanatory factor in decision-making – can be generalized by testing the hypothesis *commitment to the inspectee influences decision-making* (H3).

Both hypotheses (H1 and H3) were tested by performing a series of logistic regression analyses. After excluding those response categories of the variable 'decision-making' that contained fewer than ten responses, two response categories remained for Dilemma 1, three for Dilemma 2, and four for Dilemma 3. I therefore performed a binary logistic regression analysis to test the influence of professional role identity and 'commitment to the inspectee' on decision-making in Dilemma 1, and multinomial logistic regressions analyses to test these effects in Dilemmas 2 and 3. The effect of the independent variables on decision-making was tested via a two-step procedure. First, the effects of each dimension of professional role identity and the effect of 'commitment to the inspectee' on decision-making were tested separately. Second, controls were included in the logit models in order to investigate if the results could have been confounded by the effect of third variables.

Binary logistic regression analysis: Dilemma 1

Before I present the results of the binary regression analysis, I will address the question of whether the logistic regression model provided a good fit with the data obtained. The extent to which the new model provides better fit than the 'null model' without explanatory variable(s) is indicated by the Hosmer-Lemeshow (HL) test and the Omnibus test of model coefficients indicate. If the result of the HL test is not significant, the model can be assumed to have adequate fit (Lammers, Plezer, Hendrickx & Eisinga, 2007). Table 15 summarizes the results of the binary regression analysis applied to Dilemma 1. Next to the logits (the logistic regression coefficients (B)) and the odds ratio (Exp(B)), the results of the HL test and the Nagelkerke R Square, and the number of valid observations are provided. The Nagelkerke (pseudo) R square can be used as an indicator of the effect size of the independent variable (Lammers, Pelzer, Hendrickx & Eisings, 2007).

The logit models showed that for Dilemma 1 the dimensions 'commitment to animal welfare', 'commitment to public health' and 'strict rule enforcement' had no significant effect on decision-making. A one-unit change in the independent variables 'commitment to economic interests' and 'commitment to the inspectee', however, increased the likelihood that that the decision was deferred until after the consultation with the supervisor (commitment to economic interests (Exp(B) = 1.53; $p = .04 < .05$; commitment to the inspectee (Exp(B) = 1.47; $p = .04 < .05$). This means that if veterinary inspectors saw resecting the economic interests as an important aspect of their work and commiserated with they were more likely inspectees, the probability increased that they defer their decision until they had talked to their supervisor.

In a next step I extended to analysis to include gender, age, type of employment contract, additional employment as a veterinarian, number of years of employment at the organization, position, team, and proactive behaviour in order to control for alternative explanations of decision-making. The results of this second model (for more information see Table A5a in the Appendix) showed that the effect of 'commitment to economic interests' and 'commitment to the inspectee' remained significant (commitment to the inspectee: Exp(B) = 1.64; $p = .02 < .05$; economic interests: Exp(B) = 1.81; $p = .01 < .05$). The two control variables which had a significant effect on decision-making in Dilemma 1 were gender and age. Women were three times more likely than men (Exp(B) = 3.01) to defer their decision and contact the supervisor first before disqualifying the cattle. (However, we need to keep in mind that the number of women in the sample of this study was not representative (6.2.2))

Table 15a Results of binary regression analysis (Dilemma 1)

	HL test		Omnibus Test of Model Coefficients		Nagelkerke (pseudo) R	B	Exp(B)	Sig.	No of valid observation of N=258
	Chi-square	Sig.	Chi-square	Sig.					
Commitment to economic interests	2.99	.70	5.18	.02*	.03	.40	1.49	.03*	226
Constant						-1.23	.29	.01	
Commitment to animal welfare	3.96	.55	2.32	.13	.01	.32	1.37	.13	217
Constant						-1.32	.27	.06	
Commitment to public health	11.85	.04*	.01	.91	.00	-.02	.98	.91	222
Constant						1.27	.85	.83	
Strict rule enforcement	1.512	.91	.18	.73	.00	-.07	.93	.73	224
Constant						-.12	.88	.80	
Commitment to the inspectee	9.17	.56	.4.53	.03*	.03	.36	1.47	.04*	224
Constant						-1.37	.25	.01	
PSM	11.72	.16	2.58	.11	.02	.56	1.75	.11	226
Constant						-2.38	.09	.08	

0 = I disqualify the cattle. (reference category); 1 = I defer the decision until have I talked to my supervisor.
* Significant at < 0.05 (2-tailed)

The opposite was true for the effect of age. A one-unit change in the variable 'age' made it less likely that respondents would defer the decision rather than disqualify the cattle right away. Table A5a in the Appendix provides evidence that 'commitment to the inspectee' plus the control variables explain 13 % of the variance in the independent variable ((pseudo (R) = .13). 'Commitment to economic interests' plus the control variables explain 14 % ((pseudo (R) = .14).

Multinomial logistic regression analyses: Dilemmas 2 and 3

Before I present the results of the multinomial logistic regression analysis I will first discuss whether the 'new model', i.e., the model that includes the independent variable, can be considered to have a good fit. This information was provided by the Likelihood Ratio Test, a test based on the likelihood ratio expressing how many times more likely the data are under the 'new model' than under the base '0 or model'. In Tables 15b and 15c the results of the multinomial regression analysis are summarized for Dilemmas 2 and 3. Besides the results of the Likelihood Ratio Test, the table also contains the logits, odds ratios, the Nagelkerke (pseudo) R, and the number of valid observations. Again, each dimension of the construct 'professional role identity' and the concept 'commitment to the inspectee' was tested separately.

For Dilemma 2, again the professional identity dimensions 'commitment to economic interests' and 'commitment to the inspectee' had a significant effect on decision-making. A one-unit change in the independent variable 'commitment to the inspectee' increased the likelihood of deferring the decision compared to stopping the production processes. If veterinary inspectors thought that safeguarding economic interests was an important aspect of their work, the probability increased that they deferred the decision until they had talked to their supervisor regarding the response category 'I stop the production process' (Exp(B) = 1.9; $p = .04 < .05$). The other dimensions of professional role identity had no significant effect on decision-making.

In a second step controls were added to the model. As can be seen in Table A5b in the Appendix, the effects of 'commitment to economic interests' and 'commitment to the inspectee' remained significant. Control variables that had a significant effect on decision-making were 'type of employment contract' and 'position'. Respondents who worked as 'regular' veterinary inspectors (as opposed to practitioners) and who held a position without any supervisory responsibility (as opposed to veterinary inspectors who were also company inspectors) were less likely to write a report than to stop the production process.

This result is interesting because it supports my argument that there might be differences between practitioners and 'regular' veterinary inspectors regarding the way they do their work. (Note that, I argued that practitioners might perceive their work differently than 'regular' veterinary inspectors because, of their indirect dependency on the private sector and their distance to the NVWA (5.4)).

Table 15b Results of multinomial logistic regression analysis (Dilemma 2)

		Likelihood Ratio Test		Nagelkerke (pseudo) R	B	Exp (B)	Sig.	No of valid observations of N=258
		Chi-square	Sig.					
Commitment to economic interests		4.80	.09	.03				217
0	Constant				.41		.56	
	Economic interests				.66	1.93	.04*	
1	Constant				-1.21		.19	
	Economic interests				.54	1.72	.17	
Commitment to animal welfare		1.70	.43	.01				209
0	Constant				3.32		.01	
	Animal welfare				-.40	.67	.22	
1	Constant				1.74		.23	
	Animal welfare				-.50	.61	.25	
Commitment to public health		1.21	.55	.01				213
0	Constant				.57		.64	
	Public health				.367	1.45	.29	
1	Constant				-1.47		.36	
	Public health				.42	1.52	.36	
Strict rule enforcement		1.25	.54	.01				215
0	Constant				2.58		.00	
	Enforcement				-.29	.75	.37	
1	Constant				.07		.95	
	Enforcement				-.03	.97	.94	
Commitment to the inspectee		8.93	.01*	.05				215
0	Constant				.08		.92	
	Inspectee				.63	1.88	.02*	
1	Constant				-.15		.88	
	Inspectee				.04	1.04	.90	
PSM		.56	.76	.00				217
0	Constant				3.41		.10	
	PSM				-.40	.67	.46	
1	Constant				1.61		.56	
	PSM				-.42	.66	.55	

0 = I defer the decision until I have talked to my supervisor; 1 = I make a written report
Reference category = I stop the production process.
* Significant at < 0.05 (2-tailed)

In this case, the results suggested that practitioners – when compared with 'regular' veterinary inspectors – are less likely to make a decision that entails both financial damage to the inspectee and much time-consuming administrative work than a decision that has implies action on the spot. Table 5b shows that 'commitment to the inspectee' plus the controls explain 22 % of the variance in the independent variable ((pseudo (R) = .22). The professional identity dimension 'commitment to economic interests' plus the controls explain 23 % ((pseudo (R) = .23).

For Dilemma 3, only the dimension 'commitment to public health' of the construct of professional role perception had a significant effect on decision-making (see Table 15c). If individuals viewed safeguarding public health as an important aspect of their work theey were less likely to slaughter the cow and try to predate the exact date of the fracture rather than 'slaughtering and disqualifying the animal'. The same seems to be true for the response category 'I order to shoot and slaughter the cow and make my decision on the basis of the additionally requested food chain information'. Thus, if respondents scored higher on 'commitment to public health', they were more likely to slaughter and disqualify the animal right away. However, we need to be aware of the fact that the latter effect was only significant at a significance level of .1, meaning that this finding is more likely to be false: a ten (.10) – rather than five (.05) – percent chance.

Dilemma 3, too, was tested a second time in order to control for possible confounding effects from third variables. This was not the case: the effect of 'commitment to public health' remained significant. Table A5c in the Appendix shows that the two control variables 'type of employment contract' and 'team' had significant effects on decision-making. 'Regular' veterinary inspectors were eight times more likely than practitioners to choose the response category 'I order to shoot and slaughter the cow and try to assess the fracture's date so I can maintain order if necessary AND make my decision on the basis of the additionally requested food chain information' compared to 'I order to slaughter and disqualify the cow' (Exp(B) = 8.07). This finding again supports the argument that there are some differences between practitioners and 'regular' veterinary inspectors regarding the way they do their work. Individuals from the team 'slaughtering houses' were 30 times (Exp(B) = 30.43) more likely to slaughter the cow and try to predate the exact date of the fracture than members of the team 'import'. This is not surprising, because 'import' inspectors often do not possess the skills necessary to perform assessments of the date of the fracture. Table A4c provides evidence that the dimension 'commitment to public health', plus the control variables explain 25 % of the variance in the independent variable ((pseudo (R) = .25).

Table 15c Results of multinomial logistic regression analysis (Dilemma 3)

		Likelihood Ratio Test		Nagelkerke (pseudo) R	B	Exp (B)	Sig.	No of valid observations of N=258
		Chi-square	Sig.					
Commitment to economic interests		.81	.85	.00				221
0	Constant				1.50		.13	
	Economic interests				-.03	.98	.95	
1	Constant				2.39		.01	
	Economic interests				-.20	.82	.59	
2	Constant				1.58		.11	
	Economic interests				-.10	.91	.80	
Commitment to animal welfare		.49	.93	.00				212
0	Constant				1.94		.22	
	Animal welfare				-.13	.88	.77	
1	Constant				2.7		.07	
	Animal welfare				-.25	.78	.57	
2	Constant				2.00		.21	
	Animal welfare				-.18	.83	.69	
Commitment to public health		8.26	.04*	.04				217
0	Constant				6.17		.00	
	Public health				-1.28	.28	.01*	
1	Constant				5.22		.01	
	Public health				-.89	.41	.06	
2	Constant				4.03		.04	
	Public health				-.71	.49	.15	
Strict rule enforcement		4.38	.22	.01				219
0	Constant				.63		.56	
	Enforcement				.34	1.41	.46	
1	Constant				1.09		.30	
	Enforcement				.35	143	.43	
2	Constant				1.68		.12	
	Enforcement				-.16	.85	.85	
Commitment to the inspectee		.65	.89	.00				219
0	Constant				.67		.54	
	Inspectee				.26	1.29	.48	
1	Constant				1.49		.48	
	Inspectee				.14	1.15	.69	
2	Constant				.72		.51	
	Inspectee				.22	1.24	.56	
PSM		2.72	.44	.01				221
0	Constant				4.13		.15	
	PSM				-.71	.49	.34	
1	Constant				4.57		.01	
	PSM				-.70	.50	.33	
2	Constant				1.83		.53	
	PSM				-.13	.88	.87	

0 = I order the cow to be shot and slaughtered and try to predate the fracture so that I can act if necessary; 1 = I order the cow to be shot and slaughtered and defer my decision until I receive the additional vaccination information I requested; 2 = I order the cow to be shot and slaughtered and try to predate the fracture AND make my decision on the basis of the additionally requested food chain information

Reference category = I order the cow to be shot and disqualify it

* Significant at < 0.05 (2-tailed)

Conclusion

The results provide some support for the hypothesis that decision-making in dilemma situations is influenced by the way individuals interpret their professional role (H1) and the degree of 'commitment to the inspectee' (H3). Some dimensions of the concept of professional role identity had an effect on decision-making, others did not. This implies that approaching professionalism as a professional role identity is valuable, because this new approach partly clarifies the behavioural consequences of the concept (SRQ4). After controlling for a large number of effects I found that the professional role identity dimensions 'commitment to economic interests' and 'commitment to the inspectee' were related to the option 'I defer the decision until I talked to my supervisor' in Dilemmas 1 and 2. The dimension 'commitment to public health' was related to the decision 'I slaughter and disqualify the cow'. This result is not surprising, because economic interests did not play an important role in Dilemma 3; rather Dilemma 3 presents a situation in which public health and animal welfare are in conflict. The dimensions 'strict rule enforcement' and 'commitment to animal welfare' did not have an impact on decision-making in any of the three dilemma situations investigated here. I will return to this non-finding in the final chapter of this dissertation.

7.5 Considerations in decision-making

For Dilemmas 1 and 2 the professional role identity dimensions 'commitment to economic interests' and 'commitment to the inspectee' explained a significant amount of the probability of veterinary inspectors deciding to defer their decision until they had contacted their supervisor. For Dilemma 3, the dimension 'commitment to public health' of the construct of professional role perception was reflected in the decision 'I order to shoot and slaughter the animal'. Unfortunately, the (pseudo) R remained small for all three dilemmas ((pseudo $R \leq .05$). This raises the question what other potential predictors for decision-making there are that have not yet been included in the logit model. In the previous analysis I tested for the effect of several controls such as age, position, gender, and all dimensions of the concept of professional role identity. The (pseudo) R indicated that the added control variables do have predictive value. (The (pseudo) R went up to ~ .14 for Dilemma 1, to ~.22 for Dilemma 2, and to ~ .25 for Dilemma 3.) Analysing the considerations in decision-making may provide additional information that may help to answer the question what other potential predictors for decision-making there are.

Tables 10c, 10b and 10c in the previous subsection (7.1.4) showed that a primary consideration to defer the decision frequently mentioned in Dilemma 1 was the desire to 'play safe' (n=28). 'Because I have difficulties with throwing away 'good meat'' was often mentioned as second or third most important consideration. For Dilemma 2, the consideration most frequently mentioned regarding deferring the decision was 'because there was no strict rule enforcement in the past' was (n = 41). As with Dilemma 1, the desire to 'play safe' was frequently mentioned as second or third most important consideration. This means that – next to the professional identity dimensions 'commitment to economic interests' and the 'commitment to the inspectee' – the desire to 'play safe', previous rule enforcement habits, and personal standards probably also affect decision-making in dilemma situations. Regarding Dilemma 3, additional considerations were rarely mentioned. Most of the employees indicated that they decided to slaughter and disqualify the animal because of considerations of animal welfare, public health, or because 'that is what the rules say'. As mentioned earlier, this probably relates to the fact that financial interests played a less important role in this dilemma situation: 'only' one animal was involved.

7.6 Testing the conceptual model

In this last 'empirical' section I will try to find an answer to the primary research question *what is the combined effect of PSM and professionalism on decision-making in dilemma situations* by testing the following hypothesis presented in the theory chapter: *PSM moderates the relationship between professional role perception and decision-making in dilemma situations* (H2).

The hypothesis was tested by including PSM as a moderator in the logit models discussed in Section 7.4. The results of the logistic regression analyses testing for a possible interaction effect of PSM can be found in Table 16a, 16b, and 16c below. Table 16a lists the results of the moderator analyses applied to the relationship between the professional role identity dimensions and decision-making that was found to be significant in the previous analyses for Dilemma 1: 'commitment to economic interests'. Table 16b does the same for decision-making in Dilemma 2: it shows whether PSM moderates the relationship between 'commitment to economic interests' and decision-making. In Table 16c, the moderator effect of PSM on the relationship between 'commitment to public health' and decision-making in Dilemma 3 is presented.

Table 16a Results of logistic regression analysis with moderator PSM (Dilemma1)

	Omnibus Test of Model Coefficients		Nagelkerke (pseudo) R	B	Exp (B)	Sig.	No of valid observations of N=258
	Chi-square	Sig.					
	9.20	.03*	.05				226
Commitment to economic interests centr.				.46	1.59	.01*	
PSM centr.				.71	2.03	.06	
Commitment to economic interests x PSM centr.				.05	1.05	.89	
Constant				-.28	.75	.04	
	8.51	.04*	.05				224
Commitment to the inspectee centr.				.45	1.57	.01*	
PSM_centr				.73	2.07	.07	
Commitment to the inspectee centr. x PSM centr				-.52	.55	.22	
Constant				-.39	.71	.01	

0 = I disqualify the cattle (reference category); 1 = I defer the decision until I have talked to my supervisor
* Significant at < 0.05 (2-tailed)

Interestingly, the results failed to provide any support for Hypothesis 2. PSM did not moderate the relationship between professional role identity and decision-making in any of the three dilemma situations included in this study. This was true for both the dimensions of professional role identity that had a significant effect on decision-making in previous analyses and the dimensions that did not have significant effects (commitment to animal welfare and strict rule enforcement). For practical reasons the results of the interaction analyses applied to the dimensions without significant effects are not included as tables to this dissertation, but may be obtained from the author on request.

In a second step I performed an additional set of moderator analyses with the aim to investigate if one or more of the separate PSM dimensions of the PSM construct (compassion, commitment to public values, attraction to public service and self-sacrifice) could support hypothesis 2[11]. This meant performing 48 separate moderator analyses (three dilemmas (dependent variable) x four dimensions of professional role identity (independent variables) x four PSM dimensions (moderator) = 48). Because of the large number of separate analyses I decided to display only the significant results in Table A6. All of them relate to Dilemma 1. The non-findings may be obtained from the author on request. Table A6 provides evidence that the dimension 'compassion' shows a significant and positive effect on decision-making when tested together with the professional role identity dimensions 'commitment to public health' and 'commitment to economic interests'. An increase in 'compassion' increased the probability of the decision being deferred until after a discussion with the supervisor.

11 Investigating the antecedents or effects of different PSM dimensions separately has been done in previous research (e.g., Andersen & Petersen, 2012).

However, 'compassion' did not moderate the relationships between these two role identity dimensions and decision-making. A higher score on 'compassion' did not change the strength of the relationship between 'commitment to public health' and decision-making, and 'commitment to economic interests' and decision-making.

Finally, I also investigated whether PSM had a direct effect on decision-making in dilemma situations. The results of testing the direct effect of professional role identity on decision-making can be found in the logistic regression models in the previous section. In none of the three dilemmas investigated in this study did PSM have a significant effect on decision-making.

Table 16b Results of logistic regression analysis with moderator PSM (Dilemma 2)

	Likelihood Ration Test		Nagelkerke (pseudo) R	B	Exp (B)	Sig.	No of valid obser-vations of N=258
	Chi-square	Sig.					
Commitment to economic interests	5.80	.45	.04				213
I defer the decision until I've talked to my supervisor							
Constant				1.92		.00	
Economic interests_centr.				.64	1.90	.04*	
PSM_cent				-.29	.75	.62	
Economic interests_centr. x PSM_centr.				.49	1.64	.56	
I make a written report							
Constant				.08		.82	
Economic interests_centr.				.51	.76	.20	
PSM_centr.				-.36	.17	.66	
Economic interests_centr. x PSM_centr.				-.25	.16	.82	
Commitment to the inspectee	9.32	.16	.06				215
I defer the decision until I have talked to my supervisor							
Closeness inspectee_centr.				.59	1.80	.04*	
PSM_centr.				-.11	.90	.85	
Closeness inspectee_centr. x PSM_centr.				.23	1.26	72	
I make a written report							
Closeness inspectee_centr.				-.02	.98	.95	
PSM_centr.				-.26	.78	.74	
Closeness inspectee_centr. x PSM_centr.				.29	.13	.73	

I stop the production process (reference category)
* Significant at < 0.05 (2-tailed)

Table 16c Results of logistic regression analysis with moderator PSM (Dilemma 3)

	Likelihood Ration Test		Nagelkerke (pseudo) R	B	Exp (B)	Sig.	No of valid observations of N=258
	Chi-square	Sig.					
Commitment to public health	10.55	.31	.05				217
I order the cow to be shot and slaughtered and try to predate the fracture so that I can act if necessary.							
Constant				1.63		.00	
Public health_centr.				-2.00	.30	.03*	
PSM_centr.				.25	1.29	.77	
Public health _cent x PSM_centr				-.87	.42	.37	
I order the cow to be shot and slaughtered and defer my decision until I receive the additional vaccination information I requested.							
Constant				2.10		.00	
Public health_centr.				-.77	.17	.47	
PSM_centr.				.04	.20	.96	
Public health _cent x PSM_centr.				1.00	.07	.37	
I order the cow to be shot and slaughtered and try to predate the fracture AND make my decision on the basis of the additionally requested food chain information.							
Constant				1.56		.00	
Public health_centr.				-.66	.52	.52	
PSM_centr.				.52	.17	53	
Public Health _cent x PSM_centr.				-1.01	.36	.36	

I order the cow to be shot and disqualify it (reference category)
* Significant at < 0.05 (2-tailed)

Conclusion

The results offer no evidence for the hypothesis that *PSM moderates the relationship between the way individuals interpret their professional role and the decisions they make in dilemma situations* (H2). The results also indicate that PSM does not have a direct effect on decision-making either. This provides support for my critique that it is not sufficient to know the strength of PSM if we want to predict how an individual will behave. In the theory chapter I argued that the meaning of PSM is role identity-dependent. Only if PSM was treated as a construct with separate dimensions, not as an overarching construct, did the results provide some evidence that the dimension 'compassion' played a role in decision-making. In combination with the two professional role identity dimensions 'commitment to public health' and 'commitment to economic interests', it had a positive direct effect – but still without moderation – on decision-making in Dilemma 1. This implies that the answer to our primary research question *what is the combined impact of PSM and professionalism on*

decision-making is *not* that the strength of PSM works as an amplifier in the relationship between professionalism (approached as professional role identity) and decision-making in dilemma situations. High scores on PSM do not strengthen the effect of professional role perception on decision-making. I will return to this non-finding in the final chapter of this dissertation.