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RESEARCH ARTICLE

Attitudes of Staff Regarding Animal Welfare: A Description on Poultry Farms in Afyonkarahisar[#]

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ABSTRACT

The objective of this study was to analyze the attitudes of staff at layer hen farms operating in Afyonkarahisar province and its districts. The study was carried out with face to face interviews of staff working at 53 commercial layer hen farms to measure the cognitive, affective and behavioral dimensions of attitudes regarding animal welfare with a total of 118 survey forms which were evaluated. The sample group of the study consisted of the owners or administrators of poultry farms as well as veterinarians, agricultural engineers and other staff responsible for the care and administration of laying hens at these farms. It has been determined that a major proportion of the participants from the layer hen farms were male (87,29%) and under the age of 40 years old (64,4%). It was determined that 72,88% of the staff were graduates of secondary school and college and 63,56% of them had 17 years or less of work experience. Information on the cognitive dimension of attitudes of participants towards animal welfare has shown that knowledge in terms of animal welfare is inadequate. The results for the affective and behavioral dimensions indicate that the attitudes of staff regarding animal welfare are influenced by cultural, moral and social cults as well as beliefs and sustains a more utilitarian content.
Key Words: Animal Welfare, Attitude, Staff, Layer farm

Çalışanların Hayvan Refahına Yönelik Tutumları: Afyonkarahisar'daki Tavukçuluk İşletmelerinde Bir Betimleme

ÖZ

Bu araştırmanın amacı Afyonkarahisar ili ve ilçelerinde faaliyet gösteren yumurtacı tavuk işletmeleri çalışanlarının hayvan refahına ilişkin tutumlarının analiz edilmesidir. Araştırma, 53 ticari yumurtacı işletmede çalışanlar ile yüz yüze görüşme yoluyla yürütülmüş, çalışanların bireysel özellikleri ile bilişsel, duyuşsal ve davranışsal boyutta hayvan refahı tutum ölçeğini içeren toplam 118 anket değerlendirilmeye alınmıştır. Araştırmanın örneklem grubu tavukçuluk işletmelerinin sahipleri veya yöneticileri ile bu işletmelerde hayvan bakım ve idaresinde görevli veteriner hekim, ziraat mühendisi ve yumurtacı tavuk bakım ve idaresinden sorumlu diğer çalışanlardan oluşmaktadır. Yumurtacı tavuk çiftliklerinde katılımcıların büyük bölümünün erkek (%87,29) ve 40 yaşından küçük (%64,4) olduğu tespit edilmiştir. Çalışanların %72,88' inin orta eğitim ve yüksek okul mezunu ve %63,56'sının iş deneyiminin 17 yıl veya daha az olduğu belirlenmiştir. Katılımcıların hayvan refahına ilişkin tutumlarının bilişsel boyutuna ilişkin bulgular katılımcıların hayvan refahı konusunda yeterli bilgisiye sahip olmadığını göstermiştir. Tutumun duyuşsal ve davranışsal boyutlarına ilişkin sonuçlar, çalışanların hayvan refahına yönelik tutumunun kültürel, ahlaki ve toplumsal öğeler ile inançlar tarafından etkilendiğini ve daha yararcı bir içerik taşıdığını göstermiştir.
Anahtar Kelime: Hayvan Refahı, Tutum, Çalışanlar, Yumurtacı Çiftlik

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INTRODUCTION

Consumer-focused free market conditions have led to the widespread acception of quality assurance schemes aiming high animal welfare standards at the national and multinational level in the European Union (European Commission 2009, More et al. 2017, Havinga 2017). Consumers who showing ethical purchasing behavior and demand greater quality and transparency in animal health increase their impact on the livestock industry. The livestock industry is responding to these consumer demands through product variety and premium wages and transforming it into an opportunity to increase economic revenue (Mench 2008, Main et al. 2014).

A significant part of the standards of animal welfare quality assurance schemes is associated with animal care and management provided by farmers or the animal carers. It has been reported that the interaction between animals and farm staff who are responsible for the care and management in intensive animal production systems has significant effects on animal health, welfare and productivity (Coleman et al. 2003, Waiblinger et al. 2006, Gocsik et al. 2013, Sinclair et al. 2017).

The behavior of farm staff towards animals has a vital impact on increasing animal welfare via qualified animal-human interaction. A good human-animal interaction is also provided if the staff performing daily animal care express positive behavior towards animals (Breuer et al. 2000, Borgen and Skarstad 2007). According to the theory of planned behavior (Ajzen 1991) understanding the attitude leads to understanding human behavior. According to this theory, if a person has the intention of doing an act helps us to understand whether it will be done or not. Behavioral intention is closely related to an individual's beliefs and attitudes regarding behavior. Attitudes towards animal welfare are influenced by factors such as personality traits (Furnham et al. 2003), age (Maria 2006), gender and educational status (Kılıç and Bozkurt 2013), personal history, values and norms (Hemsworth and Coleman 1998, Kauppinen et al. 2012).

It has been suggested that the behavior of farm staff can be motivated and thus empathy, attitudes and behavior can be improved to increase animal welfare by providing a positive animal-human interaction (Kellert 1988, Coleman et al. 1998, Coleman et al. 2000, Waiblinger et al. 2006, Kauppinen et al. 2012, Bozkurt et al. 2013). Coleman et al. (2003) reported that training programs would be useful to change the attitudes and behavior of staff responsible for animal care and management. Hemsworth et al. (2002) and Sinclair et al. (2017) reported that an increase in the productivity of dairy cows and protein and fat contents in milk after cognitive-behavioral intervention.

Various studies are available to provide potential improvement in the perception and attitudes of farm staff regarding animal welfare for sheep farms (Kılıç et al. 2013, Çelik and Bozkurt 2016), pig farms (Hemsworth et al. 1998), horse farms (Hacan et al. 2015), broiler farms (Borgen and Skarstad 2007), dairy cow farms (Breuer et al. 2000, Kielland et al. 2010). However, these studies are rather limited and even if considering personal, cultural and geographical differences affect the attitudes and behavior of people towards animal welfare it seems that much more research is needed in this area.

The objective of this study was to analyze the attitudes of staff of layer hen farms for animal welfare in Afyonkarahisar province and districts.

MATERIALS AND METHODS

The universe of this study consists of staff of commercial layer hen farms operating in Afyonkarahisar province. Stratified sampling has been carried out in the study due to time and cost related constraints. According to the records of Afyonkarahisar Provincial Directorate of Agriculture, 69,4% of the active layer hen farms are located in the central district center and 30,6% are in the districts, mainly Başmakçı and Bolvadin. Within this framework, the sampling method was used in the study involved a total of 53 active commercial layer hen farms in Afyonkarahisar. Out of these 53 farms 37 were in the central district (69,81%) while 11 were in Bolvadin (20,75%) and 5 were in Başmakçı (9,44%) districts and they were chosen among the farms in the districts taking the distribution of farms capacity.

In the study, a two-part questionnaire was used as the data collection technique. In the first part, information about the individual characteristics of the staff was taken into consideration while the second part contained a scale that measured their attitude towards animal welfare in terms of cognitive, affective and behavioral dimensions. This scale was developed by Kılıç and Bozkurt (2014) with validity and reliability studies. Each item in the scale has been rated with a 5 point Likert scale ranging from 1 = I complete disagree to 5 = I totally agree. The questionnaire, which was the data collection tool, was carried out with face-to-face interviews with 160 staff in 53 commercial layer hen farms, a total of 118 questionnaires were

taken into consideration, taking into account the deficient-error low reliability data. 20,3% of the sampling group was comprised of farm proprietors / managers while 35,6% were veterinarians or agricultural engineers and 44,1% were comprised of various employee.

The obtained data were analyzed with SPSS 18.0 for Windows program, individual characteristics frequency and percentage distribution while the attitudes of staff employed in commercial layer hen farms have been described with distributions as well as arithmetic mean and standard deviation. On the other hand, Cronbach's Alpha value which was the internal consistency coefficient for the reliability of the scale was calculated as 0.761.

RESULTS

The distribution of farm staff according to their individual characteristics in the survey is presented in Table 1. According to data, 12,71% of the staff are women, 87,29% are men; 13,55% are under 18 years of age, 23,73% are aged between 26-32, 27,12% are 33-39 and 35,60% are over 40 years old. 27,12% of the participants had an education of primary school or less, 36,44% had graduated from secondary school and 36,44% were collage graduates. It was seen that, 26,27% of the participants had 0-5 years of experience, 16,95% had 6-11 years, 20,34% had 12-17 years and 36,44% had 18 years or more years of experience.

Descriptive statistics related to the cognitive dimension of the animal welfare attitude scale are given in Table 2. Accordingly, "Animal health condition affects animal welfare" ($\overline{X}$=4,81), "the conditions of shelter in which animals live affects animal welfare" ($\overline{X}$=4,78), "the animal feeding conditions affect animal welfare" ($\overline{X}$=4,75) and 'interaction between animals and humans affects animal welfare "($\overline{X}$=4,44) generated the most positive outlook. The most negative opinions were expressed for "naming animals affects animal welfare" ($\overline{X}$=2,31), "sacrificing animals affects animal welfare" ($\overline{X}$=2,80) and "the relationship process of animals with their offspring affects animal welfare" ($\overline{X}$=2,94).

Descriptive statistics on the affective dimension of the animal welfare attitude scale are presented in Table 3. When Table 3 is examined, the most positive opinions are indicated for "Using violence on animals is atrocious" ($\overline{X}$=4,88), "I believe that animals are sentient beings" ($\overline{X}$=4,86), "I believe that happy animals will produce higher quality products such as meat, milk, eggs, etc." ($\overline{X}$=4,81) and "I can understand that an animal feels pain or suffers" ($\overline{X}$=4,79). The more negative items compared to the other items are given to "I believe that animals have rights like people" ($\overline{X}$=3,50) and "I treat animals as individuals" ($\overline{X}$=3,50).

Descriptive statistics related to the behavioral dimension of the animal welfare attitude scale are given in Table 4. When the findings are examined, the most favorable opinion in the scale is "I always treat animals well" ($\overline{X}$=4,84), "I encourage people to treat animals well" ($\overline{X}$=4,75) and " I comply with legislation regarding animals" ($\overline{X}$=4,50), the most negative responses were given for "I buy products that have been produced in compliance with high animal welfare standards ($\overline{X}$=2,55), I buy products produced under high animal welfare standards although they are expensive" ($\overline{X}$=2,63) and " I support civil societies dealing with animals " ($\overline{X}$=2,92).

Table 1: Distribution according to the individual characteristics of the participants (n=118)

Variable	Groups	Number (f)	Percantage (%)
Gender	Women	15	12,71
	Men	103	87,29
Age	18 and younger	16	13,55
	26-32	28	23,73
	33 –39	32	27,12
	40 and older	42	35,60
Educational background	Primary education	32	27,12
	Secondary school	43	36,44
	College	43	36,44
Experience in poultry farming	5 years and less	31	26,27
	6 – 11 years	20	16,95
	12 –17 years	24	20,34
	18 years and more	43	36,44

Table 2: Descriptive statistics regarding the cognitive dimension of animal welfare attitude scale

Factors/ Articles	Agreement level (%)					$\bar{X}$	SD
	1	2	3	4	5		
Conditions of animal shelter affect animal welfare.	0,8	0,8	3,4	9,3	85,6	4,78	0,63
Animal feeding conditions affect animal welfare.	0,8	1,7	3,4	10,2	83,9	4,75	0,68
Animal health conditions affect animal welfare.	-	0,8	5,1	6,8	87,3	4,81	0,56
Staff responsible for the care of animals has an impact on animal welfare.	1,7	2,5	9,3	7,6	78,8	4,59	0,89
Conditions of transporting animals from one place to another have an impact on animal welfare.	0,8	1,7	16,9	28,8	51,7	4,29	0,87
Conditions that may lead to nervosity affect animal welfare.	-	3,4	5,1	22,0	69,5	4,58	0,74
The conditions of reproduction of animals affect animal welfare.	23,7	21,2	15,3	9,3	30,5	3,02	1,58
The relationship process of animals with their offspring affects animal welfare.	28,0	21,2	11,9	6,8	32,2	2,94	1,64
Equipment and thecnology used in animal production affect animal welfare.	2,5	7,6	18,6	28,0	43,2	4,02	1,08
The feeling of self-confidence affect welfare of the animals.	5,1	6,8	18,6	26,3	43,2	3,96	1,16
The recognition of the animals as individual affect animal welfare.	28,8	15,3	12,7	9,3	33,9	3,04	1,67
Slaughtering of livestock affects animal welfare.	33,1	11,0	10,2	6,8	39,0	3,08	1,75
Naming animals affects animal welfare.	41,5	19,5	17,8	8,5	12,7	2,31	1,41
The conditions during transport affects animal welfare.	2,5	3,4	16,9	32,2	44,9	4,14	0,99
Sacrificing animals affects animal welfare.	44,1	7,6	8,5	4,2	35,6	2,80	1,81
Leave the animals in streets (like as cats, dogs) affects animal welfare.	13,6	22,9	27,1	8,5	28,0	3,14	1,40
The activities of non-governmental organizations supporting animal protection affetcs animal welfare.	14,4	8,5	17,8	17,8	41,5	3,64	1,45
Legislation regarding animals has an impact on animal welfare.	11,0	2,5	6,8	11,9	67,8	4,23	1,34
Interaction between animals and humans affects animal welfare.	1,7	1,7	13,6	16,9	66,1	4,44	0,91
Purchase of food products have been produced in animal friendly production system (milk, egg, meat ect.) affects animal welfare.	8,5	8,5	20,3	18,6	44,1	3,81	1,31

Table 3: Descriptive statistics regarding the affective dimension of animal welfare attitude scale

Factors/ Articles	Agreement level (%)					$\bar{X}$	SD
	1	2	3	4	5		
I treat animal as individual.	14,4	16,1	16,1	11,9	41,5	3,50	1,51
Animals have been created for human use.	7,6	5,1	5,1	4,2	78,0	4,40	1,26
I believe that animals have a well-being.	-	-	8,5	5,9	85,6	4,77	0,59
I belive that animals are sentient beeings.	-	0,8	4,2	2,5	92,4	4,86	0,50
I can understand that an animal feels pain or suffers.	-	3,4	3,4	4,2	89,0	4,79	0,66
Using violence on animals is atrocious.	-	1,7	2,5	1,7	94,1	4,88	0,51
I believe that there is a relation between domestic violence and intentional harm against animals.	5,1	3,4	16,9	8,5	66,1	4,27	1,17
I believe that animals have rights like people.	10,2	19,5	21,2	8,5	40,7	3,50	1,44
I believe that attitudes of people towards animals affect others' perception towards them.	-	3,4	5,9	11,0	79,7	4,67	0,74
I believe that happy animals will produce higher quality products such as meat, milk, eggs, etc.	0,8	-	4,2	6,8	88,1	4,81	0,58

Table 4. Descriptive statistics regarding the behavioural dimension of animal welfare attitude scale

Factors/ Articles	Agreement level (%)					$\bar{X}$	SD
	1	2	3	4	5		
I am interested in animal welfare.	4,2	14,4	19,5	13,6	48,3	3,87	1,28
Animal welfare issue affect my choices when buying animal products.	29,7	12,7	13,6	11	33,1	3,05	1,66
I tell people around me about animal welfare.	5,9	5,1	7,6	8,5	72,9	4,37	1,19
I encourage people to treat animals well.	1,7	-	3,4	11,9	83,1	4,75	0,68
It approaches with compassion for street animals.	1,7	5,9	14,4	7,6	70,3	4,39	1,05
I support the civil societies dealing with animals.	28	22	10,2	10,2	29,7	2,92	1,63
I comply with legislation regarding animals.	6,8	0,8	6,8	6,8	78,8	4,50	1,12
I always treat animals well.	-	0,8	3,4	6,8	89	4,84	0,51
I make required attempts agains animal violence.	-	6,8	7,6	16,1	69,5	4,48	0,90
I buy products that have been produced in compliance with high animal welfare standarts.	33,9	24,6	11,9	11,9	17,8	2,55	1,50
I buy products produced under high animal welfare standards although they are expensive.	36,4	16,1	16,1	11	20,3	2,63	1,56
I can easily identify using the label on the product if it has been produced in animal friendly production system (milk, egg, meat ect.).	14,4	13,6	13,6	11	47,5	3,64	1,53

DISCUSSION

Most of the participants in the layer hen farms visited in Afyonkarahisar who were responsible for the care and administration of layer hens were male (87,29%). The rate of female employees was only 12,71%. Kılıç et al. (2013) report similar results for different fields in the livestock sector and determined that the proportion of women in sheep raising farms was 11,9% while Hacan et al. (2015) reported that the percentage for horse breeding farms was 6,8%. Çelik and Bozkurt (2016) reported that they were not encountered any female staff employed transport. The higher number of female workers can be considered as a potential in terms of staff displaying positive attitudes and behavior regarding animal welfare (Herzog et al. 1991, Kılıç and Bozkurt 2013). Kılıç and Bozkurt (2013) reported a positive association between gender and animal welfare perception and found that female farmers had a better perception of the effectiveness of the issues outlined in the animal welfare scale than male farmers. Similar findings have been emphasized in other studies (Furnham and Pinder 1990, Heleski et al. 2004).

An assessment of the findings regarding the age of the staff on layer hen farms in the study indicates that the employee profile is mainly young. The proportion of participants aged 25 years or younger was 13,55%. This value is higher than the reported rates for sheep farms (9%) and equine farms (4,6%) for the same age group. The ratio of staff in layer hen farms aged over 40 years is 35,6% and this value is higher than the values of 40,9% and 47,4% respectively for horse and sheep farms as well as the number of staff deputized in animal transport (42,6%) (Kılıç et al. 2013, Hacan et al. 2015, Çelik and Bozkurt 2016). These results show that the rate of young workers in layer hen enterprises is higher than that of middle age workers. These results have suggested that the technology used in fully or semi-automated layer hen houses and the information, attention and physical working conditions required for egg collection, grading and packaging systems may be influential in the higher rate of young staff.

The level of education of the staff who were responsible for the care and administration of layer hens and participated in the study was higher than the staff employed in other livestock sectors. While the number of elementary school graduates has been reported as high in sheep farms (Kılıç et al. 2013, Hacan et al. 2015) and animal transport (75,4% and 42,6% respectively), the rate of staff with secondary and collage diploma who participated in the study has been reported as 72,88%. Moreover, 35,6% of the participants were technical staff like veterinarians and agricultural engineers and this is attributed to the need for more sophisticated and complex production processes management required in intense breeding systems than required in the other sectors. The high level of young and educated staff in poultry farms is thought to have a positive affect on the welfare of animals under their control. Maria (2006)

reported that animal welfare was stated more by young and middle-aged people. Nevertheless, Köhler and Wildner (1998) reported that the consumer's perception of animal welfare was not affected by age while Kılıç and Bozkurt (2013) reported that no statistical association could be established between age and animal welfare perception. Kılıç and Bozkurt (2013) reported a positive association between increased education level and the perception of animal welfare and reported that this finding supported the cognitive-behavioral training of the staff in terms of improving animal welfare perceptions and attitudes.

According to the results, 63,56% of the respondents in the visited layer hen farms who responded to the attitude scale had 17 years or less experience in poultry farming (26,27% of the staff had 5 years of experience or less). This rate is quite high depending on the personnel, compared to sheep and equine farms (20,9% and 25,0% respectively). The proportion of experienced staffs with more than 18 years (36,44%) of experience in the layer farm is about half that of similarly qualified staff in equine and sheep farms (Kılıç et al. 2013, Hacan et al. 2015, Çelik and Bozkurt 2016). These results show that employees in layer hen farms leave their jobs earlier. These results suggest that employees mostly work on a monthly basis and that inadequate individual training and occupational capacities or working conditions (such as wages, working time, work conditions) may reduce motivation and not provide job satisfaction (Hemsworth and Coleman 2010). Kılıç and Bozkurt (2013) reported that enjoying work had a positive impact on the farmers' perception of welfare. Sinclair et al. (2017) reported that while trying to encourage behavioral changes that would increase animal welfare, it is very important to understand the motivating factors of human behavior.

In the cognitive dimension of the attitude scale in the study, most of the staff seemed to agree that the health, shelter, nutrition of animals and personnel conditions had an impact on animal welfare ($\overline{X}$ =more than 4,5). It was also evident that the participants agreed that transport, environmental stress, technical equipment, legislation and interactions between animals and humans affected animal welfare to a high level ($\overline{X}$ =between 4,5-4,0). In other words, staff agree in particular that factors affecting animal health also affect animal welfare. These results show that employees attach great importance to animal health in association with productivity (Breuer et al. 2003). Furthermore, the proccessses having porantial to make pain and suffering which have a direct impact on animal welfare were not given more importance by staff of layer hen farms (Dawkins 2004). Similar results have been obtained regarding the activities of civil society organizations and consumers purchasing animal-friendly food products. According to the attitude scale numbers, the impact of giving animals names and the interaction of animals with their offspring appeared to carry the least weight in terms of animal welfare. In general, the results of the cognitive aspect of the attitude scale have indicated that staff in layer hen farms do not have sufficient knowledge about animal welfare. Particularly when we consider that breeding of laying hens is one of the most intensive production systems and that evaluations in this system are interpreted in terms of flocks instead of individual animals, it is evident that the participants do not have knowledge and ideas about the evaluation of the individual well-being of animals. Participants were not strongly involved that slaughtering or sacrificing animals had an impact on their welfare. However, staff involved in the transport of ovine and bovine more agreed with this conviction (Çelik and Bozkurt 2016). At the same time this can attributed to the fact that the staff in charge of transport has more knowledge about animal welfare. The reason for this is that the "Regulation on the Procedures and Principles Regarding the Operation and Inspection of Dealers of Live Animal Trading" dated the 18th of January 2012 stipulates that in Turkey animal caregivers in charge during transport, drivers and transporters are given training on animal welfare before they receive their certificates. The medium and low levels of agreement seem to be predominantly related to the activities of civil society organizations as well as the public sector to protect animals or ethical concepts in terms of human-animal association. These results suggest that when staff evaluate animal welfare, the place of animals in the social and cultural life as well as moral values, traditions or beliefs related to animals also carry weight (Kellert 1988, Serpell 2004, Kaupiene et al. 2012). Furthermore, differences in the animal welfare attitudes of staff in different animal husbandry branches are noteworthy. Sinclair et al. (2017) manifested that the attitudes of industry stakeholders towards animal welfare are influenced by the stakeholders' role in industry.

Almost all of the participants conceded that animals were sentient beings. Furthermore, the staff considered violence against animals to be cruelty and that people who were violent to animals had the potential to be violent against other humans as well. Similar results have been reported by Çelik and Bozkurt (2016). It is evident that the participants seem to carry feelings that animals are created for human, that they deserved welfare and that poor treatment of animals is not worthy of

human dignity. In general, it can be asserted that the welfare attitudes of the participants' love for animals and the social value given to them can be interpreted as influencing their animal welfare attitude. However, it is also evident that the attitudes of the participants are very much affected by the ethical and cultural norms imputed to animals throughout society's set of values (Kellert 1988, Furnham et al. 2003, Serpell 2004). The affective dimension of the attitude has been highly influenced by moral and cultural norms towards animals (Kellert 1988, Coleman et al. 2003). Serpell (2004) reported that human-animal associations are subject to two basic dimensions of love and utility and that they converge to shape man's attitude toward animals. Sinclair et al. (2017) reported that understanding the fundamental differences between all stakeholders in the field of production of food of animal origin, seeking co-operative grounds, and combining all the initiatives of the parties was necessary to achieve success in animal welfare.

In terms of the behavioral dimension containing the intention of a specific behavior to a thing or individual, the staff of layer hen farms are highly motivated to treat animals well, and to encourage other people to do so. The attitudes of these staff to comply with animal related legislation can be attributed to concerns about animal health legislation in particular. However, the interest of staff in purchasing animal friendly products, pay more for these products as well as their tendencies for concern regarding animal welfare is medium level or low. The dilemmas of the participants in the cognitive and affective attitudes regarding animal welfare are reflected in the behavioral dimension as well. Although staff consider the impact of civil society organizations supporting animal welfare to be important, they do not support these organizations themselves. Again, these persons strongly believe that accepting animals as individuals has a strong impact on animal welfare, yet they agree to this on a medium level. Similarly, the participants strongly agree that purchasing animal friendly food has an impact on animal welfare yet have no intention of making such a purchase.

CONCLUSIONS

According to the results of the study, staff employed at commercial layer hen farms are mostly male and although they are younger and have a better education than employees in the other livestock sectors they have less work experience. The information regarding the cognitive dimension of the participants' attitudes towards animal welfare has shown that their knowledge on the subject is not enough. The results of the affective and behavioral dimensions indicate that the staff' attitude towards animal welfare are influenced by cultural, moral and social cults as well as beliefs and has a more utilitarian content. However, further research is needed to enlighten the dilemmas between the affective and behavioral dimensions regarding animal welfare attitudes.

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