



LINKING VETERINARY STUDENTS' EXPERIENCE ON ANIMAL CARE WITH THEIR DIET TYPE

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Summary

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Human-animal relationship is usually described as an attachment between humans and non-human animals in two dimensions: first, giving emotional and health benefits for people, and second, considering the consequences for animal welfare and quality of life too. This paper focuses on the first side of the human-animal bond with the aim to establish the link between the experience of veterinary medicine students with pet and farm animals breeding and their type of diet. Results show that more than the half of the respondents do not raise farm animals for food production, meanwhile 90% of the Bulgarian and 85% of the English-speaking respondents consumed products of animal origin. Vegetarians appeared to be 7.63% of the Bulgarian and 6.41% of the English speaking students, compared to the vegan diet followers, respectively 2.29% (in the Bulgarian programme) and 5.13% of the respondents (English-language programme).

Key words: animal care, diet type, food of animal origin, human-animal relations, vegetarians, vegans

INTRODUCTION

Humans and animals in their relations are sometimes studied isolated with non-human animals primarily addressed for their utility towards individuals' economic development (Morton, 2019). New scientific fields as anthrozoology have emerged in the last decades, focusing on the human-animal interactions and the benefits of them for both parties (Melfi & Hosey, 2019). Research studies have documented the importance of non-human animals in the lives of people (Knight, 2018), rising some moral implications for the depend-

ence of people on animal-based products (Buyukmihci, 2018). Provoked by the ethical and welfare issues of using animals for the benefit of human beings, we hypothesised that some aspects of the personal experience of the veterinary students with companion or productive animals appear to be among the factors building and maintaining human-animal relationship, thus influencing the respondents' lifestyle choices, in particular diet type. The survey focused on the pet ownership and livestock care/services provided by

the respondents in order to identify whether these indicators influence the veterinary students' preferences of certain diet type – animal-based food, vegetarian, vegan.

MATERIAL AND METHODS

The study was carried out under the form of a sociological survey through anonymous written questionnaire with first to fifth year veterinary students from both the Bulgarian (n=131) and the English-language programme (n=78) at the two faculties of veterinary medicine in Bulgaria (respectively at Trakia University – Stara Zagora, and the University of Forestry – Sofia). The questions were related to: 1) personal experience with companion animals; 2) experience in livestock care for the purpose of production; 3) type of diet.

The methodology of the empirical sociological survey was used for the preparation of the survey (Orloev, 2002). All data obtained were statistically processed (Statistics for Windows, Release 4.5,

Copyright StatSoft, Inc., 1993) and presented in diagrams (Excel, Windows 7).

RESULTS

The analysis of the veterinary students' experience on keeping companion animals at home shows very high results in favour of pet ownership. Totally 94.66% of the Bulgarian students have taken care of pets (12.98% in a previous period, 81.68% – at the present moment), compared to 98.72% of the English-speaking students (34.62% in a previous period, 64.10% – at the present moment) (Fig. 1). The survey found negative moderate correlation between the foreign students and the current status of pet ownership ($r = -0.34$, $P < 0.05$), which means that less of the English-speaking respondents have pets at the present moment, compared to the Bulgarians.

Regarding the personal interaction of the respondents with productive animals, results show that 53.44% of the Bulgarian and 65.38% of the foreign students have

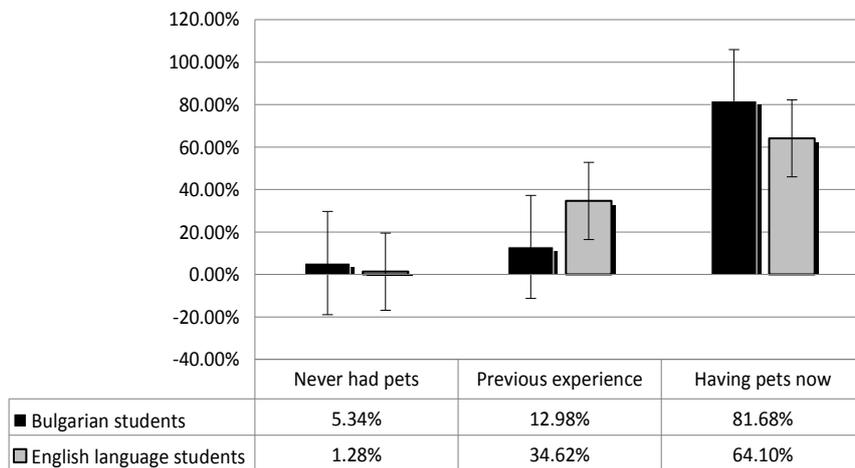


Fig. 1. Distribution of Bulgarian and English-speaking students regarding their experience in pet ownership.

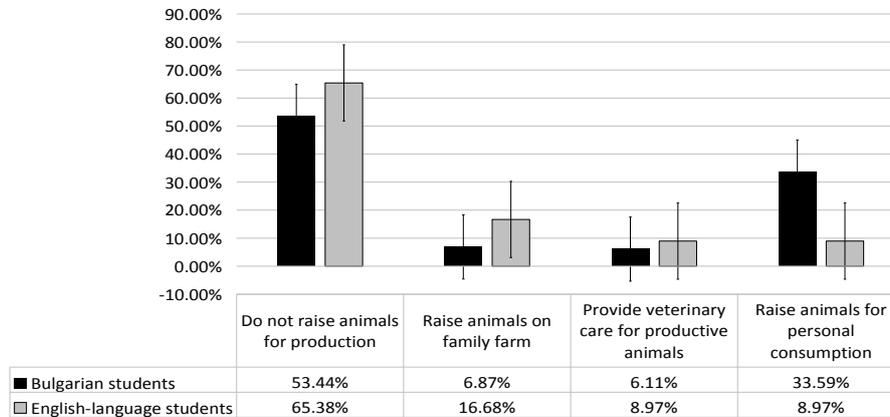


Fig. 2. Distribution of respondents regarding their participation in farm animal services with the purpose of production.

never directly or indirectly participated in activities related to obtaining products of animal origin (Fig. 2). Respondents whose families raise animals on personal farms appeared to be 6.87% for the Bulgarians, respectively 16.68% for the English-speaking students. At the same time the shares of those who have provided veterinary services for farm animals (as technicians or veterinary nurses) were 6.11% (BG programme) and 8.97% (EN programme). Part of the participants in the survey stated that they raised backyard animals in order to obtain products for personal consumption (eggs, milk, meat) – 33.59% of the Bulgarian and 8.97% of the foreign students in veterinary medicine. Although weak, there was a statistically significant negative correlation ($r = -0.25$, $P < 0.05$) between the English-speaking students and their experience on raising animals for production as less of them use such practices, thus having less possibilities to interact with farm animals, compared to the Bulgarians.

For the purpose of the study we investigated the main diet type of the veterinary

students (Fig. 3). Data showed that food based on ingredients of animal origin was consumed by 90.08% of the Bulgarian respondents, respectively – 85.90% of the foreign respondents. Vegetarian meals were preferred by 7.63% of the Bulgarians and 6.41% of the English-speaking students, while strict vegan diet was chosen by very small proportion of the respondents – respectively 2.29% (BG programme) and 5.13% (EN programme).

DISCUSSION

The current study hypothesised that some aspects of taking care of animals (personal experience with pets; raising farm animals for production and consumption or giving veterinary services), due to the establishment of human-animal bond, appear to be among the factors influencing the lifestyle choices, including diet type. Results showed that more than one half of the respondents did not raise farm animals for food production and at the same time over 90% of the Bulgarian and 85% of the English-speaking respondents consumed

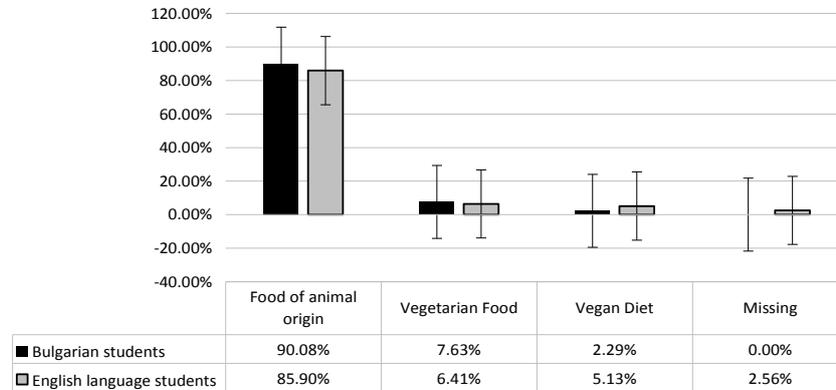


Fig. 3. Diet type of the Bulgarian and English-speaking veterinary students.

products of animal origin. Thus we could assume that one of the reasons for animal-based food diet is the lack of enough interactions and relations with farm animals. The survey did not find statistically significant connection between these two indicators but studies of different scholars linked the choice of diet type with certain animal-related motives as animal welfare. Radnitz *et al.* (2015), Elorinne *et al.* (2016) and Janssen *et al.* (2016) stated that the individuals choose to follow a vegan diet due to different reasons, primarily concern for animals (ethics and animal rights).

Some explanations of the reasons for the high percentage of animal-based food diet among the Bulgarian students may be found in the traditional lifestyle with raising animals on family farms and using their products for personal consumption – pointed out by over 40% of the respondents (summed). This practice is usual in the rural areas of the country and has an enormous social and economic effect as a certain share of the households from such areas operate as small family holdings. At the present moment approximately 28% of

all small farm holdings use half of their production for personal consumption (Ministry of Agriculture and Food, 2013).

We could assume as well that the presence of companion animals in the daily life of veterinary medicine students and taking care of pets help in building and maintaining a sustainable human-animal relationship with concern to animal needs, rights and welfare. Similar position is held by Hurn (2017), McVety (2017), Enders-Slegers & Hediger (2019) who explored the benefits from human-animal bond and pet ownership among human and non-human animals.

The influence of pet ownership on the respondents' lifestyle choices became visible from our survey as 7.63 % of the Bulgarian and 6.41% of the English-speaking students in veterinary medicine preferred vegetarian meals, and another 2.29% (in the Bulgarian programme), respectively 5.13% (in the English-language programme) strictly adhered to vegan diet. These results correspond with the survey of Dodd *et al.* (2019), who pointed out that certain proportion of Eng-

lish-speaking pet owners preferred to be vegetarian (6.2%) or vegan (5.8%).

CONCLUSIONS

The study on the personal experience of veterinary students with animal breeding, care and services and its link with their lifestyle choices, in particularly diet type, showed that the level of interactions with productive animals (their breeding for personal consumption, providing veterinary services, family livestock breeding) is not high enough to influence significantly the traditional choice of animal-based diet in favour of the vegetarian or vegan type, as the majority of the respondents consume products of animal origin.

Regarding pet ownership as a factor building the emotional and psychological side of the human-animal bond, it appeared that veterinary students who actively take care for companion animals (at the present or in a previous period of their lives) perceive pets as sentient beings. These perceptions influence to some extent the respondents' attitudes towards animal welfare and animal ethics as in the survey there are proportions of veterinary students, even small, who adhere to vegetarian or vegan diet.

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