

Is stockperson welfare essential for animal welfare?

Bem estar do trabalhador é essencial para o bem estar animal?

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Received on 12/08/2016 / Accepted on 29/11/2016

ABSTRACT

Increasingly, animal welfare (AW) is gaining ground worldwide because of pressure from importing countries, as well as the demand from a more conscious society regarding the living conditions of farm animals. Despite the growing concern about AW, there are few studies of stock person's welfare and how it might influence AW. The treatment of animals connects to stockpersons' attitudes and behaviour, which in turn are associated with several human factors such as initial experience in the activity, welfare, quality of working conditions and human-animal relationship. Many authors have investigated this relationship and its association with positive attitudes of stock persons towards animals, which consequently influence AW and productivity. However, currently, there is no highlighted concern about the human issue, as the stock person welfare (SW), believed to be a key aspect of a successful implementation of AW programs. The present work suggests a broader view concerning AW, its relation to SW and the importance of improving both aspects in livestock systems.

KEYWORDS: livestock systems, farm animal welfare, human welfare, stockperson attitudes, human-animal relationship, training.

RESUMO

Cada vez mais o bem-estar animal (BEA) está ganhando espaço mundialmente, tanto pela pressão dos países importadores, quanto pela demanda por uma sociedade mais consciente em relação às condições de vida dos animais de produção. Apesar

da crescente preocupação com o BEA, há poucos estudos sobre o bem-estar dos trabalhadores e como isso pode influenciar no BEA. O tratamento dos animais está ligado às atitudes e aos comportamentos dos trabalhadores, que por sua vez estão associados a vários fatores humanos, como experiência inicial na atividade, bem-estar e qualidade das condições de trabalho e relação homem-animal. Muitos autores têm investigado essa relação e sua associação às atitudes positivas dos trabalhadores em relação aos animais, o que, conseqüentemente, influencia o BEA e a produtividade. No entanto, atualmente, não há nenhuma preocupação destacada sobre a questão humana, como o bem-estar dos trabalhadores (BT), que se acredita ser aspecto chave para uma implementação bem sucedida dos programas de BEA. O presente trabalho sugere uma visão mais ampla sobre o BEA, sua relação com o BT e a importância de se melhorar ambos os aspectos em sistemas de produção animal.

PALAVRAS-CHAVE: sistemas de produção animal, bem-estar dos animais de produção, bem estar humano, atitudes de tratadores, relação homem-animal, treinamento.

INTRODUCTION

The development of industrialized societies has been accompanied by a growing ethical concern about the conditions in which farm animals are often raised (HONORATO et al. 2012). Nevertheless, currently, a significant parcel of society is still unaware of how farm animals are raised and, consequently, its importance in the global scenario.

Animal welfare (AW) has started to progress globally as a standard for international policy and

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market operations (COSTA et al. 2013), and it is a standard for traceability and safety of production systems. Thus it is important to support the promotion of AW by interested technicians, managers, and stockpersons.

Despite the current and rising appeal for the welfare of farm animals, stockpersons receive little attention in the rural environment. Indeed, there are many challenges to overcome this situation to enhance the welfare of animals and stockpersons, such as a persons' mentality. For instance, many researchers do not yet acknowledge a human-animal relationship as an important factor to the welfare of both (HEMSWORTH & COLEMAN 1998).

On the other hand, some researchers have observed the relevance of this relationship to successfully implement AW programs (HEMSWORTH & COLEMAN 1998, BOIVIN et al. 2003, SANT'ANNA & PARANHOS DA COSTA 2007, HONORATO et al. 2012, COSTA et al. 2013). Besides this, some stockpersons' actions may generate changes in this relationship, which influence their welfare and are connected to AW and livestock productivity.

Under these circumstances, stockpersons' actions have a fundamental role in AW level maintenance. Certain personality traits such as competence, motivation, and positive attitude, are identified as work prerequisites to ensure high standards of AW (HEMSWORTH & COLEMAN 2011).

Hence an impoverishment of stockperson welfare (SW) may directly affect AW which makes it essential to understand the difficulties, dissatisfactions, and needs of each element, human or nonhuman, involved in the production process.

In the same sense, attitudes are learned skills (HEMSWORTH & COLEMAN 2011) which may change depending on context (EAGLY & CHAIKEN 2007). Therefore effective on-farm animal handling and welfare programs enable stockpersons to realize the benefits of AW-friendly practices to their work routine, environment and, consequently, own welfare status. This review mainly aims to address the human factors related to attitudes and behaviour towards farm animals and how they can be favourable or not to AW.

DEVELOPMENT

Worker Welfare

According to SIQUEIRA & PADOVAM (2008), "the most prominent scientific conceptions today on human welfare in the psychological field can be organized, according to RYAN & DECI (2001), in two ways: 1) addressing the subjective state of happiness (hedonic welfare) named subjective well-being and 2) investigating the human potential (eudemonic welfare) which comes with psychological well-being".

These lines reflect different perspectives of happiness and welfare which are treated as pleasure or happiness in the first way or as person's ability to develop their capacities and potentialities in the second one (SIQUEIRA & PADOVAM 2008). The understanding of happiness and positive aspects of human experience is among the main concerns of psychology for the twenty-first century (SELIGMAN & CSIKSZENTMIHALYI 2000).

Even though work constitutes a fundamental component of the construction and development of personal welfare and, consequently, happiness (WARR 1987, WARR 2003), there are few research works into this area (PASCHOAL & TAMAYO 2008, SIQUEIRA & PADOVAM 2008). The reasons for this scenario may be due to the fact this area is still incipient and depends primarily on the existence of valid and reliable assessment instruments (PASCHOAL & TAMAYO 2008). Hence, it justifies the absence of a definition and agreement among researchers about what welfare at work means.

Regardless of the scarcity of studies on welfare at work, there is plenty of information concerning the quality of life and work stress. Nonetheless, these are concepts that relate to the welfare in general (PASCHOAL & TAMAYO 2008) and do not mention specific aspects of worker welfare. Both urban and rural settings are lacking research on SW.

KAGEYAMA (2004) observed the Index of Social Welfare (ISW) in order to check the welfare status in rural households. The calculation of the ISW can vary according to each survey taking into account some indicators such as the percentage of households with sanitary facility; with the phone; with garbage collection; with electricity and level of education.

However, at work environment, welfare is not only related to the acquisition of material goods but also to the emotions and the ability that a particular

individual may develop at work. General welfare (WATERMAN 1993) and employment (WARR 2007) should be determined by analysing the aspects linked to subjective welfare (individual's feelings of pleasure) and psychological welfare (development of personal attributes, exploitation of own potential, realization, and self-expression).

Thus, for this study, the following concept of welfare at work developed by PASCHOAL AND TAMAYO (2008) will be considered: "... prevalence of positive emotions at work and the individual's perceptions which express and develop their potential and skills, and advances in achieving their life goals".

Human factors such as attitude, personality traits (BOIVIN et al. 2003, HEMSWORTH & COLEMAN 2011), self-esteem, job satisfaction (BOIVIN et al. 2003), expertise and motivation (HEMSWORTH & COLEMAN 2011) can determine the human treatment of animals. Therefore, they are prerequisites to achieving high levels of AW in livestock properties.

Attitudes, human behaviour and its influence on livestock

Attitude has been defined as a psychological tendency expressed by the favourable or unfavourable evaluation of something or someone in particular (EAGLY & CHAIKEN 2007). Thus human actions are based on three basic pieces of information: 1) cognitive information, 2) effective information and 3) behavioural information (MAIO & HADDOCK 2009). HEMSWORTH & COLEMAN (2011) stated cognitive information refers to the belief about something or someone. In the same way, the effective information is the emotional response to something or someone. Finally, behavioural information refers to the tendency to behave in a certain way which may reflect on a person's attitudes. Thus the attitudes of an individual explain much of his behaviour (AJZEN 2005).

According to the Theory of Planned Behaviour, intention to perform behaviour is stronger and more favourable to attitude linked to behaviour (AJZEN 1991). For example, stockpersons with positive behaviour towards animals have positive attitudes to both animals and the conditions in which animals are kept (BOIVIN et al. 2003).

Several studies reported direct or indirect relationships between attitudes and behaviour of stockpersons to fear and productivity of animals

(HEMSWORTH et al. 1981, 1989, 2000, COLEMAN et al. 1998, BREUER et al. 2000).

HEMSWORTH et al. (2000) noted that positive attitudes are associated with higher frequency of positive interactions and less frequent negative interactions between humans and animals. Moreover, positive interactions were negatively correlated to animals' fear of humans. Fear is a product of human behaviour towards animals and which could harm AW and productivity (HEMSWORTH & COLEMAN 1998).

In the same way, the animals' fear of stockpersons can influence SW at the workplace (BOIVIN et al. 2003). For example, since the handling becomes difficult, the presence of negative attitudes is higher; thus closing the feedback loop proposed by HEMSWORTH & COLEMAN (1998).

These relationships indicate an opportunity to influence on fear and, as a result, productivity, changing the attitudes and behaviour of stockpersons (HEMSWORTH et al. 2000). The pre-selection of individuals and/or technical training can improve actions of stockpersons (BOIVIN et al. 2003) which in turn may influence several factors that are directly linked to human attitudes (Figure 1).

Figure 1 proposes a model of interaction among various factors that influence stockpersons attitudes when handling livestock based on the model of feedback HEMSWORTH & COLEMAN (1998). It explains the influence of human-animal interaction on welfare and productivity of farm animals.

As claimed by the proposed model above, technical training would be essential to achieve satisfactory levels of AW. Also, it would be able to make positive changes in some significant AW aspects as well as the improvement of SW. Furthermore, it would help in solving stockpersons' questions and needs, and offer them an opportunity to better comprehend animals and improve the human-animal relationship.

Thus technical training may enhance AW using the mechanism of increased satisfaction (HEMSWORTH 2003, SIQUEIRA & GOMIDE JR. 2004, SIQUEIRA & PADOVAM 2008) and, mainly, by strengthening the prevalence of positive emotions at work (subjective well-being; DANIELS 2000 and PASCHOAL & TAMAYO 2008). Also, it may enable stockpersons to develop their capabilities and skills according to their goals and organization (PASCHOAL & TAMAYO 2008).

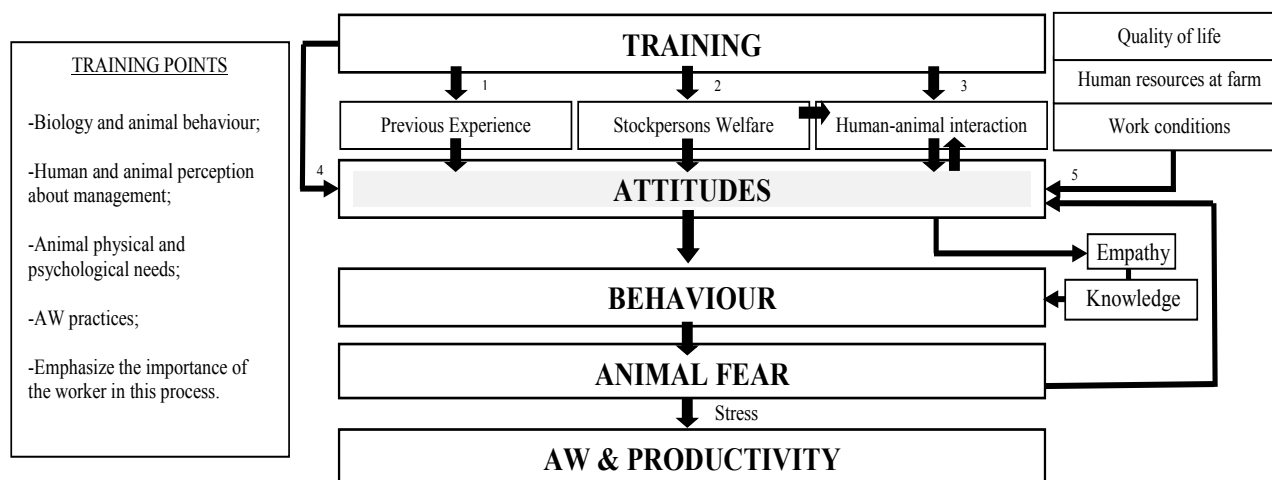


Figure 1 - Model of interaction between the main influencing factors on the attitudes of humans towards animals.

1, 2, 3, 4: Primary factors controlled by training which aims to improve attitudes and human behaviour towards animals.

5: Factors not directly related to work (quality of life) and human management factors that can influence the attitudes and human behaviour towards animals.

Source: Adapted from HEMSWORTH & COLEMAN (1998).

In the same sense, training may also provide opportunities for stockpersons to increase their involvement and organizational commitment which are relevant items for SW assessment (SIQUEIRA & PADOVAM 2008).

However, if working conditions, management of resources and quality of life are poor, the SW may be compromised, because the shaping of attitudes is directly related to work conditions (HEMSWORTH 2003, MALLER et al. 2005) and stockpersons' quality of life (MALLER et al. 2005).

In other words, "when a person is satisfied with his/her job, (s)he is encouraged to do his/her job well, to learn and improve his/her skills. Poor working conditions negatively affect the level of satisfaction and, as a result, the treatment of animals may be ruder" (HONORATO et al. 2012). Thus SW can directly affect stockpersons' attitudes and then, their behaviour and treatment towards animals which interfere positively or negatively in AW.

HEMSWORTH (2007) stated that the attitudes and behaviours of stock persons would be affected by their early experiences in agriculture. Moreover, steps may be changed. According to HEMSWORTH & COLEMAN (2011), attitudes are learned dispositions which can vary depending on the context (EAGLY & CHAIKEN 2007). Thus education programs for stock persons aiming at animal biology aspects and handling perception of animals and humans are essential to improve individuals'

attitudes, achieve an enhancement of animal welfare, productivity levels, and social work environment. (HEMSWORTH et al. 1994, 2002, COLEMAN et al. 2000).

Another important aspect related to animal handling is empathy. Although there is no clear evidence in the literature (MURI et al. 2012), it may be associated with positive attitudes and positive behaviours of stockpersons towards animals (COLEMAN et al. 2003, HEMSWORTH & COLEMAN 2011, BURTON et al. 2012).

Empathy is the ability to interpret and understand the experience of others (cognitive component) and a certain emotional reactivity (affective component; DAVIS 1980). Furthermore, it seems to influence the response of the individual front handling of animals (COLEMAN et al. 2003, HANNA et al. 2009, HEMSWORTH et al. 2009).

The basis for the human-animal relationship is formed by the interactions between them (ESTEP & HETTS 1992). The interactions between humans and animals can be negative, neutral or positive. Unfortunately, there is still a lack of evidence regarding the benefits of positive interactions as well as to assess which types of interaction between humans and animals exist (BOIVIN et al. 2003). Despite it, animals' reactivity has been reported to be lower when they are gently handled (WAIBLINGER et al. 2004, WINDSCHNURER et al. 2009).

Some studies observed that attitudes strongly

influence the behaviour of stockpersons towards animals (if they described animals positively or negatively; if they felt the importance of stroking or talking to animals, or contrary, such as hitting or yelling at animals) and personality traits (introvert/extrovert, reliable/unreliable). Such psychological characteristics are directly linked to livestock production (rate of growth and reproduction, milk yield, among others) and AW (SEABROOK & BARTLE 1992, LENSINK et al. 2000, SEABROOK 2001, HEMSWORTH 2003).

Factors such as knowledge about animal behaviour and perception of humans by animals are aspects that can be developed with stockpersons in technical training. It may favour the positive human-animal relationship by establishing technical information on how to manage, according to animals' needs and perceptions. It is important that stockpersons recognize animals as sentient beings and capable of expressing feelings, and not as machines or economic entities (GRANDIN 2003).

Technical training plays a vital role in improving the human-animal relationship because it can provide technical information to stockpersons concerning correct animal handling. Due to the fact of lack of knowledge or a belief that an aversive management facilitates work, many stockpersons do not realize the adverse effects of improper handling or ways to change it (SANT'ANNA & PARANHOS DA COSTA 2007). Therefore people who have positive attitudes towards animals also tend to handle animals positively, and vice-versa (BOIVIN et al. 2007).

Humans behave in favour to something or someone they like and behave against to something or someone they dislike (AJZEN & FISHBEIN 1980). Helping stock persons to understand animals' physical and psychological needs, biology and behaviour, among other factors, can modify their actions towards animals.

Even though human attitudes represent an important part of maintaining a satisfactory human-animal relationship, only changing stockpersons attitudes is insufficient to ensure a change in culture among the other agents within the system (BURTON et al. 2012).

BURTON et al. (2012) proposed a model for cultural development within properties in which humans and animals are involved. In this model, there is a great emphasis on the design of agricultural systems that promote positive interactions between

them rather than simply promote a change in attitude. That idea argues for this article once AW is also connected to the welfare of other elements involved in the livestock system, mainly regarding stockpersons.

Training

The training aim to provide staff and organizational development, and it is divided into three steps: 1) transmission of information, 2) development of skills and 3) change attitudes and concepts (CHIAVENATO 1998). Stockpersons are the first influence on farming practices and its transformation into production and AW (SEABROOK 2001, LENSINK et al. 2001, HEMSWORTH 2003).

It is clear that human factors determine their attitudes and behaviour toward animals (HEMSWORTH & COLEMAN 1998, BOIVIN et al. 2003, BURTON et al. 2012) and the training of stockpersons can be a beneficial action targeting AW (HEMSWORTH et al. 1994, COLEMAN et al. 2000, BOIVIN et al. 2003, HONORATO et al. 2012).

It is important to consider the human and nonhuman factors to make training effective. Although many authors have found that change in attitude is strongly associated with AW and productivity (HEMSWORTH et al. 1994, COLEMAN et al. 1998, HEMSWORTH & COLEMAN 1998, BREUER et al. 2000, COLEMAN et al. 2000, HEMSWORTH et al. 2002), BURTON et al. (2012) found that simply promoting a change of attitude is not enough for modifying the culture of stockpersons regarding animal handling.

In the same sense, it is essential that human aspects such work conditions and workload, financial incentives (GRANDIN 2003) and motivation (CHIAVENATO 2003) be considered to achieve sound management, as well as aspects of human resource management such as the presence of a supervisor (GRANDIN 2003).

GRANDIN (2003) reported that some stockpersons returned to carry out their activities in the same negative way as before after the training period. This situation might suggest that only a cultural change will promote, in the long term, a real difference in stockpersons' point of view towards animal handling and the impact of training in this process.

CONCLUSION

Many are the efforts to understand the mechanisms behind changing attitudes and human behaviour about livestock focusing on productivity and AW. Nevertheless, research has indicated that more factors, not just the temporary change of attitude, are involved in the search for more favourable animal handling.

Effective on-farm training programs may be centralizing key piece to change human behaviour towards animals. They may be useful to approach issues of interest to the human capacity to deploy AW programs.

So far there are few studies which fully address the human behavioural change aspects to achieve the desired way to handle livestock. It is imperative to understand stockpersons' feelings (worker welfare), its influences on animal handling routine and how it is possible to change the view of these individuals to enrich the welfare of humans and animals. Consequently, new paths and new opportunities will be created to change the attitudes and behaviour of stockpersons. Finally, human resources of rural enterprises should pay attention to these demands and target investments in training and development of stock persons for the reason that they may be reflected on the SW and, as a result, on the possibility of AW improvements.

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