Negative attitudes of Danish dairy farmers to their livestock correlates negatively with animal welfare

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Abstract

Positive stockperson attitudes to his or her animals is associated with a positive behavioural response in the animals and in other indicators assumed to reflect a high level of welfare as well as increased productivity, eg in milk yield. Conversely, negative attitudes have been found to have the opposite effect. However, so far, no attempt has been made to link the attitudes of stockpersons to outcomes of comprehensive protocols assessing animal welfare at farm level. In the study reported here, attitudes of Danish dairy farmers are compared with the on-farm welfare of dairy cows as assessed by the Welfare Quality® (WQ) protocol. In 35 dairy herds the welfare was assessed, and the farmers filled in a self-report questionnaire on their attitudes to dairy cows and how they should be handled. The farmers on the farms with the lowest total welfare score could, according to the self-report questionnaire, be characterised as those with a negative attitude to the handling of cows (eg less strongly disliked to kick a cow or use a stick, when necessary). As expected, farmer behavioural attitudes regarding different situations correlated: for example, farmers who liked more to work with and have positive interactions with the cows also agreed more on patient handling and the importance of regular positive contact. Furthermore, farms where farmers gave cows a positive characteristic were found to score highly on the WQ principle ‘Appropriate behaviour’.

Keywords: animal welfare, dairy cows, farmer attitude, human-animal relationship, milk yield, Welfare Quality®

Introduction

Dairy cattle and other domesticated animals rely on their caretakers, and their welfare is dependent on how well they are taken care of. Management decisions regarding housing and production systems have an impact on the animals; and several studies have indicated that the system can influence the animal, including, in the case of the dairy cow, its body condition score, lameness, integument alterations and somatic cell count (Bowell et al 2003; Regula et al 2004; Mattiello et al 2005; Trevisi et al 2006). However, practical experience suggests that the effects of the farmer and stockperson go far beyond this and, in a study conducted in 1972, another level of management influence was documented. The results indicated that the farmer’s personality and behaviour affected milk yield in dairy cows (Seabrook 1972). This finding launched a new research area which looked into the effect human personal factors, including attitudes, and behaviour, might have on animals, reviewed by Adler et al (2019).

Interaction between humans and animals can involve visual, tactile, olfactory or auditory contact. The reaction elicited in the animals in response to the contact can be either positive or negative (Waiblinger et al 2006a).

Several studies, conducted on different species, have found that negative human behaviour towards an animal can cause both physiological and behavioural stress responses in that animal which, in turn, lead to reduced welfare and decreased production (Hemsworth et al 1993; de Passillé et al 1996; Breuer et al 2000, 2003; Boivin et al 2003; Ceballos et al 2018). Attitudes are important determinants of human behaviour (Waiblinger et al 2006a; Hemsworth & Coleman 2011) and may therefore also affect animal welfare. Attitudes are described as externally directed predispositions acquired through experience (Ajzen 2005; Hanna et al 2009). Self-report questionnaires, with different statements connected to Likert scales which invite the person questioned to state how strongly he or she agrees with a statement, are most often used to assess attitudes towards, for example, animals.

Literature revealed that most of the questionnaires used to assess human attitudes to farm animals resemble each other. Questionnaires often include a section about attitudes toward animals (here, cows; statements included are, eg ‘Dairy cows are friendly’, ‘Dairy cows are intelligent’ and ‘Dairy cows are aggressive’) and other sections about the handling of cows.