Defining and measuring farmers’ attitudes to farm animal welfare

H Hansson* and CJ Lagerkvist

Department of Economics, Swedish University of Agricultural Sciences, PO Box 7013, SE-75007 Uppsala, Sweden
* Contact for correspondence and requests for reprints: Helena.Hansson@slu.se

Abstract

Identifying farmers’ attitudes to farm animal welfare (FAW) is an important step in determining farmers’ efforts to improve FAW, knowledge of which is of particular importance for understanding how the living conditions of production animals are determined. This study developed a hypothetical model of farmers’ attitudes to FAW, including the antecedents of these attitudes and possible influences on FAW-related behaviour. Two models for empirical measurement of attitudes, namely formative and reflective models, were also evaluated and compared. The results suggested that choice of measurement model considerably influences conceptualisation of attitudes and that there may be considerable model misspecifications in previous literature relating to farmers’ FAW attitudes. Existing literature on farmers’ FAW attitudes was reviewed with the aim of providing a preliminary indication of the coverage of farmers’ FAW attitudes. A need for future research related to farmers’ attitudes to FAW was identified.

Keywords: animal welfare, attitudes, factor analysis, farmers, measurement models, psychometrics

Introduction

Farm animal welfare (FAW) is defined in the literature as a human construct that is integrated into the values of humans (eg Fraser 1995; Rushen 2003). Indeed, in the study of human decision-making in relation to FAW, the standard economic welfare assumption is one of anthropocentric welfarism (McInerney 2004), whereby FAW is a subset of human welfare and the well-being of animals matters only as long as it affects the well-being of humans. This implies that improvements in FAW can be expected only when they affect the well-being of humans.

In this context, it is particularly important to understand farmers and their decision-making related to FAW, since farmers make the actual decisions about what FAW-related efforts to provide and hence ultimately determine the living conditions of farm animals. Of course, other actors, such as consumers, veterinarians and members of various pressure groups also play an important role in the debate on FAW but, as emphasised by Kauppinen et al (2010), farmers provide the actual care for the animals and thus play a special role.

Apart from undertaking FAW-related efforts due to national legislative requirements and/or cross-compliance in farm support schemes, farmers could be willing to provide FAW-related efforts to the extent that the utility derived from the use and non-use values (McInerney 2004) associated with these FAW-related efforts offset their associated costs. Use values refer to the productivity values associated with FAW, whereas non-use values refer to any other value the farmer may derive from FAW (see Lagerkvist et al [2011] for a discussion of possible non-use values associated with FAW). Farmers, thus, face a trade-off between the utility that can be derived from FAW and the costs associated with efforts related to FAW.

In the study of human decision-making, attitudes, ie affective responses to objects (Pretty et al 1997; Ajzen & Fishbein 2000; Kahneman & Sudgen 2005; van Overwalle & Siebler 2005), which manifest themselves in beliefs, feelings and behaviours (eg Fazio & Olson 2003), seem important since they are one group of antecedents of human behaviour (Ajzen 1991, 2001). Understanding the general attitude farmers have to FAW would require knowledge of the domains to which the attitude corresponds, ie the coverage of the attitude, which in turn is associated with attitudes to specific parts of FAW (specific attitudes), such as hunger and thirst; comfort; pain, injury and disease; natural behaviour; and fear and distress (see the so-called Five Freedoms listed by Farm Animal Welfare Council [2009]). While there are also other antecedents of human behaviour, such as perceived control and subjective norm (Ajzen 1991, 2002), the development of valid and reliable methods to measure these specific attitudes would be one important step in understanding farmers’ provision of FAW. A review of previous literature shows that several studies have examined farmers’ attitudes to FAW (eg Kauppinen et al 2010, 2012; Kielland et al 2010) or adjacent attitudinal constructs. These include attitudes to