The burden of domestication: a representative study of welfare in privately owned cats in Denmark

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Abstract

The way in which domestic cats are kept and bred has changed dramatically over the last two centuries. Notably, a significant number of cats are kept indoors, most of them are neutered and many are selectively bred. This likely has consequences for their welfare. A few studies link housing, neuter status and breeding in cats to risks of welfare problems. However, the study presented here is the first to quantify the risks and document the prevalence of risk factors. It builds on results from a questionnaire sent to a representative sample of the Danish population. Using the responses from cat owners who keep cats in the home (n = 378), the paper aims to investigate how indoor confinement, neutering and selective breeding affect health, behaviour and other factors relating to cat welfare. The paper reports that confined cats had significantly more behavioural problems than free-roaming cats; that a smaller proportion of the free-roaming cats suffered from the behavioural problems investigated; and that entire cats had significantly more behavioural problems than neutered cats. Finally, significantly more purebred cats than domestic shorthair cats were found to have diseases. Being confined, being intact and being purebred are therefore significant risk factors for behavioural or health problems associated with reduced welfare in privately owned cats.

Keywords: animal welfare, behavioural problems, confinement, health issues, neuter status, purebred cats

Introduction

In the last fifty years there has been a dramatic increase in the number of people keeping cats as companion animals. For example, in the UK between 1965 and 2004, the number of cats kept per hundred inhabitants increased from fewer than eight to more than 16 (Sandøe et al 2016a). Today, in most Western societies, cats enjoy popularity as companions that is comparable to dogs, and in Europe there are more households with a cat than households with a dog (FEDIAF 2014). In Denmark, although there are fewer households with cats than with dogs, the total number of domestic cats kept is higher than that of dogs (Danmarks Statistik 2000), as is the case in the United States (AVMA 2012), whereas in Australia domestic cats are reported to be the second most common companion animal, with numbers just below those of dogs (Richmond 2013). Over this rapidly rising period of cat popularity as a companion animal, dramatic changes in the way cats are bred, kept and cared for have taken place. However, little is known about how these changes affect the welfare of the cats.

One important shift concerns the housing of cats. Today, many cats are confined indoors; seemingly this happens more commonly in the US than in Europe (Rochlitz 2005; Bayer 2013). Confinement protects the cat from road accidents, injuries from fights and other dangers, but it may at the same time prevent the cat from performing important natural behaviours (Palmer & Sandøe 2014). It appears that it also puts the cat at higher risk of developing certain diseases (Robertson 1999; Rand et al 2004; Slingerland et al 2009). The main cause of this is believed to be an inactive lifestyle, which can put individuals at greater risk of developing certain lifestyle-related diseases. Similarly, behavioural problems have been linked to confinement, and specifically cats’ inactivity and their uniform, unchanging life and environment (Heidenberger 1997; Amat et al 2009; Bain & Stelow 2014). A bored or stressed cat might also perform unwanted behaviour, such as excessive vocalisation, aggressiveness or house soiling.

A second shift is that the majority of domestic cats are now neutered (Chu et al 2009; Sandøe et al 2016b). The surgical removal of reproductive organs to prevent cats from breeding has an impact on welfare for various reasons. The neutered cat needs to undergo surgery and recovery, and complications may develop from anaesthesia or surgical trauma. In the longer term, neutering increases the risk of obesity, which can lead to diabetes and other health-related