

Importance of the Stockperson: Good Human-animal Relationships on Pig Farms

Training handlers in awareness of animal welfare may be the most powerful factor in improving both production and welfare.

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Introduction

Modern systems of intensive housing for pigs have made these animals entirely dependent on regular producer inputs for welfare and biological performance. Inadequate regulation and staff who lack the appropriate training to care for the welfare of pigs can be major challenges to efficient and profitable production (Cronin *et al.*, 2014). This essay looks at recent studies connecting attitudes, perceptions and practices of pig production internationally, and differences in the animals' behaviour and productivity.

Discussion

A recent survey of 30 Finnish pig farms explored the connections between on-farm assessed pig welfare, productivity for sows and farmer disposition (Jaaskelainen *et al.*, 2014). One trained person conducted environmental and management welfare scoring on all the farms visited, and farmers were interviewed. Farmer responses most often mentioned the importance of good stockmanship and their own wellbeing as affecting animal welfare. Farmers with positive perceptions of the influence of attitudes on productivity had lower stillbirth and total mortality rates in their pigs. Overall, pig farmers with positive attitudes towards the improvement of animal welfare gained around 0.5 piglet per litter more than average farmers.

This study relied on production parameters collected by the farmers themselves, which can potentially lead to inaccurate data. The results of the welfare scoring system indicated that better scores from the "health and stockmanship" category in lactation and farrowing units were correlated with a shorter reproduction cycle, a decrease in the percentage of stillbirths and an overall increase in litters per sow per year. These results support a previous study on the effects of modifying the attitudes and behaviour of stockpeople in the pig industry. Hemsworth *et al.* (1994) found that decreasing negative human behaviours correlated with an increase in piglets born per sow per year. The positive perceptions of farmers between their own attitudes on animal welfare and outcomes in productivity are an encouraging finding of this study. Better health and stockmanship were shown to positively influence productivity. However, while these trends were significant, it is not clear which individual aspect of any category was the most important.

A similar survey focussing on producers' perceptions was carried out in Victoria to gather information on management strategies towards the detection, alleviation of pain and management of sick, injured and heat-stressed pigs (Wilson *et al.*, 2014). In this study, 16 pig farmers completed a face-to-face questionnaire. Most farmers were of the opinion that pigs suffered little pain from routine husbandry procedures and pain relief was unnecessary in these instances. However, producers did consider castration at 10 days of age to be very painful, even though most would still not administer pain relief. Despite only a small sample size, all major types of pig-production systems in Australia were surveyed. A larger survey of UK-based pig farmers (n=64) and veterinarians (n=116) also investigated attitudes to pain and the use of pain relief in pigs (Ison & Rutherford, 2014). The respondents were found to have a positive attitude towards pain relief in pigs and pain scores did not differ significantly among veterinarians and farmers overall. Compared to 67% of veterinarians, only 48% of farmers disagreed or strongly disagreed with the statement "pigs are not as sensitive to pain as humans". This sentiment could influence the management of pain in pigs on farms. As Jaaskelainen *et al.* (2014) revealed, the attitudes of stockpeople have a potentially strong influence, positive or negative, on animal welfare.

Intensively housed animals are heavily reliant on stockpeople, so inadequate handling may pose the largest welfare risk (Cronin *et al.*, 2014). Additionally, pigs that are fearful of people (i.e., displaying defensive or escape behaviour) have lower productivity on a variety of parameters and are more difficult to handle (Hemsworth, 2014). The stockperson's frustration with difficult situations can lead to increased negative interactions, which, in turn, may further exacerbate the animals' fear responses. High fear levels, with accompanying stress, result in protein substrates essential for growth and reproduction being diverted elsewhere thus lowering productivity (Hemsworth, 2014). Routine, frequent, and negative interactions in husbandry highlight the challenge stockpeople face in attempting to improve their interactions with pigs.

Coleman & Hemsworth (2014) maintain that underestimating the role and impact of the stockperson will seriously compromise the welfare and productivity of livestock. The stockperson may, in fact, be the most powerful factor affecting animal welfare and productivity. In a study by Hemsworth & Barnett (1991), pigs that were subjected to unpleasant handling treatments were more fearful of humans and showed an acute stress response through escape behaviour and their corticosteroid profile. Aversive handling also correlated with poor growth performance in young pigs. As investigated by Jaaskelainen *et al.* (2014), it is clearly economically beneficial to invest in low-stress practices and enhancing aspects of animal welfare in commercial pig production. Promisingly, a survey of 20 Canadian pig farmers found that farmers saw good animal welfare as essential for minimising costs and that economic considerations and animal-care practices are intertwined for most (Spooner *et al.*, 2014). Given the increasing demand for food, it is likely that both the livestock industry and the general community will have an increasing interest in ensuring the competence of stockpeople to manage the welfare of livestock (Coleman & Hemsworth, 2014).

Conclusion

The attitude of the stockperson is very important and it is highly recommended that stockpeople are better trained about pig behaviour. Stockpeople with positive attitudes towards pigs will have animals that are easier to handle and are more productive (Hemsworth, 2014). Considerable variation exists in the pig industry among farms in both the behaviour of stockpeople and the fear response of pigs to humans (Hemsworth, 2014). The industry could use this to improve the performance of animals by selecting and training stockpeople on the basis of their attitude and behaviour towards pigs (Hemsworth *et al.*, 1994). The influence that skilled farmers have on animal welfare cannot be underestimated and parameters evaluating those factors should be included into assessment systems (Jaaskelainen *et al.*, 2014).

References

- Coleman, G.J., Hemsworth, P.H. 2014 Training to improve stockperson beliefs and behaviour towards livestock enhances welfare and productivity. *Revue Scientifique et Technique – Office International des Epizooties*, 33:1, 131-157.
- Cronin, G.M., Rault, J.L., Glatz, P.C. 2014 Lessons learned from past experience with intensive livestock management systems. *Revue Scientifique et Technique – Office International des Epizooties*, 33:1, 139-151.
- Hemsworth, P.H. 2014 Behavioural principles of pig handling. In: *Livestock handling and transport*, ed T. Grandin, 4th edn, CABI, Wallingford, UK.
- Hemsworth, P.H., Barnett, J.L. 1991 The effects of aversively handling pigs, either individually or in groups, on their behaviour, growth and corticosteroids. *Applied Animal Behaviour Science*, 30, 61-72.
- Hemsworth, P.H., Coleman, G.J., Barnett, J.L. 1994 Improving the attitude and behaviour of stockpersons towards pigs and the consequences on the behaviour and reproductive performance of commercial pigs. *Applied Animal Behaviour Science*, 39, 349-362.
- Ison, S.H., Rutherford, K.M.D. 2014 Attitudes of farmers and veterinarians towards pain and the use of pain relief in pigs. *Veterinary Journal*, 202, 622-627.
- Jaaskelainen, T., Kauppinen, T., Vesala, K.M., Valros, A. 2014 Relationships between pig welfare, productivity and farmer disposition. *Animal Welfare*, 23, 435-443.
- Spooner, J.M., Schuppli, C.A., Fraser, D. 2014 Attitudes of Canadian pig producers toward animal welfare. *Journal of Agricultural and Environmental Ethics*, 27, 569-589.
- Wilson, R.L., Holyoake, P.K., Cronin, G.M., Doyle, R.E. 2014 Managing animal wellbeing: a preliminary survey of pig farmers. *Australian Veterinary Journal*, 92:6, 206-212.