Monitoring stockpeople attitudes and their relationship with animal welfare

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Introduction

• There are increasing international and local pressures for farm animal welfare monitoring schemes.
• Housing of farm animals is a contentious issue for many
• While welfare monitoring schemes are likely to improve animal welfare, the impact of such schemes will only be realised by recognising the limitations of stockpeople
• Monitoring ‘stockmanship’ and providing specific stockperson training to target key aspects of stockmanship is an important objective
Introduction (continued)

- On farm assessment of animal welfare is difficult to do in a standard way
  - Effects of other animals
  - Physiological measures time consuming and expensive
  - Non-physiological measures not well defined
- Large numbers of animals need to be assessed to get reliable results
- Often it is human behaviour that attracts media attention
Variations in behaviour towards dairy cattle
Time spent near laying hens
Table 1  Summary of the results of studies in which negative handling increased either basal free cortisol concentrations or the size of the adrenal glands in pigs.

<table>
<thead>
<tr>
<th>Experiment</th>
<th>Effects</th>
<th>P-value</th>
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</thead>
<tbody>
<tr>
<td>Hemsworth <em>et al</em> (1981a)</td>
<td>↑↑</td>
<td>0.05</td>
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<tr>
<td>Basal free cortisol</td>
<td></td>
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<tr>
<td>Gonyou <em>et al</em> (1986)</td>
<td>↑↑</td>
<td>0.05</td>
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<td>Adrenal glands</td>
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</tbody>
</table>
Attitudes and behaviour

Demographic variables
Personality traits
Attitudes towards targets

Beliefs that behaviour leads to outcomes
Evaluation of outcomes

Attitude toward the behaviour

Intention

Behaviour
Factors influencing performance

Capacity

Willingness

Opportunity

Performance

Capacity:
- Ability, age, health, knowledge, skills intelligence, level of education, endurance, stamina, energy level, motor skills

Willingness:
- Motivation, job satisfaction, job status, anxiety, legitimacy of participation, attitude, perceived task characteristics, job involvement, ego involvement, self-image, personality, norms, values, perceived role expectations, feelings of equity

Opportunity:
- Tools, equipment, materials, and supplies; working conditions; actions of coworkers; leader behaviour; mentorism; organisational policies, rules, and procedures; information; time; pay
Full model of stockperson performance

Stockperson
- Attitudes
- Behaviour
- Job Satisfaction
- Work Motivation
- Technical Skills & Knowledge
- Motivation to learn

Animal
- Fear
- Stress
- Productivity & Welfare

Stockperson Work Performance
Stockperson attributes that need to be assessed

- Skills and knowledge
- Motivation
- Job satisfaction
- Attitudes
Stockperson attributes

1. Skills and knowledge

- Knowing and being skilled at the techniques that must be used to accomplish a task are clearly prerequisites to being able to perform that task. Thus technical skills and knowledge will be the most limiting factors to job performance in situations where specific technical skills and knowledge are required to perform the tasks.
  - good general knowledge of the nutritional, thermal, social and health requirements of the animal,
  - practical experience in the care and maintenance of the animal and an ability to quickly identify any departures in the behaviour, health or performance of the animal and promptly provide or seek appropriate support to address these departures.
Stockperson attributes

2. Motivation

- High job performance in any industry relies on a combination of motivation, technical knowledge and skills and an opportunity to perform the job and clearly low motivation will limit job performance regardless of technical skills and knowledge of the individual.
Stockperson attributes

3. Job satisfaction

- Job satisfaction is a characteristic that is influential because of its direct effects on other job-related characteristics including job motivation and motivation to learn new skills and knowledge.
Stockperson attributes

4. Attitudes

- The attitude of the stockperson can affect animal welfare in two main ways
  - by influencing the stockperson’s behaviour and, in turn, the animal’s fear of humans
  - by affecting the level of inspection and promptness of intervention when welfare problems arise.
## Predictors of Pig Stockperson Performance

<table>
<thead>
<tr>
<th>Predictor variable&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Stockperson performance variable</th>
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<tbody>
<tr>
<td></td>
<td>Supervisor ratings</td>
<td>Independent observer ratings</td>
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<tr>
<td></td>
<td>Conscientiousness</td>
<td>Satisfaction</td>
<td>Technical knowledge</td>
<td>Behavior toward pigs</td>
<td>Work ethic</td>
<td>Intention to turnover</td>
</tr>
<tr>
<td>PDI performance</td>
<td>0.32*</td>
<td>0.39**</td>
<td>0.27</td>
<td>0.29*</td>
<td>0.22</td>
<td>-0.35**</td>
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<tr>
<td>PDI tenure</td>
<td>0.03</td>
<td>0.18</td>
<td>0.13</td>
<td>0.15</td>
<td>0.05</td>
<td>-0.28*</td>
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<tr>
<td>Positive attitude</td>
<td>0.27*</td>
<td>0.26</td>
<td>0.23</td>
<td>0.23</td>
<td>0.11</td>
<td>-0.37**</td>
</tr>
<tr>
<td>Empathy affect</td>
<td>0.11</td>
<td>0.12</td>
<td>0.27</td>
<td>0.37**</td>
<td>0.19</td>
<td>-0.41**</td>
</tr>
<tr>
<td>Empathy attribution</td>
<td>0.13</td>
<td>0.05</td>
<td>0.33*</td>
<td>0.30*</td>
<td>0.17</td>
<td>-0.39**</td>
</tr>
</tbody>
</table>

*Source: From Coleman (2001).*
Factors contributing to productivity and welfare

- **Stockperson**
  - Attitudes
  - Behaviour
  - Job Satisfaction
  - Work Motivation
  - Motivation to learn
  - Technical Skills & Knowledge

- **Animal**
  - Fear
  - Productivity & Welfare
  - Stress

- **Work Performance**

Factors contributing to productivity and welfare include attitudes, behaviour, job satisfaction, work motivation, motivation to learn, technical skills & knowledge, fear, productivity & welfare, and stress. These factors are interconnected, influencing each other in various ways.
Applications

- Establishment of a database of stockperson performance in each livestock sector
- Provide a tool to identify areas where welfare is at risk
- Provide a tool to identify training needs
- Provide a tool to track industry-specific changes over time
- Provide information to assist government and industry to respond to public concerns
Thank You