Chinese Egg Producers' Attitudes and intentions towards Improving Animal Welfare

Qing Yang November 2020



Background

- China is the largest egg producer ¹
- Battery cages: a welfare issue²
- Producers' views remain unknown

2019 CAGE FREE EGG CHINA SUMMIT

2019非笼养鸡蛋(中国)高峰论坛

18 June 2019 1pm-5:30pm Shanghai Marriott Hotel City Centre Ballroom 1

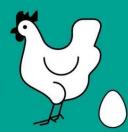




Photo by Compassion in World Farming

中国标准化协会标准

STANDARDS OF CHINA ASSOCIATION

FOR STANDARDIZATION

T/CAS

269-2017

农场动物福利要求 蛋鸡

Farm animal welfare requirements: Laying hen

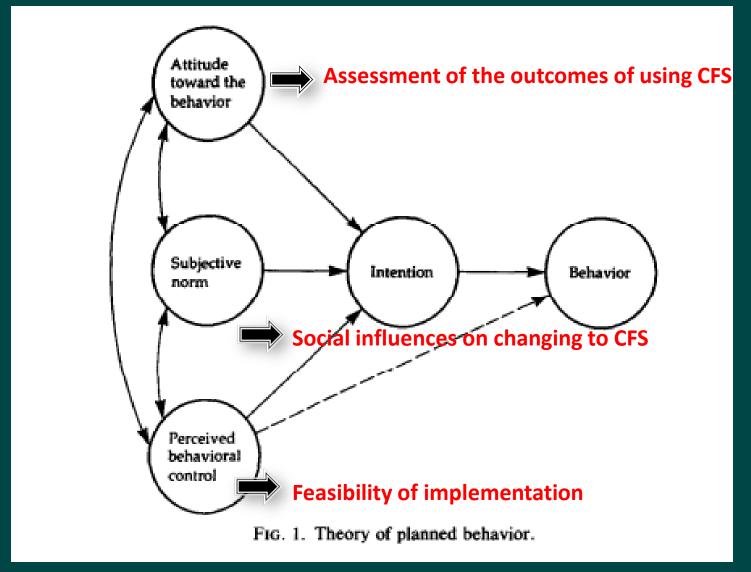
Why do producers (not) change to higher welfare production systems?

- Personal factors⁴⁻⁷;
- Regulatory factors 4-7
- Market factors^{5,8-11};
- Social influences factors¹²⁻¹⁶;
- Feasibility factors^{5-7,10,12};



Photo by Xu Wenlong

The Theory of Planned Behaviour



Research aim and objectives

♦ Aim:

Explore producers' attitudes towards CFS and other external factors that influence their intentions to convert to CFS.



Photo by Compassion in World Farming

Objectives:

- Investigate how producers interpret hen welfare and perceive CFS.
- Explore which stakeholders motivate producers to adopt CFS.
- Identify the challenges that impede producers' adoption of CFS.

Methodology: interviews

- Open-ended, semistructured interviews over phone
- Participants recruited through Wechat
- Eight managers interviewed between Nov.2019 and Jan.2020
- Guided interview questions developed based on TPB
- Farm size between 50,000-25 million birds



Photo by RSPCA

Data analysis: Thematic analysis18

Nvivo NVIVO## Inductive & deductive analysis¹⁸ Requirement of Difficult to collect eggs labour Difficult for vaccination Difficulty of managing CPS Difficulty to meet environmental impact Consumers' assessment unwillingness to pay requirements Feasibility of implementation Absence of trustworthy lack of land food certification systems resources

Results 1: Assessment of the outcomes of using CFS

- √ Good for hen health
- Not beneficial to hen welfare
- X Lower productivity
- Reduced profitability
- Poorer food safety

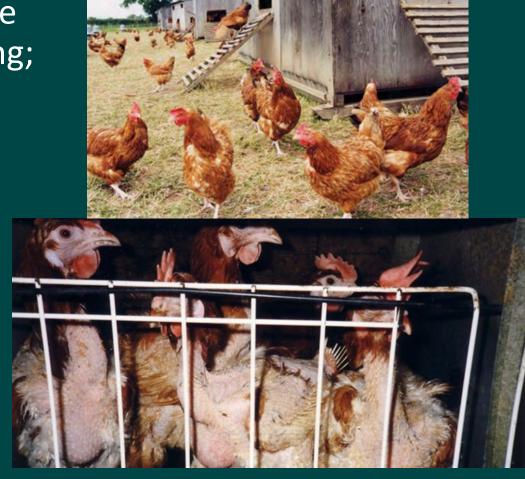
"Hens are kept in cages for many generations, their natural behaviours have been eradicated."

(P8).

"...food, water, temperature and humidity are the most suitable for hens, this is the best welfare." (P2).

Discussion 1: Assessment of the outcome of using CFS

- Defining animal welfare as biological functioning;
- Lack of understanding of animal welfare science and animal behaviour
- Negative economic outcome
- Tailored training is necessary



Photos by Compassion in World Farming

Results 2: Social influences on changing to CFS

- **X** Consumers
- **X** Government
- Agricultural experts
- Animal welfare organisations
- √ Food business companies

"Government will not support cage free systems, they want to ensure food supply..." (P1). "Few consumers care (about welfare)...they don't have the concept." (P2).



Photo by Compassion in World Farming

Discussion 2: Social influences on changing to CFS

- Lack of public awareness of animal welfare¹⁹;
- Governmental support of intensification of livestock industry;
- Animal welfare research is productivity oriented²⁰;
- Lack of advocacy of CFS from animal welfare organisations;
- Pressure from food businesses provides opportunities to change



Photo by Compassion in World Farming

Results 3: Feasibility of implementation

- Consumers' unwillingness to pay;
- The absence of trustworthy food certification systems;
- X A lack of land resources;
- Difficulty to meet environmental impact assessment requirements;
- Difficulty of managing CFS;

"people are willing to pay...this is the key issue...as long as there is market demand, the industry can change rapidly." (P2)

"market and food certification walk hand in hand...there must be recognised certification systems." (P2)

Discussion 3: Feasibility of implementation

- Economic viability of CFS is the primary concern;
- Various production systems need to be allowed;
- Start with less expensive
 CFS that are suitable for the farm setup;
- Creating and developing a market for cage-free eggs is critical;
- Engaging all stakeholders, particularly food businesses;

- Raising awareness of food safety and quality among consumers
- Training producers to employ CFS



Photo by Compassion in World Farming

Conclusion and Critique

Conclusion

- TPB is useful
- Identified the major factors
- Low intention to change:
- Negative assessment of using CFS;
- Minimal social influences;
- Challenges beyond control;
- Practical approach:
- Marketing cage-free eggs;
- Engaging all stakeholders;
- Farm-appropriate production systems;
- Training producers to use CFS.

Critique

- Participant bias
- Social desirability bias
- Results not generalisable
- A lack of definitions of CFS



Photo by Compassion in World Farming

Reference List

- ¹ Yang, et al. (2018) Worlds. Poult. Sci. J., 74, 417–426.
- ² Hartcher, et al. (2017) Worlds. Poult. Sci. J. 73, 767–781
- ³ Chicken Watch. Available online: https://chickenwatch.org/cage-free (accessed on 15th April 2010).
- ⁴ Stadig et al.(2015) Animals, 6, 1-12.
- ⁵ Stadig et al. (2016) Poult. Sci. 95, 715–725.
- ⁶ Tuyttens et al. (2011) Poult. Sci. 90, 941–950.
- ⁷Tuyttens et al. (2008) Livest. Sci. 116, 289–299.
- ⁸ Bock et al.(2007). Br. Food J, 109, 931–944.
- ⁹ Veissier et al. (2008) Appl. Anim. Behav. Sci., 113, 279–297.
- ¹⁰ Gocsik et al. (2015) Anim. Welf., 24, 211–222.
- ¹¹de Krom,et al. (2015). Sociol. Ruralis, 55, 417–437.
- ¹² de Lauwere et al. (2012). Livest. Sci., 143, 151–161.23.
- ¹³ Kauppinen, et al. (2010) Anim. Welf., 19, 523–536.
- ¹⁴ Platto et al. (2020) Anim. Welf. 2020, 29, 99–112.
- ¹⁵Jones et al. (2015) Prev. Vet. Med. 121, 30–40.
- ¹⁶ Borges et al. (2019) Prev. Vet. Med. 170, 104718
- ¹⁷ Ajzen (1991) Organ. Behav. Hum. Decis. Process, 50.179-211.
- ¹⁸ Braun and Clarke (2006) Qual. Res. Psychol. 3, 77–101.
- ¹⁹ You et al (2014). PLoS One, 9, 1–10.
- ²⁰ Sinclair et al (2020). Animals, 10.

