

# Qualitative studies on farmers' perception of risk from HPAIV and implementation of biosecurity measures on UK poultry farms

Paniz Hosseini, Ivo Syndicus, Eve Houghton, Guillaume Fournie, Javier Guitian, Ashley C Banyard, Richard Hepple, Andy Paterson, Ian H Brown, Pablo Alarcon, James Wood



## Background

The current epizootic of **high pathogenicity avian influenza virus (HPAIV) H5N1** in the United Kingdom (UK) has dwarfed all previous incursions. The scale of the incursions between 2020 and 2023 drove the need to review gaps in our understanding of the virus incursion onto premises.

This study used **qualitative methodologies** to evaluate **human behaviours** on poultry farms that impact upon biosecurity and farmers experiences of **disease management** in relation to HPAIV.

## Research Question:

**What are farmers' perceptions of biosecurity measures and how do they implement them?**

## Aims & Objectives:

- To explore **biosecurity** and **disease management** practices on commercial poultry farms.
- To investigate farmers' **experiences** and **perceptions** of HPAIV.
- To explore farmers **use and/or misuse** of biosecurity on farms.

## Methods

13 commercial poultry farms were visited in England and Wales between **May and September 2023**.

- Premises included farms that had an HPAIV outbreak since 2021 (**case farms**) and those that had not (**non-case farms**).
- Recruitment of **farm managers** was undertaken through **companies and trade associations**.

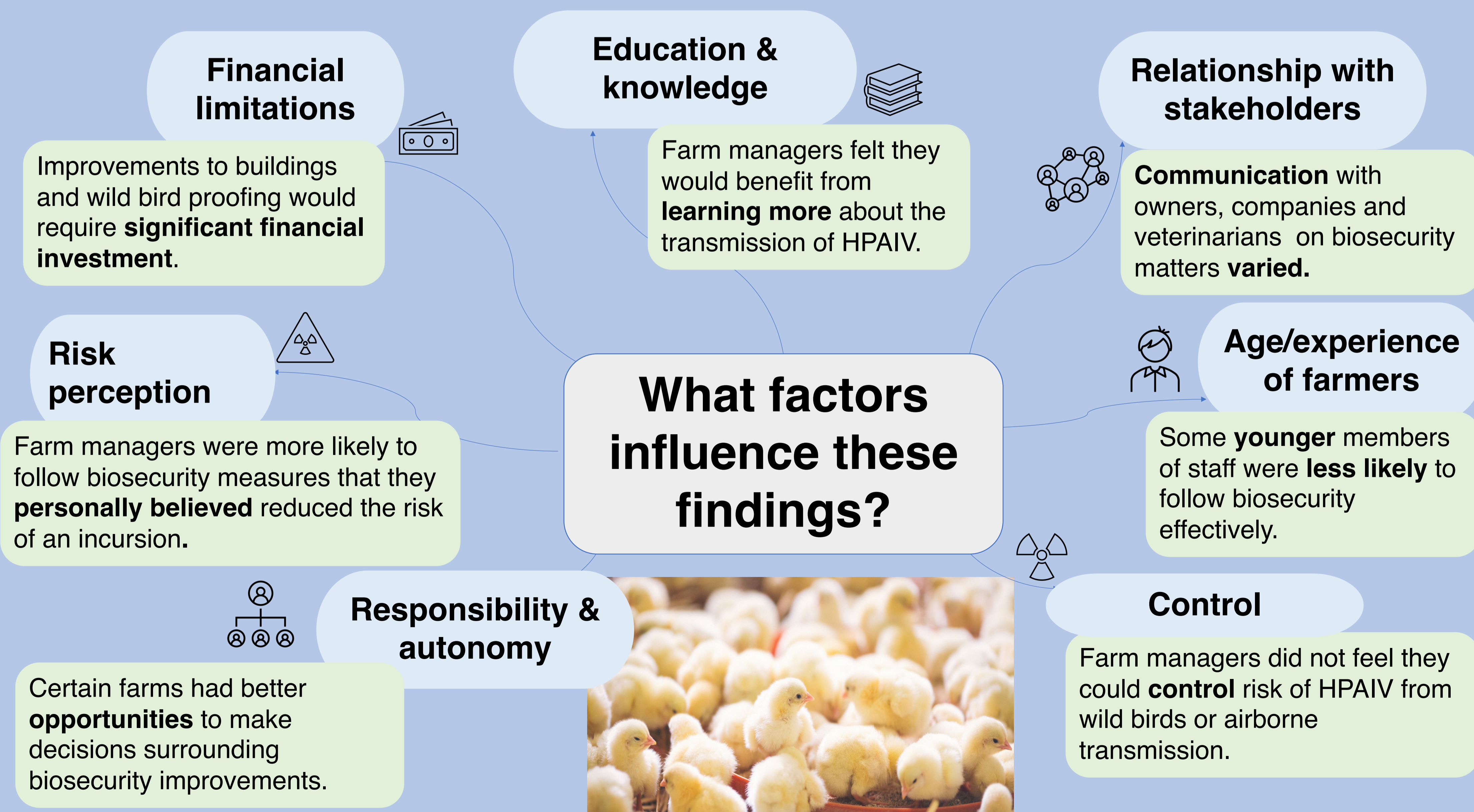
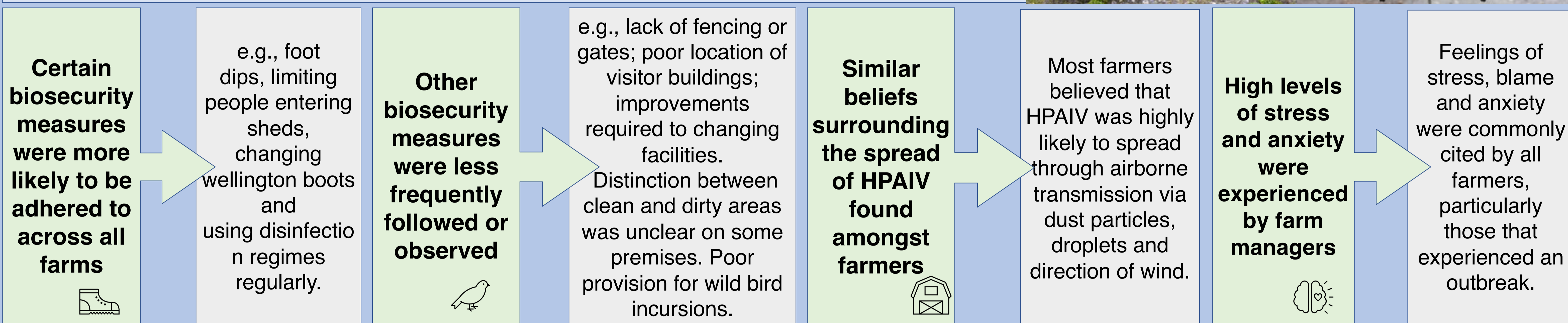
- **Semi-structured interviews** were used to enable in-depth discussions.
- **Ethnographic observations** were made to assess the **reported experiences** of farmers when facing incursions of HPAIV and **physical evidence** of biosecurity practises.

## Data analysis

Interviews, observation notes/diary entries and other information gathered during the study were analysed to generate **codes, patterns and themes** amongst the data using qualitative data analysis software (NVivo 12).



## Findings



## Recommendations & future work

- ❑ Further qualitative research is needed to better understand the **socio-structural factors** impacting upon incursion potential.
- ❑ **Guidance and support services** would benefit farmers who have had an outbreak, particularly surrounding **mental health**.
- ❑ Access to **educational materials** on the risks associated with HPAIV, tailored for all **ages and language** requirements, and updated more frequently, would be of great utility.

We will be following up on these findings in further research during the next phase of the study: **FluTrailMap**.

## Acknowledgements

Many thanks to the funders of this study, the farm managers involved, and to the companies and associations in the industry for all their time, involvement and invaluable guidance.