

Summary Report

Appreciation of Risk Research

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1. Background and Objectives

The agriculture sector accounts for a dis-proportionately high percentage of workplace fatal and non-fatal injuries; despite only employing 1% of the UK's workforce, the sector accounts for 20% of workplace deaths each year. As a result, the sector is a key priority for HSE.

Research already undertaken within the sector had demonstrated that farmers are aware of the health and safety risks present on the farm, claim to be undertaking basic risk management and claim to take action when they identify something unsafe on the farm.

However around one third admit they do things that they know are risky and the previous qualitative research highlighted that while farmers are knowledgeable about the risks, they also demonstrate risky behaviours.

The overall aim of this research was to understand why farmers and farm workers continue to take health and safety risks in the course of their work, in order to help HSE develop interventions that might reduce the accident rate within the sector.

The objectives of the research were as follows:

- To understand whether farmers and farm workers 'truly' appreciate the risks they are taking
- To understand why they knowingly take the risks they do and the reasons that lie behind this
- To test/validate/disprove the hypotheses outlined in the brief
- To understand where there is an opportunity for HSE and/or others to intervene to prevent risk taking behaviour
- To understand how interventions can be developed to work with the brain's natural thought and decision making processes to reduce/prevent risk taking behaviour
- To understand how interventions should be timed to disrupt actions that are risky

2. Research Methodology

The research was qualitative in nature; it involved in-depth conversations with a range of farmers and agricultural workers, following a list of topics but allowing individuals to respond in an open manner: 28 x farm visits and 6 x group discussions took place across 8 locations in England, Scotland and Wales.

As outlined below, the sample structure for the farm visits was designed to ensure we included a good spread of farms; farms of different types and farms of different sizes.

England; Shropshire, Devon, Yorkshire, Norfolk

2 x 1.5 hr groups; one with farmers, one with farm workers

16 farm visits

- 5 x grazing livestock, 5 x general cropping, 2 x mixed, 2 x dairy, 2 x horticulture
- 5 x very small, 5 x small, 3 x medium, 3 x large

Scotland; Perth, Kinross and Argyll

2 x 1.5 hr groups; one with farmers, one with farm workers

6 farm visits

- 2 x cattle/sheep, 3 x general cropping, 1 x mixed
- 2 x small, 2 medium, 1 x large, 1 x very large

Wales; Montgomery, Welshpool

2 x 1.5 hr groups; one with farmers, one with farm workers

6 farm visits

- 1 x dairy, 1 x sheep/beef, 1 x mixed, 1 x pigs
- 1 x very small, 3 x small/medium, 2 x large

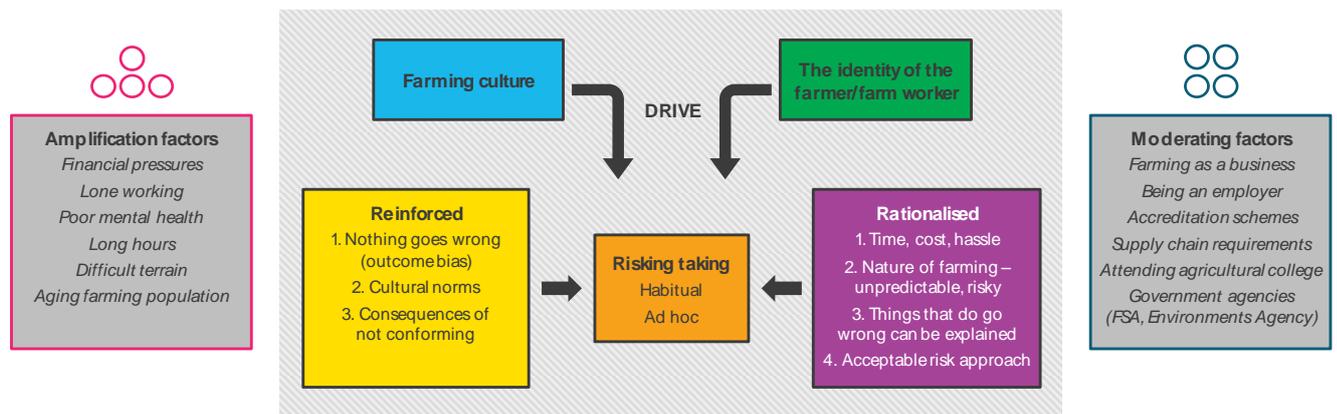
Researchers spent up to 3 hours on each farm conducting an in-depth interview with the farmer and shorter interviews with the farm workers, depending on availability.

Researchers were also given a tour of the farm by the farmer, enabling them to see the type of farm and observe the farmer and/or farm worker as they went about their daily tasks.

On 8 of the farms, farmers recorded themselves going about their everyday activities; this took place after the initial visit and fed into the overall analysis of the data.

3. Main Findings

The findings of the research enabled a model to be developed. As the model illustrates (see below), risk-taking in farming is complex; risks are taken for a range of reasons and this does not reflect a lack of claimed knowledge around H&S amongst farmers or farm workers. However, it does reflect a lack of factual understanding and emotional acceptance of the potential consequences of their risky behaviours.



Drivers of risk-taking behaviour

The first key element of the model is the very strong culture that exists in farming; farming is unusual; firstly in that it is a way of life not just a job and secondly in that the farm is home as well as workplace. Farmers feel a strong sense of belonging to farming and a strong sense of being set apart from the rest of society. The norms and accepted practices within the farming community can have greater traction than externally imposed standards. Within this farming culture a degree of risk-taking is the 'norm' and the culture both drives and reinforces risk-taking behaviour amongst farming and farm workers.

The second key element of the model is what we have called the identity of the farmer/farm worker. The research found that there were a set of characteristics that all farmers seemed to share; they could be present more or less strongly in different individuals, but they were found to some degree across all farmers. These characteristics are:

- taking pride in their farmer 'craftmanship',
- taking satisfaction in their wide range of skills and their ability to tackle a wide range of tasks,
- a belief in their strength, resilience & self-sufficiency and finally,
- a high level of confidence in their own competence;

We have called these combined characteristics the 'identity' of the farmer. A degree of risk-taking is part of that identity – farmers tend to feel that they are able to

manage a degree of risk without consequence i.e. and be ok. Also, they feel that a degree of risk taking is unavoidable – ‘part and parcel’ of farming.

Overlaying this farmer ‘identity’ is the individual farmer’s overall attitude to risk, which appears to be largely personality driven. Many farmers take a pragmatic approach to risk; safety is one one factor they are juggling along with many others – it is important but it can be traded off against other factors. However, some farmers are more actively risk averse; safety is a key component in their decision making and features more prominently in the day-to-day running of the farm. Conversely some farmers are more actively risk-taking in their approach; they appear to enjoy taking risks and do so more regularly in the course of their day-to-day farming.

Reinforcers of risk-taking behaviour

Risk taking behaviour is reinforced by a range of factors and rationalised by farmers in a variety of ways.

One key reinforcer of risk-taking is ‘getting away with it’ – especially in the area of habitual risk-taking, if farmers undertake the same risky activity many times without it going wrong then this reinforces the idea that the risk is manageable and reduces the feeling that what they are doing is risky. Academics call this ‘outcome bias’ - the tendency to judge a decision by its eventual outcome instead of based on the quality of the decision at the time it was made.

A second reinforcer of risk-taking are the cultural norms that drives risk-taking in the first place which also work to reinforce it - a degree of risk-taking is inherent in the farming culture and the farmer identity – by taking risks a farmer is reinforcing his identity as a farmer and his sense of belonging to the farming community.

Finally, there is a third reinforcer of risk-taking and that is a fear of the consequences of not conforming to these cultural norms. Standing out from the crowd can feel like a daunting thing to do, it can lead to feelings of humiliation and also to fear of rejection from ‘your group’. For farmers and farm workers, whose identity and allegiance is very tied up in being a farmer and part of the farming world, this can be a daunting thought; both emotionally and practically. For farm workers compliance with the cultural norms around risk-taking can be essential to secure and maintain their income. For farmers especially being respected in their community is very important.

Rationalisations for risk-taking behaviour

When farmers were asked about the risks they take, they explained (rationalised) these in many different ways. They often talked about the time or cost or hassle of doing things in a safer way or in the way they felt would be regarded as the ‘proper’ way. Farmers also talked about the unpredictable nature of farming and the idea that a degree of risk was inevitable and that it was not practically possible to manage out all the risk. Farmers farming in difficult terrain, in remote parts of Scotland and Wales were especially likely to talk like this, but all farmers did, to a degree, hold this view. Farmers also found reasons to explain accidents that had happened to other farmers in a way that distanced the possibility of it happening on their farm, e.g. that the farmer was a known risk taker, the person involved was elderly, etc.

Finally, farmers talked to us about their approach to safety on the farm. Safety is important to all farmers, but for most it is one factor they are juggling amongst many others and it is not for the majority the most important factor; so they accept a degree of risk, trading this off against time, cost, hassle – the aim is to get the job done effectively with an acceptable level of risk.

Amplification factors

There are a range of factors that, if present on a farm, serve to amplify risk-taking; these include many variables that are 'part and parcel' of modern farming; financial pressures, high levels of lone working, the need to work long hours and an aging farming population all contribute to greater risk-taking on farms.

Moderating factors

On the other side we have a range of things that, if present on the farm, serve to moderate the level of risk-taking. These include being subject to health and safety requirements of accreditation bodies, the supply chain (processors and customers, including supermarkets) and Government agencies such as the Food Standards Agency (FSA). They also include farms where the farm is being run more as a business (and less as a way of life) and/or where there may be employees on the farm.

Finally, it was clear that in this sample, farm workers who had attended agricultural college had a different attitude and were more health and safety focussed – and although they sometimes met with resistance from older farmers, they did try to challenge some of the riskier practices.

Types of risk taking

As highlighted earlier, risk-taking appears to fall into two main categories; ad hoc/in the moment risk-taking and habitual risk-taking.

In this sample, overall it appeared that farmers tend to take greater risks with smaller scale and/or unplanned tasks than with regular and/or larger scale planned activities where farmers tended to invest in the equipment, processes and structures required for the task to be undertaken 'safely'.

With more ad hoc tasks (e.g. clearing a blockage, getting rid of an unwanted tree branch, changing a light bulb) farmers take more risks. Farmers tend to be aware that they are taking a risk but don't think about it for long; the decision to take the risk is therefore not especially considered or thought through; the desire to 'get the job done' overrides awareness of the risk and they 'just do it'. Farmers could expose themselves to high levels of risk where they found themselves in situations where they felt they had no choice but to react. These situations often involved cattle e.g. where the cow is having trouble calving or where a cow gets aggressive. Here the farmer is acting largely without conscious decision making or reasoning; dealing with a situation at hand, with the level of risk they are taking being a secondary consideration. Only afterwards do they become conscious of the degree of risk they have exposed themselves to.

Across the research several areas emerged where risk-taking is standard practice and quite habitual in nature. It is not that farmers are unaware of the risks and indeed several of these practices are seen as high risk. However, doing things in this way is the 'norm', the accepted way of doing things and as such it is not really questioned, even where it is seen as risky. Areas of habitual risk taking are as follows:



Farm workers approach to risk

The views, attitudes and described behaviours of the farm workers are largely consistent with those of the farmers. However, in practice, the approach that farm workers take to risk is heavily influenced by the farmer. The farmer's attitude and approach sets the tone and ultimately drives the approach taken to risk on the farm. Workers reported that farmers attitudes were variable, with some strong proponents of safe working and others less so. It appeared that some farmers did talk in terms of observing good safety practices but then turned a blind eye to workers 'poor' practices, the desire to get the job done quickly seemingly overriding safety considerations. In addition, it seemed that any supervision tends to be fairly light touch due to the isolated working practices and the self-determined culture in farming. Finally, some farmers appear to consider good practice to be responding to any concerns/requests raised by workers rather than dictating the safety practices they would like them to adhere to.

Workers who were themselves more risk averse could find it challenging if they were working somewhere where they are required to do things they feel uncomfortable with and if they were required to cut corners by the farmer. They often feel pressured to do so, in order to secure continued employment both on that farm and others in the locality. More experienced workers were better able to pick a farm to match their own working practices.

For farm workers who were themselves more risk-taking by nature, risk is part of the 'fun' of working on a farm; in this sample, these workers tended to be younger, male and enjoy relying on their wit and instincts. If they found themselves working on a

farm where the culture was more risk averse they could choose to dismiss elements of the imposed safe working practices as impractical or unrealistic, although their risk-taking behaviour did appear to be curtailed, to an extent at least. Typically, these workers did still like working on farms where the farmer took their safety into consideration – this was seen as a sign of a ‘good’ farm; but they felt that then it was their own responsibility.

4. Opportunities

The research has demonstrated that risk-taking in farming is complex; risks are taken for a range of reasons and this does not reflect a lack of claimed knowledge around safe working practices amongst farmers or farm workers.

However, it does reflect a lack of factual understanding and emotional acceptance of the potential consequences of their risky behaviours.

Many farmers take a pragmatic approach to safety and risk and encouraging farmers to be ‘safer’ is unlikely to be motivating in and of itself. The challenge is to give farmers a reason to want to change their risk-taking behaviours.