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Social norms and risk communication

Joachim Scholderer*

Norwegian University of Life Sciences (NMBU), Christian Magnus Falsens Vei 18, 1433 Ås, Norway. E-mail: joachim.scholderer@nmbu.no

University of Zurich, Binzmühlestrasse 14, 8050 Zürich, Switzerland. E-mail: joachim.scholderer@uzh.ch

Aarhus University, Fuglesangs Allé 4, 8210 Aarhus V, Denmark. Email: js@econ.au.dk

Nina Veflen

BI Norwegian Business School, Nydalsveien 37, NO-0484 Oslo, Norway. E-mail: nina.veflen@bi.no

Nofima AS, Osloveien 1, NO-1430 Ås, Norway. E-Mail: nina.veflen.olsen@nofima.no

*Corresponding author

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Abstract

Social norms are beliefs about what people in general would consider appropriate behaviour in a particular social context. In this mini-review, we summarise research on the role of social norms in the context of safe food handling practices. We review existing evidence regarding the influence of social norms on food handling practices related to cross-contamination and hygiene, time-temperature control and adequate cooking. Furthermore, we discuss the consequences of biases in social norms and how they might be mitigated by norm-oriented risk communication messages. Finally, we discuss potential conflicts between norms that are instrumental for safe food handling practices and norms that are instrumental for maintaining social relationships, and suggest directions for future research.

Key words

Risk communication, risk perception, social norms, food safety

Introduction

Food handling and consumption are integral parts of our social life, governed by conventions and social norms. Social norms are rules for what constitutes "appropriate" behaviour in a given social context. A social norm exists when people (a) expect the majority of their reference group to behave in a particular way and (b) believe that the majority would expect them to behave in the same manner (Bicchieri, 2006). Ultimately, most forms of risk communication—from hygiene education to food safety training to dissemination of consumer advice—aim to establish social norms: simple rules for hazard or exposure reduction that consumers and professional food handlers are likely to follow because "everybody does it".

Effect of social norms on safe food handling practices

Up until now, only few studies have quantitatively investigated the effects of social norms in the context of food safety. In a recent meta-analysis, Young, Reimer, Greig et al. (2017) report weighted average correlations between social norms and consumer intentions to engage in safe food handling practices in their households, based on altogether eight primary studies. For practices related to cross-contamination and hygiene, time-temperature control and adequate cooking they find average correlations ranging from r = .34 to .40. However, one problem with behavioural intentions (in the context of time-temperature control, a typical questionnaire item might be "*The next time I have soup for dinner I will not let the leftovers stand outside the fridge over night"*) is that they are often only weakly related to actual behaviour. Based on the average intention-behaviour correlations reported by Young et al. (2017), the effects of social norms on actual behaviours related to cross-contamination and hygiene, time-temperature control and adequate

cooking would be considerably smaller, ranging from r = .09 to .13. Although social norms may appear to contribute only little to people's adoption of safe food handling practices, their effects should not be underestimated: the effects of social norms on food safety-relevant behaviours have similar sizes as those of risk perceptions (Young et al., 2017) and food safety campaigns in the media (Young, Waddell, Harding et al., 2015).

Social norms as a target for risk communication

Social norms become an important target for risk communication when they are biased among relevant groups of consumers or professional food handlers. Two useful analogies can be drawn from the risk perception literature (Verbeke, Frewer, Scholderer & de Brabander, 2007): people systematically underestimate risks that are frequent and mundane, and people tend to believe that they are less at risk from negative events than others. The latter phenomenon, optimistic bias (Miles & Scaife, 2003), tends to be particularly pronounced when people believe that they have a high degree of control over their exposure to a hazard (Klein & Helweg-Larsen, 2002). As a consequence, they are less likely to engage in practices that promote food safety.

Social norms can be biased in a similar manner. A consumer may, for example, believe that almost nobody washes their lettuce before they eat or serve it, and therefore not do it either (a hygiene problem). A very simple message that establishes a correct social norm—such as *"Why do YOU think people rarely get food poisoning from their lettuce? It's simple: 95% of consumers wash their lettuce before they eat it"*—may already be sufficient to change the behaviour of this particular consumer. Interventions of this type have successfully been used in the promotion of environmentally responsible behaviour (e.g., Schultz, Nolan, Cialdini, Goldstein & Griskevicius, 2007; Steg & Vlek, 2009) and may also have much potential in the promotion of safe food handling

practices. Biran, Schmidt, Varadharajan et al. (2014), for example, report a randomised controlled trial in which the reinforcement of social norms was part of a complex community intervention to promote handwashing in households.

Norm conflicts

A gap in the existing literature is that many social contexts are governed by *multiple* norms that may be in conflict with each other. Consider the situation of being invited to dinner at someone's home. A social norm that is instrumental for promoting food safety (e.g., "do not eat undercooked chicken" in the context a problem of adequate cooking) may be in conflict with a cultural norm that is instrumental for maintaining social relationships (e.g., "accept the food that your host offers when you are invited to their home"). Research by the authors is currently underway concerning the nature of norm conflicts in eating situations and the conditions under which food safety norms will trump competing social norms (e.g., a guest asking the host to return to the kitchen and make sure the chicken is well done; see Figure 1). The results obtained up until now suggest that food safety norms and social norms operate in an additive manner but in opposite directions. Social norms have slightly stronger absolute effects, resulting in a net effect of increased risk-taking (Veflen, Scholderer & Langsrud, 2018).

Conclusion

Social norms are an attractive target for risk communicators. If it were possible to establish a social norm that is instrumental for public health objectives, or weaken a social norm that counteracts public health objectives, many risk management problems would solve themselves

simply because everybody would feel a generalised social pressure to “do the right thing”. Much more research is needed though, particularly concerning norm conflicts. One question that should be addressed in future research is which types of risk communication messages would be able to raise consumer awareness of such norm conflicts. A second, related question is which channels would have sufficient reach among consumers to lead to substantial effects on a population level. Finally, and perhaps most importantly, research should identify effective “negotiation strategies” that will empower consumers to *constructively* resolve norm conflicts in such a way that it becomes feasible for them to adhere to food safety-relevant norms without disturbing their social relationships.

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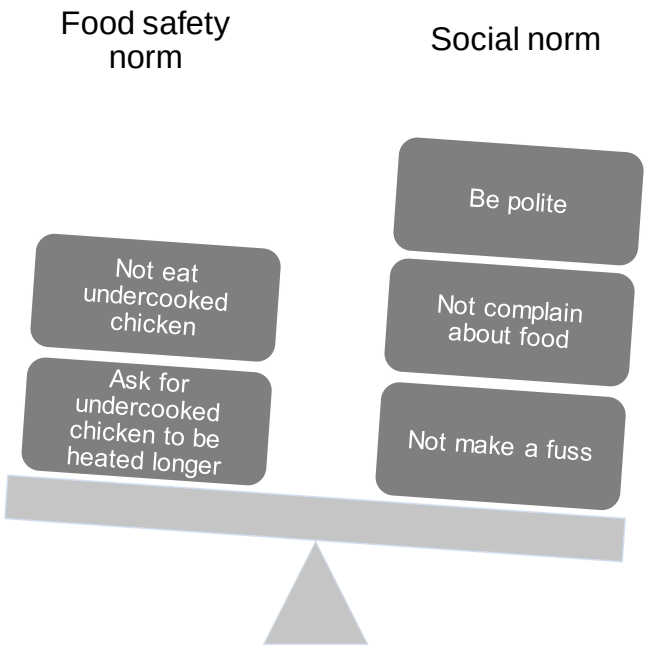

Figure 1. Norm conflict and food safety behaviour