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# The Importance of Moral Intensity: An Application to Ethical Food Issues

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## Abstract

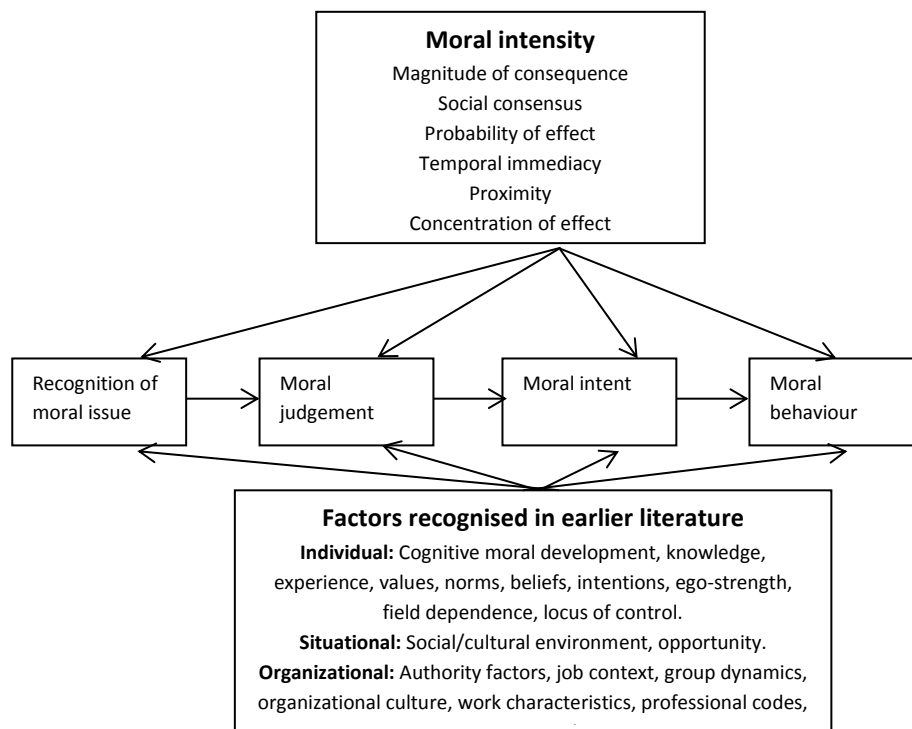
In this study we analyse moral decision making in a food related setting. Jones (1991) argues that ethical issues vary in their perceived moral intensity, where moral intensity is “the extent of issue-related moral imperative in a situation”. According to Jones, moral intensity is an issue-related construct that is made up of six main components: magnitude of consequences, social consensus, probability of effect, temporal immediacy, proximity and concentration of effect. The moral intensity of an issue affects all stages of moral decision making. We measure the relative importance of different dimensions of moral intensity in a food related setting. We carry out a survey to investigate the impact of varying components of moral intensity in two settings where a food producer sells potentially harmful products. The aim is to measure how changes in these dimensions impact on individuals’ assessment of these dimensions as well as two stages in the ethical decision process. We find a complexity of issues relating to how people consider morality in food production and consumption and the importance of the specific context to moral decision making.

## 1. Introduction and Background

The purpose of this study is to explore the impact of characteristics of a food-related issue on the ethical decision making process. The ethics of food consumption and production is an important societal issue locally, nationally and globally. Issues such as animal welfare, the environmental impact of food production, fair trade, food safety regulations and waste reduction all have a moral component. In this paper, we follow Jones, (1991) in his definition of a moral<sup>1</sup> issue as an action or decision that has “consequences for others and must involve choice, or volition, on the part of the actor or decision maker” (p. 367). Our decisions on what to consume have more direct consequences for those producing our food and processing our food but also more indirect consequences through the environmental impacts of our choices. Similarly, actions and decisions of those involved in food production have consequences for consumers and the wider environment.

The academic literature on ethical decision making has a long history and there is an extensive body of both theoretical and empirical papers on the ethical decision making process. Up until Jones’ 1991 paper, however, the characteristics of the moral issue itself were generally ignored in those models. Jones (1991) argues that ethical issues vary in their characteristics and that the variation in the characteristics of moral issues impacts the ethical decision making process in addition to individual characteristics, cultural influences and the wider context of the decision problem. Jones’ introduced the term moral intensity to describe the collective characteristics of the moral issue. According to Jones, moral intensity is made up of six main components: magnitude of consequences, social consensus, probability of effect, temporal immediacy, proximity and concentration of effect. Each of these components is hypothesised to impact on the four main stages of the ethical decision process a) recognising the moral issue, b) making a moral judgement, c) establishing moral intent and d) engaging in moral behaviour.

**Figure 1** Moral intensity in the ethical decision process – based on Jones (1991) and Frey (2000)



<sup>1</sup> We use moral and ethical interchangeably.

Since the publication of Jones' paper, numerous empirical papers have studied the impact of the different dimensions of moral intensity on the ethical decision making process. The most common approach taken is a vignette approach, a common approach in ethics research. Tsalikis *et al.* (2008) summarise the literature up until the mid-2000s.

Across these 16 studies, social consensus and magnitude of consequences were the two factors that were generally found to have a statistically significant effect on the ethical decision process. Social consensus was statistically significant in 81 percent of the studies where it was included and magnitude of consequences in 73 percent of the studies where it was included. Concentration of effect was only found to have a statistically significant effect on the ethical decision process in 33 percent of the studies where it was included.

Most studies investigated by Tsalikis *et al.* (2008) only studied the impact of a subset of the proposed six dimensions of moral intensity. In addition to their own study, only four out of the 16 papers they review include all six dimensions of moral intensity (Morris and McDonald, 1995; Singhapakdi *et al.*, 1996; Frey, 2000; Kelley and Elm, 2003). More recently, Valentine and Hollingworth (2012) also included all six dimensions in their analysis.

The studies vary in their approach to the measurement of the moral intensity dimensions. Most papers do not manipulate the dimensions. The variation in the moral intensity dimensions is solely due to the perception of the respondents. The perceived level of moral intensity is used to explain the ethical decision making process.

If we focus on the papers that include all six dimensions, the only two studies that vary the level of the moral intensity dimensions and also collect information on participants' perceptions of the level of the dimensions are Frey (2000) and Morris and McDonald (1995). Both studies find that, although correlated, the perceived moral intensity dimensions differ from the actual manipulation of the moral intensity dimensions. Valentine and Hollingworth (2012) and Singhapakdi *et al.* (1996) do not manipulate the dimensions of moral intensity. Their explanatory variable is the perception of the moral intensity dimensions of the same scenario(s). Tsalikis *et al.* (2008) manipulate the moral intensity dimensions in their scenarios but do not measure the perception of the moral intensity dimensions. Kelley and Elm (2003) take an entirely different approach. They use a phenomenological research approach to study the effect of context on moral intensity dimensions. Qualitative data is collected through twenty-two structured interviews with the aim to understand the ethical issues their respondents experienced and whether the specific context affected the perception of the moral intensity of the ethical issues they encountered.

There are very few studies that apply Jones' model of issue-contingent ethical decision making to food related issues. One exception is Bennett and Blaney (2002). They investigate the impact of one of the dimensions, namely social consensus, on willingness-to-pay within a contingent valuation framework. Another is Bennett *et al.* (2002) where two animal welfare policy scenarios are studied with different levels of the moral intensity dimensions. The levels of moral intensity dimensions are varied across the two animal welfare policy scenarios but not within the scenarios. We are the first to systematically apply all six dimensions of moral intensity within food related settings. Furthermore, even though there is an extensive empirical literature on moral intensity, with the

exception of Frey (2000) and Morris and McDonald (1995), there is a lack of systematic study of the manipulation and perception of all six dimensions of moral intensity.

In this paper, we develop a framework to systematically study the effect of the manipulation of the six dimensions of moral intensity, their perception by respondents and the impact they have on the recognition of the moral issue and on moral intent.

## 2. Hypotheses

We hypothesise that our manipulations of the six moral intensity dimensions are positively related to, but different from, the perception of six moral intensity dimensions by the respondents.

Hypothesis 1:

The manipulations of the moral intensity dimensions are positively correlated to the perception of these dimensions by the respondents.

Our second and third hypotheses are that perceived dimensions of moral intensity are positively related to the recognition of the moral issue and to moral intent respectively.

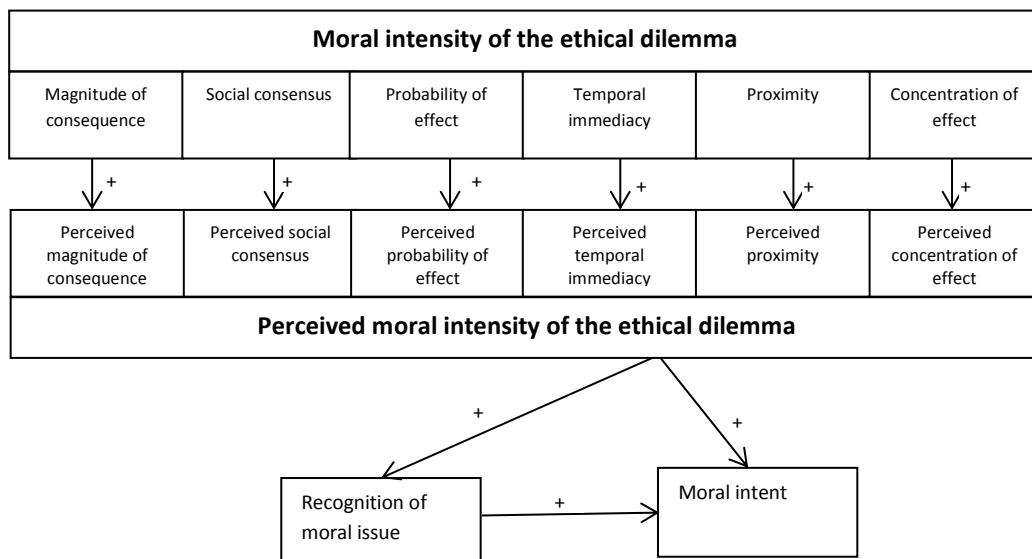
Hypothesis 2:

Each of the six moral intensity dimensions is positively related to the recognition of the moral issue.

Hypothesis 3:

Each of the six moral intensity dimensions is positively related to moral intent.

**Figure 2** Hypothesised relationships



We expect a more complex set of relationships to be present but do not have any specific hypotheses about these. Our survey will allow us to start exploring these more complex relationships. Each of the dimensions may influence the perception regarding other dimensions (i.e.

an interaction between perceived moral dimensions). In addition, even though the manipulated levels of moral intensity dimensions are purely situational and not dependent on individual-level characteristics, the perception of these dimensions is likely to be influenced by a number of individual-level variables (e.g. age, gender, family situation, attitudes and beliefs of the person). We collect a small number of demographic variables. These will be included in our analysis.

### 3. Methods

We use two vignettes to explore the hypothesised relationship within a food safety setting. The survey is administered as an online survey. Food safety was chosen in this initial phase because it is a topic that most people are familiar with either through personal experience or through high-profile cases in the press such as the 2016 E.coli outbreak in England (<https://www.gov.uk/government/news/update-as-e-coli-o157-investigation-continues>). We use two similar vignettes to test the sensitivity of the responses to small changes in the setting. Each respondent is presented with 2 versions of each vignette. This allows both between and within respondent analysis.

#### 3.1 Vignettes and manipulated levels of the moral intensity dimensions

Two similar vignettes on food safety are used. Within each vignette the levels of the moral intensity are manipulated. The vignette is presented first with the general outline of the situation.

##### Vignette 1 – chicken meals

David Jones is an employee for a manufacturer of popular chicken meals. He operates the cooling system. During one of his shifts, he got distracted and the temperature in the system increased to a level so that harmful bacteria could have survived in some of the meals. If the bacteria survived they will cause some consumers to have severe stomach upset. David Jones knows that it is possible that due to his inattention some consumers might suffer severe stomach upset if the meals are sold. David Jones does not tell his managers about the problem and the meals are sold.

##### Vignette 2 – milk powder

Anna Robinson works for a dairy company producing milk powder. During one of her shifts, she was tired and forgot to follow steps that are crucial for making sure that the milk powder is free of bacteria. She cannot be sure that all bacteria were killed. The bacteria could survive in the dried product and cause vomiting in some consumers when the milk powder is consumed. The milk powder will be made available to charities. Anna Robinson decides not to tell her manager about the problem and the milk powder is distributed to charities.

The information on the two different versions of the vignette is then presented in the following format. The two extreme levels tested in the pilot are also indicated.

##### Vignette 1 – chicken meals

The probability that any illness is caused is **10% (90%)**

The number of people getting severe stomach upset if any illness is caused is **10 (1,000)**

The length of period of being ill is **1 hour (4 days)**

Meals are sold in **China (UK)**

The time period between consumption of the meal and the start of illness is **1 month (a few hours)**

What most people would do according to a survey is to **not tell the manager (tell the manager)**

### Vignette 2 – milk powder

The probability that the bacteria survived and any illness will be caused is **10% (90%)**

The number of people experiencing vomiting if the bacteria survived is **10 (1,000)**

The length of period of illness is **1 hour (4 days)**

The consumers of the milk powder are **recipients of overseas aid in Africa (people in your area)**

The milk powder is likely to be used after being stored for **a couple of weeks (five years)**

What her friends recommend to do is to **tell her boss (not to tell her boss)**

We choose 12 versions with different combinations of the two levels of the six manipulated dimensions of moral intensity. Among those 12 versions is the version where all dimensions are low (10% likelihood, 10 people affected etc) and the version where all dimensions are high (90% likelihood, 1,000 people affected etc). We randomly present 2 out of 12 versions to each respondent for each of the vignettes.

### 3.2 Measurement of dependent variables

We use the questions developed by Singhapakdi *et al.* (1996) for both the recognition of the moral issue and for moral intent. Respondents are asked to rate their agreement or disagreement with the following two statements using a seven-point Likert scale:

The situation above involves an ethical problem.

I would act in the same manner as David Jones/Anna Robinson did in the above scenario.

### 3.3 Measurement of perceived moral intensity dimensions

As for the independent variables, we use the questions developed by Singhapakdi *et al.* (1996) with slight variations to adapt them to our vignettes. Respondents are asked to rate their agreement or disagreement on a seven-point Likert scale (from strongly agree to strongly disagree)..

The overall harm done as a result of Anna Robinson's action would be small.

Most people would agree that Anna Robinson's action is wrong.

There is a small likelihood that Anna Robinson's action will cause any harm.

Anna Robinson's action will not cause any harm in the near future.

I feel for those affected by consuming the milk powder in this situation.

Anna Robinson's action will harm few people (if any).

The order of these questions is randomised to avoid order effects.

At the end of the survey, we collect information on age, gender, household composition and marital status.

#### **4. Data collection and analysis**

An online pilot survey with 100 respondents will be run in April 2018 using the Qualtrics panel. The data will be analysed using a regression model. Results and findings of the study will be presented.



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