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Are some deaths worse than others? The effect of 'labelling' on people's perceptions

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ABSTRACT

This paper sets out to explore the extent to which perceptions regarding the 'badness' of different types of deaths differ according to how those deaths are 'labelled' in the elicitation procedure. In particular, we were interested in whether responses to 'contextual' questions – where the specific context in which the deaths occur is known – differ from 'generic' questions – where the context is unknown. Further, we set out to test whether sensitivity to the numbers of deaths differed across the 'generic' and 'contextual' versions of the questions. We uncovered evidence to suggest that both the perceived 'badness' of different types of deaths and sensitivity to the numbers of deaths may differ according to whether 'generic' or 'contextual' descriptions are used.

Qualitative data suggests two reasons why responses to 'generic' and 'contextual' questions differed: firstly, some influential variable(s) were omitted from the 'generic' descriptions and secondly, certain variables were interpreted somewhat differently once the context had been identified. The implications of our findings for 'generic' questions, such as those commonly used in health and safety and environmental studies are discussed.

1. Background

People regard some deaths as worse than others (Sunstein, 1997). For example, research has shown people are more concerned about cancer deaths than deaths from heart disease, motor vehicle accidents, household fires, or airplane accidents (Jones-Lee, Hammerton, & Philips, 1985; Savage, 1993). Likewise deaths caused by industrial air pollution are regarded as more deserving of resources than deaths caused by smoking or automobile accidents (Subramanian & Cropper, 2000). Hence, it would appear that just as the acceptability of risks can be characterized by 'qualitative' factors, (Slovic, 1992) public concern about deaths might be aggravated by certain underlying features of those deaths.

As noted by Sunstein (1997) the risk perception literature does suggest reasons why people might regard some deaths as worse than others. More specifically, as well as the notion of livable life-years (i.e., it is worse if a child is killed than an older adult), he highlights the importance of 'dread' (i.e., death preceded by unusual pain and suffering), blameworthiness (i.e., responsibility for death lies with a third party), distributional equity (i.e., victims are members of socially disadvantaged groups), and high externalities (i.e., catastrophic events involving widespread non-pecuniary losses). For example, cancer

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deaths might be more 'dreaded' than deaths from heart disease because they are preceded by a longer period of pain and suffering, whereas people who die from industrial air pollution are less to blame than smokers are for their deaths.

The UK Department for Transport (DfT), currently use a willingness to pay (WTP)-based value for the value of preventing a fatality (VPF) on the roads of approximately £1.6 millions, but how transferable is this to other contexts which have different underlying attributes that are weighted more or less heavily? The Treasury Green book acknowledges that "there is evidence that individuals are not indifferent to the cause and circumstances of injury or fatality". It goes onto highlight that the Health and Safety Executive (HSE), in assessing the benefits of avoiding asbestos-related deaths – currently doubles the roads VPF figure to allow for individual aversion to dying from cancer as well as the additional associated personal and medical costs. They go onto say, however, that there is no direct evidence to support the magnitude of the adjustment factor used.

One way in which such policy decisions may be better informed is to quantify the importance of each of the underlying attributes of types of deaths, such as 'dread' and 'blameworthiness'. This type of quantification would then allow more general conclusions to be drawn about the 'bad deaths' premium that people place on different types of deaths according to their underlying features. It is unclear, however, whether people's concerns for different types of deaths *can* be adequately captured by a manageable set of 'generic' attributes used to describe the deaths.

There is much evidence from elsewhere to suggest 'labelling' the cause of death might affect responses. In the health state valuation field, Sackett and Torrance (1978) found that adding a label to a health state description significantly affected the utility values obtained: 'tuberculosis' was given a higher value than 'unnamed contagious disease', whereas 'mastectomy for breast cancer' was given a lower value than 'mastectomy for injury'. Gerard, Dobson, and Hall (1993) also found differences when the word 'cancer' was used and when descriptions were written in the third party. Likewise, Rabin, Rosser, and Butler (1993) and Robinson and Bryan (2001) report that adding a label significantly affected valuations of both physical and mental conditions, but found differences in the direction of these effects. Smith (2008) found that respondents were willing to pay more to avoid health states labelled as 'stroke' and 'bowel cancer' than their identical 'generic' counterparts.

The impact of assigning psychiatric 'labels' to individuals with mental health problems has been explored previously (Link, Cullen, Frank, & Wozniak, 1989; Loman & Larkin, 1976) and found to be important. For example, the use of a label such as 'schizophrenia' has been found to have strong effects on people's perceptions and judgments about individuals with this mental illness (Link et al., 1989). Fryer and Cohen (1988) found that hospital staff rated patients labelled "psychiatric" as less likeable and as having more unfavourable traits than patients labelled "medical".

In the current context, it is plausible that respondents' attention to attributes of deaths might be directed by their affective reactions to the descriptions used. Just as research on the identifiable victim effect has shown (Jenni & Loewenstein, 1997; Kogut & Ritov, 2005; Small & Loewenstein, 2003), identifying the deaths by names may produce more of an emotional reaction than the stripped down generic descriptions. For, example Kogut and Ritov (2005) have found that people's ratings of distress and willingness to contribute towards saving a single child's life was higher when identifying information about the child was provided (i.e., their age, name and picture). By identifying the victim in this way the case becomes more vivid and concrete and evokes a stronger emotional response. However, it is worth noting that this identification effect may be restricted to single victims. When asked to rate their distress and willingness to contribute towards saving a group of eight children the same detail of identifying information about each of the eight children did not affect respondents' willingness to contribute (Kogut & Ritov, 2005).

Whilst there are clearly a large number of potential factors that may influence respondents' assessments, the research published in this paper explored this issue for deaths that were described using four of Sunstein's attributes – the age of the victim (livable life-years), the severity and duration of the victim's pain and suffering in the period leading up to their death (dread), and who is most to blame for the victim's death (blameworthiness). More specifically, the aim of the study was to test how well people's concerns towards these attribute-only or 'generic' descriptions of deaths matched with their concerns towards descriptions where the specific cause of death is also identified (for example, as a driver in a car accident) – 'contextual' descriptions.

Whilst evidence that responses to generic and contextual descriptions are different would tend to rule out the existence of a generic model of 'bad deaths' which would be extremely useful for policy purposes, it does not, in itself, tell us that one description is somehow 'superior' to the other. Before reaching such a conclusion, we need to establish which set of responses is the most valid. One criterion against which to assess the validity of responses it to test the sensitivity to a factor that should have an impact on people's concern (Loomes, 2006). We might expect that, all other things being equal, people should regard more deaths as worse than less.

A prominent issue in the willingness to pay (WTP) literature, however, has been the inability of that method to account for insensitivity to the magnitude of the risk reduction. That is, respondents tend to view safety improvements as a 'good thing' and may therefore be liable to state much the same WTP for different sizes of risk reduction, whether for fatal or non-fatal injuries (Beattie et al., 1998; Covey, Jones-Lee, Loomes, & Robinson, 1998; Dubourg, Jones-Lee, & Loomes, 1997; Hammitt & Graham, 1999; Jones-Lee, Loomes, & Philips, 1995; Jones-Lee et al., 1985). It is worth noting that a number of studies have uncovered marked insensitivity even when the risk reduction is couched in terms of the numbers dying (see for example, Beattie et al., 1998 and Desaigues & Rabl, 1995). By way of illustration, roughly half the sample in the Beattie et al. study (1998) stated exactly the same WTP amount for an improvement that prevented 15 deaths on the roads each year as one that prevented five deaths, even after this apparent anomaly had been pointed out to them and they had been given the opportunity to revise their responses.