Risk perception as mediator in perceptions of neighbourhood disorder and safety about victimisation

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ABSTRACT

This paper tested a new conceptual model suggesting that risk perception is a significant mediator between perceived neighbourhood disorder and a sense of (un)safety. Three components of risk perception were evaluated: perceived vulnerability, controllability and probability of occurrence of specific offences. Using photo-simulation, three places with different levels of physical and social disorder were created and 120 British students rated the level of disorder, risk and safety of each place. Results showed that risk perception partially mediated the relationship between perceived disorder and safety. Perceived vulnerability was the strongest predictor and mediator in all three places but most significantly in the degraded place. Findings indicated that the more disordered a place is perceived the more a person relies on the perception of risk to estimate how safe she or he might be. Investigating the interpretive processes that occur when people estimate risk and safety, is crucial.

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1. Introduction

Vandalised neighbourhoods, covered with graffiti and litter, have been said to increase antisocial behaviour, lack social control and are precipitant to crime. This in turn, evokes anxiety, fear and unsafe feelings amongst residents and outsiders, even when actual crime is low (Brown, Perkins, & Brown, 2004; Brunton-Smith & Sturgis, 2011; Skogan, 1990; Taylor, 1987; Wilson & Kelling, 1982). This proposition has been criticised for its conceptual and methodological vagueness, physical determinism, and omission of a psychosocial dimension estimating neighbourhood disorder and safety (Chadee, Austen, & Ditton, 2007; Farrall, Grey, & Jackson, 2007; Hale, 1996; Wilcox-Rountree & Land, 1996).

An alternative position argues that both perceived disorder and fear of crime are co-determined by unobserved causes and social meanings associated with environmental cues. Factors such as collective efficacy and community cohesion (Pitner, Yu, & Brown, 2012; Sampson & Raudenbush, 1999), social structure, neighbourhood composition and prior beliefs, informed by stereotypes and stigma (Body-Gendrot, 2009; Sampson & Raudenbush, 2004, 2005) are thought to shape perceptions of disorder and other reactions to crime such as fear and unsafe feelings. Some researchers have found that racial, ethnic and class composition (Sampson, 2009), and poverty (Franzini, O'Brien-Caughy, Murray, & O'Campo, 2008) are more powerful predictors than observed neighbourhood disorder and argue that minority-migrant groups living in isolation and poverty, have been historically stigmatised and associated with neighbourhood disorder and crime.

There is also research examining the reciprocal relationship whereby perceived disorder influences fear of crime and the latter heightens public's sensitivity to disordered places (Jackson, Gray, & Brunton-Smith, 2010). Such causal reciprocity, we suggest, however socially constructed (cf. Jackson and colleagues) needs to be interpreted on the basis of an individual's past experience (direct or indirect) and cognitive and emotional processes. Whilst there have been attempts to integrate psychological and sociological accounts to explain fear of crime (Jackson, 2008; Jackson, Allum, & Gaskell, 2006) little by way of empirical evidence is available to support this conceptual stance; an omission this paper seeks to redress.

Here, we focus on and extend the fear-risk paradox concept which suggests that fear seems to be greatest amongst those who perceive themselves to be most vulnerable, when in fact they are at least objective risk of victimisation such as women, the elderly and racial minorities (Wyant, 2008). Researchers using this approach pointed out that risk perception, sensitivity to risk and vulnerability are better predictors of fear of crime. Broadly speaking, there are two research trends attempting to account for the fear-risk

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paradox: one argues that a person's demographic and physical characteristics and their perception of the offence, the risk and its seriousness, determine their vulnerability and sensitivity to crime (Killias, 1990; Semmens, 2004; Warr, 1984, 1987).

The second proposes that the fear-risk paradox is an emotional reaction that is elicited by interactive dynamics between personal attributes, interpretive processes and physical-social and environmental cues that relate to symbols of crime, the potency of the danger and some aspects of personal harm or loss (Ferraro, 1995; Garofalo, 1981; LaGrange, Ferraro, & Supancic, 1992). Garofalo, for example, focused on psychological processes and stated that a person's demographic attributes, beliefs, attitudes, experience, and overall lifestyle, influence the image of crime held by a person, which in turn affects her/his assessment of risk. Ferraro, on the other hand, argued that the recognition of a potential danger, which he names perceived risk, is necessary to elicit fear. For him, people react to crime in terms of both the situational context and the personal meanings attached to each type of crime, which in turn are derived from the social interaction with others (including knowledge from experts and culture) and the physical environment. Therefore, people's perceptions of risk and behaviour need to be investigated within the context where they occur.

Even though interactionist models represent an advance on the deterministic approaches such as the *broken windows theory* (Wilson, 1975; Wilson & Kelling, 1982) and the *incivilities thesis* (Hunter, 1978; Skogan, 1990), the fear-risk paradox is, itself, too speculative and has had insufficient empirical support; hence, its explanatory power remains limited. Critiques stress that the fear-risk paradox has not progressed due to the lack of a more psychological framework that helps to define and explain the perceptual and interpretive processes that occur when people evaluate places and estimate risks (Chadee et al., 2007; Jackson, 2009). More importantly, they do not consider the importance of the interaction between psychological, social and environmental components that influence the way people react to crime. As noted by Ferraro (1995), such interaction may adjust pre-existent conceptions and reactions towards crime, risk and fear i.e. create a dynamic and shifting risk assessment. Thus the addition of cognitive, affective and socio-cultural processes that occur when people evaluate places is still required.

Building upon the conceptual premises and empirical contributions from both 'fear of crime' and risk analysis approaches, this paper introduces a new conceptual model to explain the relationship between environmental variables (physical and social disorder), risk perception and sense of safety in residential areas. Whilst neighbourhood perceptions of physical and social disorder are necessary conditions but in and of themselves are insufficient to explain feelings of fearfulness and insecurity. Rather, the perception of risks is associated with people in places and it is this, we say, influences assessments of safety and fear of possible victimisation from crime. This paper is organised in the following manner. First, we present the conceptual model proposed and its main components, explaining how each one of them contributes to perceptions of safety. We then describe the method used to test the model and critically assess the results obtained. We conclude by discussing the implications of our study in light of current and future research.

1.1. The model

Our model hypothesises that if a place has been appraised as having a certain level of disorder then a second appraisal of the place is undertaken by the perceiver in terms of the risk it may pose to them. Therefore, the relationship between perceived disorder and sense of safety is thought to be mediated by an assessment of risk. For a fuller explanation of the model, the following sections will describe each component and how they are conceptualised.

The key components of the model are the individual and the contextual factors that influence the way a person perceives places and estimates risk and safety such as socio-demographic characteristics of the perceiver, personal dispositions and traits, affects and experience with similar places, motives, the situation itself, and a person's socio-cultural background. These factors are constantly interacting within and between the other components of the model.

Researchers investigating neighbourhood disorder and incivilities have argued that people evaluate places in terms of, amongst other things, physical and social incivilities and that these have an effect on crime, fear and perceived safety (Cozens, Hillier, & Prescott, 2001; Doran & Lees, 2005; Perkins & Taylor, 1996). According to this research, insufficient lighting, novelty, and high density, tend to make people feel more unsafe (Peinter, 1996); green foliage density and maintenance also have been found to have an effect on fear and perceived safety (Kuo, Bacaioca, & Sullivan, 1998; Kuo & Sullivan, 2001). In a study using photo-simulation, Pitner and Astor (2008) examined the effect that physical incivilities had in children's perceptions and attributions of harm in residential areas. They concluded that, as expected, physical disorder influenced children's perceptions of danger and safety. A major concern is that the authors did not investigate further the effect that, for instance, experience (direct or indirect), inferred social disorder and estimations of risk had in children's reasoning. In their study, participants referred to the likely harm that dangerous people living there may inflict on them, especially in the most decayed areas. For us, both instances are a sign of children's inferences and estimations of risk, personal vulnerability and coping responses to a (inferred) likely danger rather than a direct consequence of the physical characteristics of the neighbourhoods. Also, personal values and morals seem to have influenced children's decision making when presented with provocation scenarios, as the majority of children condemned retribution and violence irrespective of the physical characteristics of the places (p. 333). We argue that it is not only the presence of incivilities but also other psychosocial and contextual attributes that are significant to perceptions of safety. Investigating the interpretive processes that occur when children estimate safety and risk is crucial.

Other scholars concur with the idea that overall appearance of places, or likeability, evokes favourable or unfavourable reactions (e.g. nice, good, awful) and point out that if one's feelings towards an event (or place) are favourable then the risks will be judged as low and the benefits high. Hence, the more liked a place, the less disordered, risky, and unsafe it will be perceived (Alkahami & Slovic, 1994; Nasar, 1998). Others have found that community structure, place attachment and social trust (Brown & Perkins, 2001; Friederichs & Blasius, 2003; Skogan, 1990; Taylor, 1996; Walkalate, 1998), as well as neighbourhood stability, resident appropriation, social control and a strong sense of community (Brunson, Kuo, & Sullivan, 2001; Garcia, Taylor, & Brian, 2007; Jackson, 2004; Markowitz, Bellair, Liska, & Liu, 2001; Ross, Reynolds, & Geis, 2000; Schweitzer, Woo-Kim, & Mackin, 1999) elicit feelings of well-being and safety. The prospect or legibility of a place seems to affect perceptions of safety too (Fisher & Nassar, 1992). Familiarity and anticipated social support can also make people feel safer (Merry, 1981). Thus, instead of only focussing on physical aspects of disorder and antisocial behaviour, research investigating fear and other reactions to crime should also incorporate individual and community factors associated with place assessment such as likeability, prospect, familiarity, social control and sense of community.