Noise Annoyance Undermines Neighbourhood Group Processes: Applying the Social Cure to understanding the effects of urban noise on Residents

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Background

- The Social Cure perspective posits that identification with groups are beneficial for health and wellbeing (Jetten, Haslam, Haslam, & Branscombe, 2009). One way in which this occurs is due to the fact that social groups provide us with the resources and support to cope with potential stressors (Haslam, Jetten, Postmes, & Haslam 2009).
- Identification with the local neighbourhood community can help people cope with shared environmental stressors such as socioeconomic disadvantage (Fong, Cruywys, Haslam, & Haslam, 2019).
- One community stressor which is often overlooked is noise. Exposure to noise can have potentially detrimental effects on psychological and physical wellbeing (Gaines & Hagler, 2007). Previous research within the Social Cure tradition has indicated that social identity can influence the experience of noise and help group members better tolerate noise (Shankar, Stevenson, Tewari, Hopkins & Reicher, 2013).

The aim of the current work is to determine the nature of the underlying processes. The predictions are that social psychological processes will attenuate the negative implications that noise annoyance has on wellbeing.

Method

For the first wave, 253 UK-residing participants were recruited via Prolific Academic [162 females, 82 males, 5 other; M_age = 35.45 years, SD = 12.50, range = 18-71]. Three months later, the participants were invited to take part in the second wave of the study (N = 217, 144 females, 69 males, 4 other; M_age = 35.66 years, SD = 12.73, range = 18-71).

- Community support was measured at T1 with Haslam, O’Brien, Jetten, Vormedal, and Penna’s (2005) four-item scale. Higher values (1-7) indicated stronger perceived support.
- Wellbeing was measured at T2 using the five-item Well-being index (WHO, 1998). Higher values (1-5) indicated greater wellbeing.
- Noise annoyance was measured at T1 using Lim, Kim, Hong, & Lee’s (2008) six-item scale. Higher values (1-5) indicate higher values of noise annoyance.

The present research aimed to explore the relationship between noise annoyance, wellbeing, and social cure variables. The results indicate that those people who have the lowest levels of identification and support are the most vulnerable to the effects of noise on health. This is in line with the prediction that social psychological variables would protect against the potentially detrimental effects of noise exposure on health. Further research is still needed in order to establish a causal relationship between the relationship of social psychological variables, and noise annoyance with wellbeing.

Supporting previous research, these findings highlight the importance of fostering community identification in order to give people the resources to overcome stressors that they face in everyday life.

Pilot Work

The data used was gathered under the Survey of Noise Attitudes: Aircraft (2014), due to which the variables are not the same ones as commonly used under the Social Cure tradition.

Participants: 1982 participants took part in the survey, 954 were male and 1028 were female. Ages ranged from 18 – over 75, with 6 participant’s ages not reported.

Moderated mediation analysis was conducted as shown in Figure 1. Neighbourhood positivity is conceptualised as a proxy for community identification.

Results indicated that the index of moderated mediation was significant (Index = .001, Boot(SE = .001, BootLLCI = .0003, BootULCI = .003). Further analysis showed, that a decline in neighbourhood liveability only mediated the relationship between noise annoyance and wellbeing, at low levels of neighbourhood positivity (Effect at low levels of positivity= -.002, Boot(SE = .001, BootLLCI = -.01, BootULCI = -.0001).

Discussion

Figure 1. Significant moderated mediation model. Age, gender, and actual noise exposure were controlled for.

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For References please scan the QR-code or go to:
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