The lure of antagonistic social strategy in unstable socioecological environment: Residential mobility facilitates individuals' antisocial behavior

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ABSTRACT

Individuals are believed to calibrate their antisocial level in response to the socioecological environment where they live. However, knowledge of the relationship between specific socioecological factors and antisocial behavior remains scant. This research focused on humans' residential mobility and explored its influence on antisocial behavior. Three studies were designed to test the hypothesis that individuals with high (vs. low) residential mobility tend to engage in antisocial behavior more frequently. The results showed that both self-reported residential mobility (Study 1) and manipulated residential mobility (Studies 2 and 3) positively predicted individuals' antisocial level. Furthermore, we found that social monitoring played a role in moderating the linkage between residential mobility and antisocial behavior (Study 3); individuals with high residential mobility decreased their antisocial behavior when they were observed by artificial eyes, while individuals with low residential mobility did the opposite. Taken together, this research suggests that, generally speaking, residential mobility is one socioecological factor that increases antisocial behavior, and that social monitoring can have diverse effects on such behavior.

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1. Introduction

Antisocial behavior which is usually an embodiment of antagonistic social strategy has substantial adverse impacts on the development of society, such as fostering dishonesty in social interaction and undermining justice (Hafer & Rubel, 2015; Wiltermuth, 2011). Despite the malignance, antisocial behavior as well as antagonistic social strategy has not disappeared during human evolution and exists extensively throughout society. Some psychologists believe that individuals have been shaped to adopt mutualistic or antagonistic social strategies in response to differing socioecological conditions by natural selection (Figueredo et al., 2006; Jonason, Icho, & Ireland, 2016; Trivers, 1971). Antisocial behavior may bring about extra benefits for transgressors in some environments, and thus antagonistic social strategy and antisocial behavior would be preferred in these circumstances (von Hippel & Trivers, 2011). However, our knowledge about the association between antisocial behavior and specific socioecological factors remains relative poor, although some research to some extent demonstrates that family environment plays a role in the development of antisocial behavior (e.g., Jonason et al., 2016; Jonason & Webster, 2012). Thus, this research

aims to clarify how an important socioecological factor — residential mobility – influences individuals' antisocial behavior.

Residential mobility can be generally defined as the degree to which people in a given area change residence in a given period of time (Oishi, 2014). Practically, we focus on this socioecological factor because residential mobility has increased sharply in the past century (Oishi et al., 2007). How people calibrate their behavior patterns during these moves merits attention, and thus clarifying the relationship between residential mobility and antisocial behavior has value. Theoretically, we are interested in the effect of residential mobility on various antisocial behaviors because residential mobility determines an individual's interpersonal environment to a great extent (Oishi, 2014), thereby possibly affecting an individual's strategy selections during social interactions. Generally, individuals living in areas in which there is a greater turnover rate of new social partners have a broader social network with weaker friendship ties relative to those living in areas with less turnover (Oishi & Kesebir, 2012). Due to the different structures of interpersonal association, high (vs. low) residential mobility could lead to different behavior patterns and behavioral outcomes. For example, researchers have found that individuals with low residential mobility prefer to be loyal helpers, whereas those with high residential mobility tend to be egalitarians (Lun, Oishi, & Tenney, 2012). In addition, evidence suggests that high residential mobility is associated with high rates of crime, delinquency, and neighborhood violence (McGee, Wickes, Corcoran, Bor, & Najman, 2011; Sampson, Raudenbush, &

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Earls, 1997). Also, frequent movers show fewer pro-community behaviors than those who hardly move (Oishi et al., 2007). These findings suggest that residential mobility shapes individuals' preference between mutualistic and antagonistic social strategies and is likely to play a role in development of antisocial behavior.

Notably, we hypothesized that high residential mobility would increase antisocial behavior for two main reasons. First, the loose structure of interpersonal association related to high residential mobility would undermine the background conditions necessary to obtain benefits via direct and indirect reciprocity. Consequently, the lure of self-interest might then discourage people from contributing effort toward the provision of collectively beneficial goods and instead encourage them to adopt antagonistic social strategy and engage in antisocial behavior (van Lange, Joireman, Parks, & van Dijk, 2013). Specifically, direct reciprocity operates if the possibility of repeated encounters and interactions is sufficiently high because people's cost is more likely to be paid off by the recipient in the future when repetition increases (Axelrod, 1984; Rand & Nowak, 2013; Sigmund, 2010). However, for people with high residential mobility, frequent moves break their ties with neighborhood, school, and company (Cavanagh & Huston, 2006), and thus the possibility of repeated interactions sharply decreases (Cavanagh & Huston, 2006; Oishi & Kesebir, 2012). As a result, direct reciprocity is less likely to be at work as repeated interactions decline. As for indirect reciprocity, it arises if the ability to distributing reputational information is sufficiently high because people's goodness is more likely to be paid off by third parties in that case (Axelrod, 1984; Rand & Nowak, 2013; Sigmund, 2010). But in an environment with high residential mobility, reputational information cannot be distributed effectively between recipients and third parties due to the loose structure of interpersonal association. Thus, areas of high residential mobility might not be able to take advantage of the benefits of indirect reciprocity. By contrast, antagonistic social strategy and antisocial behavior would become ideal ways to avoid losses and maximize self-interest when cooperation rarely happens. Therefore, high residential mobility may potentially increase the appeal of more antisocial behaviors.

A second reason why high residential mobility would increase antisocial behavior is that the costs and punishments associated with antisocial behaviors, such as cheating, are relatively low in an environment with high residential mobility. As rational crime theory holds, people only transgress if the benefits of doing so outweigh the costs (Allingham & Sandmo, 1972; Michaels & Miethe, 1989), and the potential costs for individuals with high residential mobility might be perceived as being lower than average. Since people living in areas with high residential mobility have a quite loose network, it is possible that frequent movers' transgression is less observed by people around (Anderson, DePaulo, & Ansfield, 2002; von Hippel & Trivers, 2011), and that punishment mechanism in communities is slow and ineffective. Indeed, researchers have found that the rate of third-party punishment is less prevalent in cultures with high mobility (Graham, Meindl, Beall, Johnson, & Zhang, 2016; Roos, Gelfand, Nau, & Carr, 2014). In sum, high residential mobility translates into fewer potential costs associated with punishment and might be a second reason why high mobility corresponds with greater antisocial behavior.

Based on the above reasons, we hypothesized that high residential mobility is a socioecological factor that could increase antisocial behaviors, especially risky and dishonest behavior from which individuals can gain self-interest. However, we do consider this effect to have boundaries. Threat perception could further influence the perception of potential benefits versus costs of engaging in antisocial behaviors. Specifically, for individuals with high residential mobility, when they believe their behavior is covert and difficult to perceive, they might be more willing to adopt antisocial strategies; however, when they feel that their behavior is being monitored, the pressure of potential punishment possibly suppresses the use of antisocial strategies. Previous research revealed that social monitoring, such as being observed by third parties and

being watched by fake eyes could decrease selfishness (Burnham & Hare, 2007; Haley & Fessler, 2005; Milinski & Rockenbach, 2007). In the current research, we also expected that social monitoring would reduce antisocial behavior for both frequent movers and people with low residential mobility, but we further hypothesized that social monitoring moderates the linkage between residential mobility and antisocial behavior. We believed that social monitoring could bring about punishment concern of frequent movers to a greater extent because equal punishment often means more for frequent movers without group supports than those hardly move (Lun, Roth, Oishi, & Kesebir, 2013). Consequently, the existence of monitoring could be an effective approach to deterring negative behaviors of frequent movers; the difference of antisocial level between frequent movers and individuals with low residential mobility would be narrower or even disappear when people feel themselves to be monitored.

Across three studies, we tested the hypothesis that individuals with high residential mobility would show more antisocial behavior than those with low residential mobility. We expected that this effect could be shown by conducting different operationalizations of residential mobility and be captured by a variety of forms of antisocial behavior. Specifically, Study 1 measured individuals' residential mobility via a self-reported scale and assessed their tendency of guessing the right answer in a knowledge test which manifested their dishonesty; in Study 2, we manipulated residential mobility and then assessed individuals' tendency to maximize their self-interest which conflicted with providing accurate answers in a dot detection task, aiming to clarify the causal relationship; in study 3, we primed residential mobility and assessed the extent to which individuals provided dishonest reporting for a better monetary reward in a matrix-solving task, and this task was completed in both a situation in which a monitoring cue existed and a situation in which a monitoring cue was absent, aiming to test the moderating role of monitoring in the linkage between residential mobility and antisocial behavior.

2. Study 1

Study 1 was designed to preliminarily examine the association between residential mobility and antisocial behavior. In this study, we investigated how personal residential mobility relates to dishonesty. A scale consisting of three dimensions, including history, state, and intention, was used to measure participants' residential mobility across time. The participants were then required to take a knowledge test, and the dishonesty frequency therein was observed. Additionally, the Dark Triad traits (i.e., narcissism, Machiavellianism, and psychopathy) were measured and controlled for in this study to eliminate the effect of personality, because prior studies found that these traits decreased moral performance and boosted antisocial behavior (Jonason, Strosser, Kroll, Duineveld, & Baruffi, 2015; Jones & Paulhus, 2017; Zuo, Wang, Xu, Wang, & Zhao, 2016). We expected that participants scoring high on residential mobility would show a higher level of antisocial behavior than those with low residential mobility.

2.1. Method

2.1.1. Participants

To determine the sample size for this study, we conducted a power analysis utilizing G*Power 3.1 (Faul, Erdfelder, Lang, & Buchner, 2007). Previous research on residential mobility yielded a moderate correlation of 0.34 between residential mobility and pro-community behavior (Oishi et al., 2007); we expected a similar correlation in this study and set a conservative correlation of 0.30 in the analysis. The power analysis revealed that approximately 77 participants would be needed to achieve 85% power $(1 - \beta)$ at a 0.05 alpha level $(\alpha = 0.05)$. To account for potential study dropouts, we thus recruited 208 adults in the campus forum of Beijing Normal University in exchange for monetary compensation. Of these participants, 14 were excluded as they failed an