



Social comparisons and health: Can having richer friends and neighbors make you sick?

Genevieve Pham-Kanter*

Becker Center on Chicago Price Theory, Chicago Booth, University of Chicago, 5807 South Woodlawn Avenue, Chicago, IL 60637, United States

ARTICLE INFO

Article history:

Available online 8 June 2009

Keywords:

USA
Relative deprivation
Reference groups
Relative income
Income inequality

ABSTRACT

Do richer friends and neighbors improve your health through positive material effects, or do they make you feel worse through the negative effect of social comparison and relative deprivation? Using the newly available National Social Life, Health, and Aging Project (NSHAP) data set that reports individuals' income positions within their self-defined social networks, this paper examines whether there is an association between relative position and health in the US. Because this study uses measures of individuals' positions within their self-defined social groups rather than researcher-imputed measures of relative position, I am able to more precisely examine linkages between individual relative position and health. I find a relationship between relative position and health status, and find indirect support for the biological mechanism underlying the relative deprivation model: lower relative position tends to be associated with those health conditions thought to be linked to physiological stress. I also find, however, that only extremes of relative position matter: very low relative position is associated with worse self-rated physical health and mobility, increased overall disease burden, and increased reporting of cardiovascular morbidity; very high relative position is associated with lower probabilities of reporting diabetes, ulcers, and hypertension. I observe few associations between health and either moderately high or moderately low positions. This analysis suggests that the mechanism underlying the relative deprivation model may only have significant effects for those at the very bottom or the very top.

© 2009 Elsevier Ltd. All rights reserved.

Introduction and background

Empirically, income has consistently been shown to be highly correlated with health; in both aggregate and micro studies, richer people have better health and longer life expectancies (for reviews, see Adler, Boyce, Chesney, Folkman, & Syme, 1993; Adler & Ostrove, 1999). There also appears to be a strong correlation between income inequality and health. Whether comparing across countries, U.S. states, or smaller sampling regions, those geographic areas with higher levels of inequality also appear to have higher rates of mortality (see for example, Daly, Duncan, Kaplan, & Lynch, 1998; Kaplan, Pamuk, Lynch, Cohen, & Balfour, 1996; Kennedy, Kawachi, & Prothrow-Stith, 1996; Waldmann, 1992; or the review by Wilkinson and Pickett, 2006).¹

One hypothesis put forth to explain these associations between health and both income and income inequality is that health is determined, not only by one's absolute material resources, but also by one's relative position (Marmot & Wilkinson, 2001; Wilkinson, 1996, 1997). According to this hypothesis, poor people have worse health not only because they are less able to afford health-promoting goods, but also because they experience health deficits related to the gap between their own circumstances and those of others. These health deficits are thought to stem from the psychosocial effect of finding oneself less worthy in social comparisons – in other words, from the stress of being of lower social rank. According to the relative deprivation hypothesis, the greater this difference between one's circumstances and those of others, the worse one's health. In the aggregate, then, the more unequal a society – that is, the greater the difference between a society's haves and have-nots – the worse the health of society's poorest members because of relative deprivation. This leads to worse overall (average) health, and so we observe the negative association between income inequality and health.

That low social rank has negative health effects is somewhat supported by animal studies. Among non-human primates, lower social rank is associated with higher levels of stress hormones,

* Tel.: +1 773 702 4196.

E-mail address: g_phamkanter@uchicago.edu

¹ More recently, the association between inequality and health has been questioned (see for example, Deaton, 2001, 2003; Deaton & Lubotsky, 2003; Deaton & Paxson, 2001a, 2001b; Lynch, Smith, Kaplan, & House, 2000; Miller & Paxson, 2006).

which if chronically elevated, lead to worse immune function, increased inflammation, and increased susceptibility to disease (Cohen et al., 1997; Sapolsky, Albers, & Altmann, 1997). Most primate studies, however, do not attempt to exogenously change social rank; they therefore cannot rule out the possibility that an unobserved factor affects both an animal's social dominance and its immune status, or that susceptibility to infection leads to low social rank. The one study that does manipulate the social status of monkeys finds a clear effect of rank on stress hormone response but does not directly evaluate health outcomes (Shively, Laber-Laird, & Anton, 1997).

Among humans, the hypothesis that low relative position has an independent effect on health has been more difficult to test. The biggest problem, aside from humans' natural aversion to the randomization of their economic status, has been that, within a society, lower income implies both lower absolute resources and lower relative position; stated differently, lower income is perfectly correlated with lower relative (economic) position within a given society.

Because of this difficulty, individual-level studies that have attempted to test the relative deprivation hypothesis have evaluated, not the effect of an individual's relative position, but rather the effect of income inequality of someone's area of residence – state, MSA, or census sampling unit – on his or her health (for example, Fiscella & Franks, 1997; Mellor & Milyo, 2002; Sturm & Gresenz, 2002). Notably, unlike the studies that use aggregate data – which consistently report a negative association between inequality and health – these individual-level studies find no relationship between the inequality of an individual's geographic area and his or her health.

These tests, however, do not quite estimate the effect of relative position on health. As Eibner and Evans (2005) point out, two individuals may experience the same level of inequality because they live in the same community, but their relative position within the community may be very different – and it is their relative position that affects health. These individual-level tests of inequality therefore do not truly test the relative deprivation hypothesis.

Attempts to test this hypothesis by constructing individual-level measures of relative deprivation have met with mixed results. In these papers, relative deprivation is typically determined by an individual's income relative to the incomes of those who have the same demographic characteristics (e.g. gender, race, age, education, region of residence, occupation). Kondo, Kawachi, Subramanian, Takeda, and Yamagata (2008) unambiguously find a relationship between relative deprivation and worse self-reported health, while Jaffe, Eisenbach, Neumark, and Manor (2005), and Yngwe, Fritzell, Lundberg, Diderichsen, and Burstrom (2003) report a similar relationship in men but no such relationship among women. Others, like Eibner and Evans (2005), Gravelle and Sutton (2006), and Jones and Wildman (2008), find that empirical associations between relative position and health tend to be very sensitive to the measures of deprivation used as well as to the form of the models being estimated.

In this paper, I empirically examine the relationship between relative position and health but address an important issue that has not been attended to in previous studies. A difficulty that arises in the empirical study of relative deprivation is that individuals' reference groups are unobserved. Consequently, an individual's relative position must be imputed by the researcher, most often by defining someone's relative income as this person's income relative to the incomes of those with similar demographic characteristics. Thus, the imputed relative income of, say, Chief Justice John G. Roberts, Jr., would be his income relative to the income of – as of the time of this writing – white males, approximately 50 years old, living in Washington, DC.

While this method of constructing reference groups is reasonable given data constraints, it is not unproblematic. First, there is a fair amount of sociological evidence suggesting that someone's reference group is not typically as broad as his geographic region or demographic classification. Reference groups tend to be more localized and are mostly limited to family, friends, neighbors, work colleagues, and others people know personally (for overviews, see Frank, 1985; Merton, 1957).

Moreover, while it is true that these localized reference groups tend to be comprised of people who have the same demographic characteristics as the primary individual (McPherson, Smith-Lovin, & Cook, 2001), it is unclear whether demographic and geographic groupings are accurately capturing that individual's reference group. For example, that the social network of a Supreme Court Justice tends to consist of lawyers does not mean that we would be accurately representing his or her socioeconomic reference group by pooling all U.S. lawyers or indeed even all Washington, DC lawyers. Justices' professional reference groups are more likely to be comprised of federal judges or law professors or professionally elite non-lawyers. Further, anthropological work provides evidence for the importance of locally defined norms and cultural models in specifying the criteria for social status; consonance with these local cultural models has been shown to be associated with health status (Dressler, Balieiro, Ribeiro, & Dos Santos, 2005; Dressler & Bindon, 2000; Dressler, Bindon, & Neggers, 1998), and standard demographic variables do not adequately capture these localized norms and models.

We suspect, then, that individuals are likely to be drawing, for their reference group, from a pool of demographically similar people in a way that is idiosyncratic to the individual and his/her local environment, and that is biased in important unobserved ways. Consequently, geographic or demographic classifications may not simply be innocuous approximations of actual reference groups but may be misleading indicators of them.

For this reason, this paper focuses on local reference groups as identified by the individual. Note that reference groups are 'local' in the sense of being part of one's social, work, or kin network, but need not be geographically concentrated; for example, two brothers may reflexively compare themselves to each other even though one lives in New York and the other in San Francisco. To account for the social locality of reference groups, this paper uses newly available data on individuals' positions within their local network to construct measures of relative position. These local measures will allow us to test the relative deprivation hypothesis by examining whether the *mechanism* behind the theory of relative deprivation could be operating: if the relative deprivation hypothesis holds and relative income has an effect on health independent of absolute income, we should observe associations between local position (relative to a reference group) and health status.

In addition to these relative position measures, this data set contains a particularly rich set of health indicators. I can thus examine associations between relative position and a broad range of health status measures. Most studies examining health use either a self-reported summary measure of health or the rather extreme outcome of death. This paper uses indicators that capture a range of well-being and morbidity. Like other papers, this paper looks at self-reported health, but I also consider reports of diagnoses of important health conditions such as diabetes, cancer, arthritis, and reports of previous strokes and heart attacks. I also use a body mass index measure calculated from height and weight measurements, and interviewer-recorded blood pressure readings. Since the health effect of social comparison is posited to work through a specific physiological stress pathway, the various measures of health will help me detect different ways in which the

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات