Discrimination and Poor Health: Weathering vs. Habituation
(Extended Abstract)
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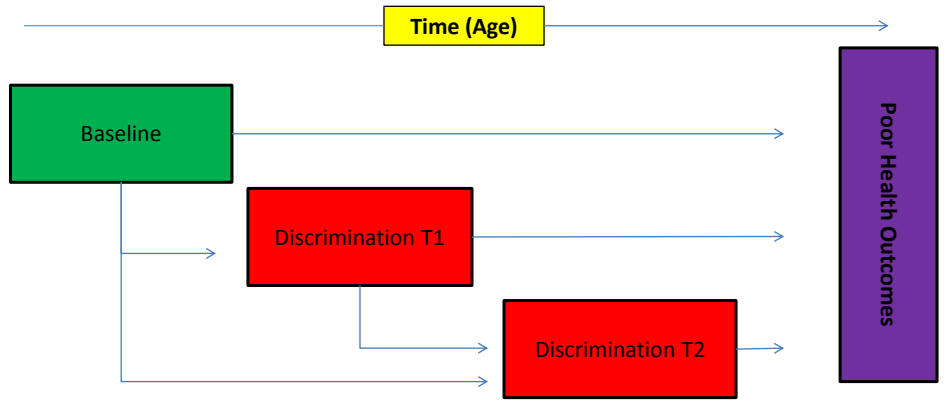
Discrimination is a well-established correlate of poor health and health disparities (Williams & Mohammed, 2009; Takeuchi & Williams, 2003; Williams et al., 2010). These robust correlations remain even in the presence of controls for other forms of life stressors (Thoits, 2010; Cokley et al., 2011; Hall et al., 2012). To date most scholarship builds from a "weathering" paradigm, which attributes poor health to the accumulation of disadvantages – including discrimination, poverty, poor nutrition, among others – across the life-course (Geromimus, 1992). More recent research considers the role of habituation in this accumulation process and suggests a minimization of the effects of later-life discrimination on health because of early and frequent exposure to the stressor (Williams et al., 2003).

Despite the size of this line of inquiry, most studies of struggled to navigate crucial methodological hurdles. These include the dearth of longitudinal data, the prevalence of small sample sizes, and a general inability to appropriately adjust for confounding variation. Additionally, few studies have successfully documented the pathways by which discrimination negatively affects health. As a result, any possible salutary effect of discrimination has been largely invisible, despite theoretical research indicating the protective capacity of habituation responses. Lastly, since most studies have been cross-sectional, it is difficult to determine the level of exposure that is necessary to alter disease and health patterns. My research aims to advance our understanding of the pathways between discrimination and health by tackling several of these issues.

This present study focuses on the association between discrimination and health across the life-course. I develop panel regression models with a novel data set containing discrimination data at multiple points in time and a large battery of self-reported and nurse-assessed health outcomes. These models facilitate testing for the presence of weathering or habituation processes in a population-representative sample. Specifically, I examine whether experiences of discrimination in early adulthood are associated with an age-specific increase in poor health across the life-course (weathering), or if multiple experiences of discrimination minimize the age-specific effect on health (habituation). To highlight the scientific value of the approach, I also estimate a set of cross-sectional specifications with the same data; doing so allows me to demonstrate what can be learned by taking a life course approach to this line of inquiry.

Figure 1, adapted from Kuh et al. 2003, captures my general approach. What I would expect to see, in support of the weathering hypothesis, is an increase in the age-specific association between discrimination and poor health, while I would expect an age-specific decrease in the association between discrimination and poor health for the habituation hypothesis.

Figure.1



Accumulation of Risk Model

Kuh D et al. J Epidemiol Community Health 2003;57:778-783

Data & Methods

I will use data are from the Coronary Artery Risk Development in (Young) Adults (CARDIA) study. CARDIA is a prospective cohort study, stratified randomly by race (Black & White), sex (men & women), age (18-24 & 25-30), and education (less than high school education & more than high school education). The first wave was collected in 1985 and interviewed over 5,000 participants from Alabama, Illinois, California, and Minnesota. Subsequent waves of data were collected in 1987-1988 (Year 2), 1990-1991 (Year 5), 1992-1993 (Year 7), 1995-1996 (Year 10), 2000-2001 (Year 15), and 2005-2006 (Year 20).

I will conduct regression analysis, using multiple waves of the survey, to test for age-specific associations between discrimination and poor health, with extemporaneous measures, at years 7 and 15. I then build upon this using panel data analysis to account for early life experiences. Using the CARDIA data at baseline, year 7, year 15, year 17, and year 20, will allow me to take advantage of the multiple measures of discrimination, controls for early life experiences (age, education, race, sex, and mental health), numerous health indicators (physical activity, mental health, reproductive health, blood pressure, life events, and medical histories), multiple waves of follow-up across 20 years, and the ability for comparison of results to other cross-sectional studies. Investigating evidence for two important schools of thought regarding discrimination and health, this study will inform research on health disparities and life-course trajectories more broadly, while shedding light on the possible protective aspects of stress exposure.

References

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