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Intervening within and across levels: A multilevel approach to stigma and public health

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ABSTRACT

This article uses a multilevel approach to review the literature on interventions with promise to reduce social stigma and its consequences for population health. Three levels of an ecological system are discussed. The intrapersonal level describes interventions directed at individuals, to either enhance coping strategies of people who belong to stigmatized groups or change attitudes and behaviors of the non-stigmatized. The interpersonal level describes interventions that target dyadic or small group interactions. The structural level describes interventions directed at the social-political environment, such as laws and policies. These intervention levels are related and they reciprocally affect one another. In this article we review the literature within each level. We suggest that interventions at any level have the potential to affect other levels of an ecological system through a process of mutually reinforcing reciprocal processes. We discuss research priorities, in particular longitudinal research that incorporates multiple outcomes across a system.

Introduction

> Many channels of social life have not simply a beginning and an end but are circular in character (Lewin, 1947, p. 147).

Stigma occurs when a *label* associated with a *negative stereotype* is attached to a characteristic (e.g., skin color, sexual orientation, chronic illness), causing people with this characteristic to be seen as *separate* from and *lower in status* than others and thus, as legitimate targets of *discrimination* (Link & Phelan, 2001). Stigma can affect the availability of societal resources (Link & Phelan, 2006), the way people interact with each other (Blascovich, Mendes, Hunter, & Lickel, 2000), and the way people think and feel (Crocker, Major, & Steele, 1998). It is fundamentally a multilevel construct and one that is increasingly seen as a contributor to health disparities (Hatzenbuehler, Phelan, & Link, 2013).

Our goal is to use a multilevel lens to understand interventions to reduce stigma, improve related health outcomes, and reduce health disparities. We review an interdisciplinary research literature that demonstrates the types of interventions that have been tested and where these interventions fit in a multilevel system. Our review includes interventions directed at several common stigmas and highlights ways that intervention approaches vary by stigma type. A multilevel approach suggests that health and healthcare are a part of a reciprocal web of relationships among individuals, their social networks, and larger social structures. This perspective encourages researchers to consider how effective interventions that target stigma at any level, when well-timed and congruent with conditions at other levels, might have long-term, cascading effects across a system.

Our review categorizes intervention types by their place in an ecological system (Bronfenbrenner, 1977) (see Fig. 1). We describe three levels—intrapersonal, interpersonal, and structural—consistent with others investigating health disparities (e.g., Jones, 2000). We use this model as a heuristic for the purpose of our analysis, recognizing that researchers have used a variety of models, differing in the number and types of system levels depicted (e.g., Belsky, 1980; Earnshaw, Bogart, Dovidio, & Williams, 2013; Johnson et al., 2010; McLeroy, Bibeau, Steckler, & Glanz, 1988).

At the innermost level (Fig. 1) are individuals and the *intrapersonal* dynamics that affect people's experiences with the environment. Interventions at this level are directed at both reducing stigma expression and reducing the impact of stigma on stigmatized

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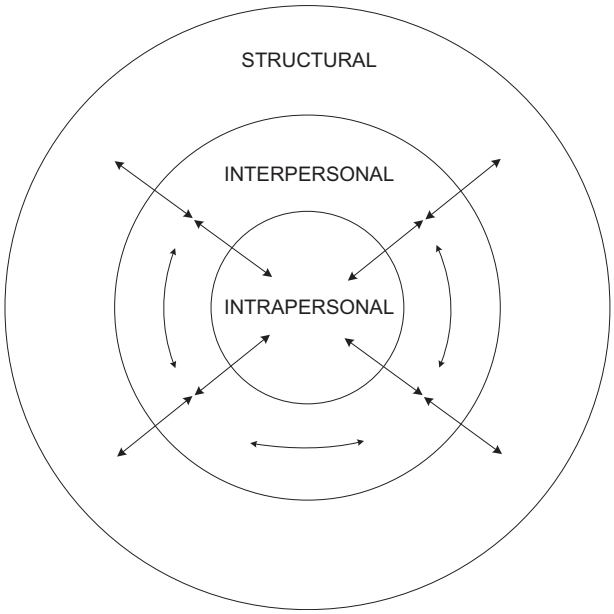

Fig. 1. A multilevel system with arrows depicting the possibility for bidirectional influences within and between system levels.

group members. Interventions at the *interpersonal* level target dyadic and small group interactions. These interventions may involve people who share a stigma or people who differ in their stigma status, including people who are not members of stigmatized groups. The outermost circle depicts the *structural* level, which focuses on social forces and institutions, like legislative action, mass media, and governmental or organizational policies. Interventions at the structural level target institutional forces that can affect material resources, legal practices, and psychological climate targeted at specific stigma groups. Central to our focus is the idea of bidirectional influences in an ecological system. Through a process of reciprocal causality, interventions can become self-reinforcing if improvement in one outcome improves others, which reinforces the original outcome in an ongoing feedback cycle. This process could unfold both within and between system levels.

We begin by providing an overview of our article selection and categorization process. We then describe the types of interventions we found at each level, separately identifying interventions that target stigmatized groups from those that target the non-stigmatized. We conclude by discussing how interventions might have effects across levels and providing recommendations for future research.

Methodological approach

A multilevel approach is by its nature multidisciplinary, ranging from biological and psychological research at the intrapersonal level to sociological and policy research at the outermost level. Accordingly, we review articles from a variety of disciplines, which have thus far existed mostly separate from one another in the stigma literature (Hatzenbuehler, 2009).

We define interventions as (a) manipulations designed to induce change that (b) have at least a theoretical possibility of a control group. This is consistent with Campbell's (1991) notion of an "experimenting society," in which researchers "try out new programs designed to cure specific social problems…[and] retain, imitate, modify or discard them on the basis of apparent effectiveness" (Campbell, 1969, p. 409). Our definition serves the goal for this article: to identify points in a system that may be effective places to deliberatively induce change and test for effectiveness.

This article is not meant to be an exhaustive review of interventions, but rather a description of types of stigma interventions used and a discussion of where they fit in an ecological system. We do not critique research design, methodology, or outcomes and we remain agnostic about relative effectiveness.

Article selection and categorization

We searched several databases, including Web of Knowledge, Google Scholar, PubMed, and PsycINFO, using a variety of keywords, including stigma, intervention, health disparities, and stress. We also collected articles based on personal knowledge, recommendations from scholars who study stigma, and cited-reference searches. Our primary goal was to identify with reasonable confidence the *types* of interventions that have been attempted, not to do a systematic review of every intervention, which would be beyond the scope of this paper. Thus, the specific studies included here should be considered representative, not exhaustive.

We included interventions that targeted a variety of different outcomes. For example, given the link between stigma and health described in the current issue and elsewhere (e.g., Pascoe & Richman, 2009; Williams & Mohammed, 2009) interventions could focus on *directly reducing stigma* (e.g., changing public attitudes towards stigmatized groups). Interventions might also *enhance health behaviors*, either by promoting healthy behaviors (e.g., increasing medical checkups) or reducing unhealthy behaviors (e.g., unprotected sex) among members of stigmatized groups. Interventions could also *reduce psychosocial stress*, which is consistently associated with negative health outcomes (Cohen, Janicki-Deverts, & Miller, 2007; McEwen, 1998; Miller, Rohleder, & Cole, 2009) and may be a mechanism by which stigma leads to health disparities (Link & Phelan, 2006; Meyer, 2003; Sternthal, Slopen, & Williams, 2011). We also included interventions focused on *improving educational outcomes* for stigmatized groups, since higher levels of educational attainment are associated with better health (Case, Lubotsky, & Paxson, 2002; Pappas, Queen, Hadden, & Fisher, 1993; Rogers, Hummer, & Everett, 2013) and there are well-established educational disparities for many stigmatized groups (Jencks & Phillips, 1998; National Academy of Sciences, National Academy of Engineering, & Institute of Medicine, 2007). Finally, we included interventions aimed at *directly improving health outcomes* among stigmatized groups, whether physical or mental (e.g., increasing the availability of counseling resources).

We categorized articles first by their system level and then by intervention type within level. Level of intervention was defined with respect to the focus of the intervention and was irrespective of the intervention outcomes described above. Educational interventions designed to provide *individuals* with new knowledge about a topic, for example, were considered intrapersonal, even if such interventions were delivered in a group setting. However, interventions designed to affect the way larger institutions provide education were considered structural. Decisions about system level and intervention type were made collaboratively.

Below, we describe types of interventions within system levels, beginning at the intrapersonal and concluding with the structural. Within each level, we separately describe types of interventions aimed at members of stigmatized groups and those aimed at the non-stigmatized.

Results: intervention types

Intrapersonal-level interventions

Intrapersonal interventions target the way people think, feel, or behave. Because they are delivered individually, such interventions