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The Contributing Role of Prevalent Belief Systems to Intergroup Attitudes and Behaviors

Sheri R. Levy

Stony Brook University, New York, sheri.levy@stonybrook.edu

Tara West

Lisa Rosenthal

Yale University

Correspondence to: Sheri R. Levy, Department of Psychology Stony Brook University, Stony Brook, NY, USA 11794-2500, Email: sheri.levy@stonybrook.edu.

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Abstract

Abundant research shows that prevalent belief systems across cultures contribute to people's levels of stereotyping, prejudice, and discrimination. Such popular belief systems are often communicated by everyday sayings (e.g., the belief that hard work leads to success, as captured by "Madruga y verás, trabaja y tendrás" [Colombia], "Kung may tiyaga, may nilaga" [Philippines], "The early bird catches the worm" [U.S.A.]). We review the relations between intergroup processes and the following belief systems: entity theory, incremental theory, multiculturalism, colorblindness, polyculturalism, and the Protestant work ethic. We discuss factors that affect the development, maintenance, and potential change in these belief systems, and ways that this knowledge may be used to reduce prejudice are discussed.

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Introduction

Madrugá y verás, trabaja y tendrás (Wake up early and you will see, work and you will have [Colombia])

Vive la différence (Long live the difference [France])

A leopard cannot change its spots (the United States)

In everyday life, people often convey their cultures' popular belief systems through sayings such as those above. Research has demonstrated that such belief systems serve multiple functions, including helping the believer to filter incoming social information and guiding the believers' thoughts, feelings, and behaviors toward themselves, others, and groups (e.g., Hong, Levy, & Chiu, 2001; Wegener & Petty, 1998). In this article, we review research on several belief systems that have been found to have far-reaching implications for understanding intergroup attitudes and relations, and that have been studied among social perceivers who vary by age, culture, and race/ethnicity. Specifically, we review the entity theory, the incremental theory, colorblindness, multiculturalism, polyculturalism, and the Protestant work ethic. Examples of other belief systems that are not included because of limited space are beliefs about social hierarchies and authorities, including social dominance orientation and right-wing authoritarianism (e.g., Altemeyer, 1998; Duckitt & Sibley, 2007; Pratto, Sidanius, Stallworth, & Malle, 1994), as well as political and religious belief systems.

To understand the consequences of belief systems for intergroup attitudes and relations, we first need a working understanding of the nature of belief systems. We begin by briefly describing some common features of the belief systems. Then, we discuss each belief system and its demonstrated relation to the holders' thoughts, feelings, and behaviors toward different groups (e.g., racial/ethnic groups), including ways in which these relations differ across holders (e.g., based on age, culture, race/ethnicity). We conclude by discussing ways in which belief systems change or are maintained.

Defining Belief Systems

The belief systems discussed in this article are used by people across cultures in their everyday lives. For this reason, belief systems are sometimes referred to as "lay theories," "folk theories," or "naïve theories" (Heider, 1958; Kelly, 1955; Wegener & Petty, 1998). Sometimes belief systems such as the Protestant work ethic not only represent a description of the world, as in *hard work leads to success*, but also can represent a prescription for how people should behave, or how the world should be, as in *hard work should lead to success*. As a prescription, belief systems have also been referred to as ideologies or approaches (e.g. see Rosenthal & Levy, 2010); the belief systems included

in this review, however, have tended to be assessed using measures (as given later in this article) that do not include a prescriptive element.

While children likely become aware of belief systems early in their lives, and even express such beliefs as early as age five (see Dweck, 1999), much of the research investigating the effects of belief systems on intergroup attitudes and behaviors has examined children ages ten and older, as they would be expected to have mastered relevant social-cognitive skills such as perceiving similarities across different groups (e.g., Aboud, 1988; Dweck, 1999).

While the prevalence and endorsement of particular belief systems vary across cultures, each belief system discussed herein has been studied in multiple cultures, suggesting a universal aspect to these beliefs (e.g., Hong et al., 2001). Both individual and environmental factors affect one's endorsement of belief systems, including the relatively proximal family environment (e.g., parents, siblings), the local community (e.g., school, peers, friends), and the relatively distal cultural environment (e.g., mass media). Following from this, the endorsement of a belief system is sometimes viewed as an individual difference, or stable personality type. However, belief systems are not necessarily stable (see section on Maintenance and Change of Belief Systems). In fact, belief systems can be activated and deactivated in particular contexts, with frequently activated belief systems more chronically accessible and more likely to be applied to one's observations and experiences than less frequently activated beliefs (e.g., Dweck, Chiu, & Hong, 1995a, 1995b; Higgins, 1996; Hong et al., 1999; Levy, Freitas, Mendoza-Denton, Kugelmaas, & Rosenthal, 2010).

This ability to temporarily activate belief systems has been used by researchers investigating the causal role such belief systems play in stereotyping, prejudice, and discrimination (e.g., Hong et al., 2001). In such studies, participants typically read brief articles reminding them of a prominent belief system in their culture (e.g., Chiu, Hong, & Dweck, 1997; Wolsko, Park, Judd, & Wittenbrink, 2000). When a belief system is activated in these ways, it is assumed that people can somewhat readily switch to viewing their world through the lens of the activated belief system because it is familiar to them through previous social experiences (e.g., Dweck et al., 1995b; Hong et al., 2001).

Because people have explicit access to their belief systems, an individual's endorsement of a given belief is typically assessed through self-report. Using agree-disagree response scales, children and adults are asked to report their agreement with simple, straightforward statements reflecting each belief system (e.g., endorsement of the entity theory [that people cannot change] would be assessed via agreement with the statement "People can do things differently, but the important parts of who they are can't really be changed"; Levy, Stroessner, & Dweck, 1998).

Belief systems are often discussed as primarily serving people's epistemic needs to explain and understand their social world (Heider, 1958; Wegener & Petty, 1998). However, there is increasing recognition that belief systems also serve psychological needs, such as providing a sense of control and bolstering self-esteem, as well as social needs, such as forming and maintaining relationships with family and friends (e.g., Hong et al., 2001; Levy, Chiu, & Hong, 2006). Such a focus on the functions of belief systems

helps explain individual differences within social contexts. That is, within a given environment, each individual will be more receptive to the belief systems that support his or her individual needs, which vary across time and place (e.g., Levy, West, & Ramirez, 2005; Levy, West, Ramirez, & Karafantis, 2006). For example, a person might strongly endorse the entity theory, not only because this belief system is prevalent in her environment, but also because it helps her understand why her brother doesn't change his ways and because it boosts her self-esteem (e.g., by supporting the prediction that she will remain successful throughout her life).

People also may benefit from the perception that their belief systems represent the "correct" social reality; unlike scientists, most lay people do not test their belief systems for accuracy. Lay people tend to seek out social information that verifies the legitimacy of their cherished belief systems, while ignoring information that contradicts their belief systems (e.g., Heider, 1958; see also Hong et al., 2001).

Although no lay belief system likely provides a "correct" social reality, belief systems have important consequences for both the holders of the beliefs and for their social targets (see Hong et al., 2001; Wegener & Petty, 1998). In this chapter, we address the consequences of the entity theory, the incremental theory, colorblindness, multiculturalism, polyculturalism, and the Protestant work ethic on prejudice (negative affect toward a group), stereotyping (associating a set of attributes with a group), and discrimination (biased treatment or intentions toward a group and its members).

Belief Systems: Their Relations to Intergroup Attitudes and Behaviors

Beliefs about the Malleability of Human Attributes

Beliefs about the malleability of human attributes reflect beliefs about the degree to which human qualities (e.g., morality, personality, intelligence) can change. People holding the entity theory (attributes are fixed entities) tend to see people's qualities as stable characteristics and would agree with the saying, *Aunque la mona se vista de seda, mona queda* (Argentinian proverb; A monkey is a monkey even if it is dressed in silk). By contrast, people holding the incremental theory (attributes can increase or change) view people's qualities as dynamic and likely believe, *It's never too late to turn over a new leaf*. Entity and incremental theories are opposing beliefs that reflect different realities; however, both belief systems are prevalent within and across cultures, likely reflecting that each belief system is "correct" sometimes. And, indeed, people more or less hold both belief systems, although people tend to more strongly agree with one versus the other at a given time, likely reflecting which belief system is more prevalent in their environment or which one better meets their individual needs.

Both entity and incremental theories have been endorsed across age groups (elementary school, middle school, and college) and cultures (Australia, Hong Kong, Mexico, and United States: see Bastian & Haslam, 2006; Chiu et al., 1997; Church et al., 2003; Dweck, 1999; Dweck et al., 1995a; Hong et al., 2003; Levy, Plaks, Hong, Chiu, &

Dweck, 2001; Plaks, Levy, & Dweck, 2009; see also relevant work on essentialism and entitativity: Yzerbyt, Judd, & Corneille, 2004). In the United States, for example, children have been found to express entity and incremental theories around the age of five (Kamins & Dweck, 1999); yet, as mentioned earlier, much of the work on the implications of these theories for judging groups of people has examined children ages ten and older, who have mastered relevant social-cognitive skills (e.g., Aboud, 1988; Dweck, 1999).

Across studies with a variety of age groups, perceivers holding an entity (vs. incremental) theory generate more trait attributions for group members' behaviors, perceive less within-group variance and between-group commonalities, make more extreme trait judgments of racial/ethnic, occupational, and unfamiliar groups, report less willingness to socialize with others who exhibit a few negative and neutral behaviors, and provide less help for disadvantaged others (Hong, Chiu, Yeung, & Tong, 1999; Karafantis & Levy, 2004; Levy & Dweck, 1999; Levy et al., 1998; Plaks, Stroessner, Dweck, & Sherman, 2000).

As examples, college students in the United States holding an incremental theory, relative to those holding an entity theory, have been shown to less strongly agree with stereotypes of racial/ethnic and occupational groups in both correlational and experimental studies. The experimental studies used the inductions created by Chiu et al. (1997), which included a three-page article resembling a popular psychology magazine that vividly described extensive (fictitious) research concluding that either people can change (incremental theory) or cannot change (entity theory). In one laboratory experiment, predominately European American college students were randomly assigned to read either the entity or incremental theory article and then, ostensibly as part of another study, were asked to evaluate stereotypes of occupations (teachers, politicians, lawyers, doctors) and racial/ethnic groups (African Americans, Asians, and Latinos; Levy et al., 1998). Participants exposed to the entity induction rated traits relevant to the societal stereotypes of each group (e.g., "intelligent" for doctors) as more descriptive of the group than did incremental-induced participants, suggesting that the two inductions differentially triggered levels of stereotyping.

College students in the United States endorsing an entity theory have also been shown to more readily form extreme trait judgments after receiving a small sample of behaviors of a few fictitious students from another alleged school. In contrast, participants endorsing an incremental theory perceived members of this novel student group to be less similar to each other, suggesting that they see people as individuals and not merely as members of a group (for a review, see Levy et al., 2001). Likewise, Hong et al. (1999) found that Hong Kong college students with an incremental, opposed to entity, view were less likely to exaggerate trait differences between their ingroup (Hong Kongers) and an outgroup (Mainland Chinese). Similar results were obtained with ethnically diverse samples of children in the United States. Children holding the incremental theory, more so than children holding the entity theory, expected greater overlap between two novel groups (e.g., in terms of likes and dislikes, goals) even though they had learned that the two groups differed in other ways. Further suggesting that children holding an incremental theory form more flexible judgments of others, the children holding the incremental (vs.

entity) theory were also more interested in befriending children from the school in which some children misbehaved (for a review, see Levy et al., 2001).

While the entity theory is related to more negative intergroup thoughts and behaviors than the incremental theory, both theories are prevalent within and across cultures. Belief systems are culturally and situationally bound, and therefore children and adults are more likely to use them the more they are communicated by socializing agents such as the mass media, parents, and teachers (e.g., Hong et al., 1999). Studies in the United States, for example, seem to suggest that both theories are prevalent, with about half of study participants self-reporting either an entity or an incremental theory (e.g., Dweck, 1999; Dweck et al., 1995a). This may be in part because both belief systems reflect the reality that, to some degree people can and do change, while to some degree, they cannot or do not. Thus, either belief system can serve epistemic needs to understand and explain the world. From an intergroup relations perspective, one might want to foster the incremental belief system more than the entity belief system. However, the entity belief system is also “correct” to some degree, and may serve other psychological needs, such as forming and maintaining relationships (to the extent that others in one’s environment espouse the entity theory) or giving a sense of control and predictability (to think that people labeled as “good” or “bad” will remain that way far into the future).

Beliefs about Diversity: Colorblindness, Multiculturalism, and Polyculturalism

Colorblindness, multiculturalism, and polyculturalism reflect beliefs about racial/ethnic diversity, sometimes referred to as intergroup or interethnic ideologies, specifically when they are used as prescriptions (how the world, or individuals, should be) rather than descriptions (how the world is). Colorblindness and multiculturalism have long been studied among children and adults in racially/ethnically diverse countries such as Canada, the Netherlands, and the United States (e.g., see Esses & Gardner, 1996; Rosenthal & Levy, 2010; Verkuyten, 2009; Zirkel, 2008) among children and adults (e.g., Banks, 2004; Correll, Park, & Smith, 2008; Levy et al., 2005; Plaut, Thomas, & Goren, 2009; Richeson & Nussbaum, 2004; Ryan, Hunt, Weible, Peterson, & Casas, 2007; Stephan, Renfro, & Stephan, 2001; Wolsko, Park, & Judd, 2006; Zirkel, 2008). The research on polyculturalism is relatively recent, and, to the best of the authors’ knowledge, has been limited to studies of adults in the United States, (Rosenthal & Levy, 2012; Rosenthal & Levy, 2010; Rosenthal, Levy, & Moss, 2012). All three beliefs have been expected to promote intergroup harmony and therefore have been discussed and sometimes directly tested as prejudice reduction tools in schools and the workplace (e.g., see Stephan et al., 2001; Zirkel, 2008).

Colorblindness

Generally, colorblindness calls for less attention to racial/ethnic group membership suggesting that intergroup discord emerges in part from an overreliance on group categories (e.g., Ryan et al., 2007; Wolsko et al., 2000). By ignoring group categories, people endorsing colorblindness may instead focus on the commonalities across people

(e.g., how all people living in a country are citizens of that country) or on individuals' uniqueness, without attention to group affiliations. There is empirical support for the potential benefits of the "similarities" version of colorblindness, as focusing on a common ingroup identity ("we") transcending intergroup distinctions ("us" vs. "them") has been shown to improve intergroup attitudes (see the Common Ingroup Model; Gaertner & Dovidio, 2000; Gaertner, Dovidio, Anastasio, Bachman, & Rust, 1993). Yet, the similarities version is also tied to assimilation ideology in the melting pot metaphor that all groups differences should melt away, for example, when people immigrate to a country such as the United States (e.g., see Allport, 1954). Such a belief is tied to negative intergroup attitudes (e.g., Ryan et al., 2010; Wolsko et al., 2006, see Rosenthal & Levy, 2010), and may have negative practical effects on less advantaged groups, who are expected to behave more like the dominant group.

The principle of viewing people as unique individuals, which is captured by popular sayings such as "You can't judge a book by its cover" (see Ryan et al., 2007; Schofield, 1986) has shown some promise for increasing intergroup harmony in children (see relevant theorizing and empirical support from Cognitive Developmental Theory; Aboud & Fenwick, 1999) and adults (see relevant theorizing and empirical support from Brewer and Miller's Decategorization Model; Brewer & Miller, 1984). Nonetheless, generally, across studies, measuring colorblindness in the similarities form, uniqueness form, or combination of both forms have yielded mixed results. Colorblindness has been related to lower ingroup bias and ethnocentrism (e.g., Correll et al., 2008; Wolsko et al., 2000), but also has been associated with greater ethnocentrism and stereotyping, and greater implicit prejudice (e.g., Correll et al., 2008; Richeson & Nussbaum, 2004; Ryan et al., 2007; Vorauer, Gagnon, & Sasaki, 2009).

Multiculturalism

In contrast to colorblindness, multiculturalism calls for greater attention to group memberships such as race/ethnicity, and suggests that differences should be recognized and celebrated (e.g., Banks, 2004; Sleeter, 1991; Zirkel, 2008; e.g., in France, "Viva la difference!"). In contrast to the melting pot metaphor, multiculturalism is linked to the metaphor of the tossed salad, with each group representing a unique ingredient in a national salad bowl. Multiculturalism focuses on learning about important differences between groups, appreciating groups' positive contributions to society, and recognizing each group's right to maintain its own culture and traditions (e.g., Berry & Kalin, 1995; Ryan et al., 2007; 2010; Wolsko et al., 2000, see Rosenthal & Levy, 2010). Someone endorsing multiculturalism would agree with items such as, "In order to live in a cooperative society, everyone must learn the unique histories and cultural experiences of different ethnic groups" (Wolsko et al., 2006).

Multiculturalism is often socialized through events (e.g., Black History Month in the United States), programs (e.g., intergroup dialogue groups), or stand-alone seminars in schools that highlight the history, culture, and contribution of particular racial/ethnic groups (for a review, see Stephan & Stephan, 2001; Stephan et al., 2004).

The multicultural belief system has been studied in laboratory and field studies across cultures (e.g., Correll et al., 2008; Richeson & Nussbaum, 2004; Wolsko et al., 2000). Such studies have demonstrated that multiculturalism is related to lower ingroup bias and ethnocentrism (e.g., Richeson & Nussbaum, 2004; Verkuyten, 2005; Vorauer et al., 2009) and greater interest in contact with people from different racial/ethnic backgrounds (e.g., Wolsko et al., 2006), although these effects can sometimes vary by the perceiver's racial/ethnic group (e.g., Plaut et al., 2009; Ryan et al., 2007).

Yet, some work suggests that multiculturalism can increase stereotyping and prejudice (e.g., Ryan, Casas, & Thompson, 2010; Ryan et al., 2007; Wolsko et al., 2000). This may be because multiculturalism draws attention to group differences, which, even when presented in a positive light, may increase bias (e.g., Bigler, 1999; Prashad, 2001).

Polyculturalism

Polyculturalism focuses on how different racial/ethnic, and cultural groups have throughout history interacted with and influenced each other, and how they continue to do so today; thus, different groups of people are more connected to each other than may often be thought or highlighted (e.g., Kelley, 1999; Prashad, 2001). In his article "The People In Me," Kelley focused on the often unspoken ways that different racial/ethnic groups influence and are influenced by each other's cultures. Prashad's (2001) book titled *Everybody was Kung Fu Fighting: Afro-Asian Connections and the Myth of Cultural Purity* documents the African and Asian connections exemplified in Kung Fu. Prashad details historical evidence that this martial art form is indeed the product of influences from African and Asian cultures, extending beyond those cultures as it achieved world-wide popularity. People endorsing a polycultural belief system may for instance think about how salsa music and dance derive from the influences of African, European, and Indigenous American cultures, or how the combined Zulu and Indian influences on health and medical practices are readily apparent in contemporary South Africa (see Flint, 2006).

People who endorse polyculturalism agree with items such as "Different cultural groups impact one another, even if members of those groups are not completely aware of the impact" (Rosenthal & Levy, 2012). Polyculturalism emphasizes the interconnectedness rather than the separateness of racial/ethnic groups, helping to blur group boundaries and allowing people to feel more connected to each other; yet, it does not require ignoring one's racial/ethnic identity, or adopting the dominant cultural identity in place of one's own. Polyculturalism also does not require the creation of common goals or interdependency, as mutual cultural influence already exists and would simply need to be highlighted (see Rosenthal & Levy, 2010).

Polyculturalism has been found to be associated with positive intergroup attitudes among racially/ethnically diverse samples in the United States. Endorsement of polyculturalism has been associated with greater support for social equality, greater willingness for contact with people from different racial/ethnic backgrounds, greater comfort being around people from different backgrounds, and more positive attitudes toward liberal social policies, such as affirmative action and legalizing the status of currently undocumented immigrants (Rosenthal & Levy, 2012). Polyculturalism has

additionally been found to be related to more positive attitudes toward gay men and lesbian women (Rosenthal et al., 2012). However, although research findings to date show consistently positive intergroup implications of endorsement of polyculturalism, it is possible that future work may also uncover some negative consequences, such as increasing intergroup hostility if past negative interactions among groups (e.g., discrimination, wars) are given more attention (see Rosenthal & Levy, 2010).

Comparison between colorblindness, multiculturalism, and polyculturalism

On average, people tend to endorse polyculturalism and multiculturalism (i.e., most participants report that they either “agree” or “strongly agree” with most items tapping those belief systems), and are less likely to endorse colorblindness (e.g., most participants “disagree”; Rosenthal & Levy, 2012). As noted earlier, when differences are found, advantaged groups (e.g., Dutch, White Americans) endorse colorblindness or assimilation more than marginalized groups (e.g., Turkish-Dutch, Black Americans), who instead show greater preference for multiculturalism.

Although colorblindness, multiculturalism, and polyculturalism are all theoretically expected to have positive consequences for attitudes toward other groups, colorblindness and multiculturalism have some mixed results in studies examining the relation between each of these beliefs and prejudice. In many places, colorblindness has become a less popular belief system, especially among researchers trying to improve intergroup relations; however colorblindness persists as a belief system that is endorsed by some research participants. This may be because it serves people’s personal needs such as for affiliation (if others they know endorse it), to bolster self-esteem (if colorblindness benefits one’s or one’s group’s advantaged position), or to appear non-prejudiced (by suggesting the group membership is irrelevant in determining an individual’s worth).

Protestant Work Ethic

Another prevalent belief system across many cultures (e.g., Canada, England, New Zealand, the United States) is the Protestant work ethic (PWE), often captured by proverbs such as *The early bird gets the worm* and *Madruga y veras, trabaja y tendras* (*Wake up early and you will see; work and you will have*; see Furnham et al., 1993; Rosenthal, Levy, & Moyer, 2011). PWE, the core belief that hard work leads to success, has been shown to have two versions, one that facilitates egalitarianism and the other that facilitates prejudice (Levy et al., 2005; Rosenthal, Levy, et al., 2011).

One version of PWE can be found in popular “rags to riches” stories (e.g., J.K. Rowling, Oprah Winfrey), with the implication that people from all social categories have equal potential to succeed through hard work and effort. This version of PWE has been referred to as PWE-Equalizer, and is associated with egalitarianism (e.g., Levy et al., 2010; Levy et al., 2005; Levy, West, et al., 2006; Ramírez, Levy, Velilla, & Hughes, 2010). As a facilitator of prejudice, PWE can also justify disadvantage by suggesting that less advantaged groups (e.g., women, African Americans, individuals with low economic

status) are not working hard enough and therefore are at fault for their own disadvantage – referred to as PWE-Justifier (e.g., Levy, West, et al., 2006, see Crandall, 2000, Rosenthal, London, Levy, Lobel, & Herrera-Alcazar, 2011). PWE-Equalizer seems to exist across age, cultural, and social status groups, whereas PWE-Justifier seems to be culturally bound, with children learning the tolerant implication and later, as adolescents or young adults in particular cultures, learning the intolerant implication (e.g., Levy et al., 2005; Ramírez et al., 2010; Rosenthal, Levy, et al., 2011).

PWE-Equalizer is likely communicated as a motivator of positive behavior; it outlines a pathway to success through working hard, which applies to people of all ages and backgrounds. But, in cultures that emphasize individualism (such as Western cultures), prejudice can be part of the associative network of PWE that people learn through messages that less advantaged groups simply didn't work hard enough. The notion of an associated meaning mechanism derives from the longstanding social psychological research showing that the same construct can be perceived differently by different people or in different contexts (e.g., Bruner, 1957; Turner & Oakes, 1997), and that children often hold a narrow view that broadens with experience (Lewin, 1951). If people accumulate and refine their understandings of PWE through cultural or personal experience and relevance, adults are likely to be familiar with PWE-Equalizer and PWE-Justifier, but children (or adults less familiar with PWE's inequality-justifying associations) are likely to be only familiar with PWE-Equalizer.

Research in the United States has shown that younger age groups tend to construe PWE in terms of its egalitarian version. In one study, participants were randomly assigned to one of two experimental conditions, which involved reading a brief pro- or anti-PWE induction article that described allegedly credible and extensive psychological research supporting or opposing PWE. As expected, the 10- and 15-year olds that read a pro-PWE induction article, and who assumedly construe PWE in terms of its egalitarian implication, reported greater beliefs in egalitarianism, relative to the 21-year-old participants, who presumably are also familiar with PWE's inequality-justifying associations (Levy, West, et al., 2006). A follow up study with the oldest age group only (approximately 21-year olds) illustrated their understanding of the justifier-of-inequality implication of PWE: adults who were led to think about past instances of others using PWE in support of blaming disadvantaged groups members for their disadvantage were less egalitarian (reported less support for social equality and donated less money to a homeless shelter) compared to students in a control condition (Levy, West, et al., 2006). The shift in PWE's implication toward intolerance in Western societies such as the United States seems to begin in late adolescence (ages 16-18). It may be that as educational and career prospects are increasingly being evaluated in adolescence, advantaged adolescents begin to make or be receptive to a connection between PWE and American individualism, which blames the disadvantaged. For example, advantaged group members may derive some benefit from taking personal credit for their own (or their group members') accomplishments, and from blaming others for their disadvantage (e.g., justifying inequality). European American adults have been found to generally endorse PWE-Justifier more than African American adults do (Levy et al., 2010).

In non-Western, less individualistic cultures where attributions of individual responsibility and control are less pervasive, PWE is less likely to acquire the justifier-of-inequality implication and instead function through its equalizer implication (Ramírez et al., 2010; Rosenthal et al., 2011; see Crandall & Martinez, 1996). For instance, in Colombia, where people's beliefs about work have historically had strong ties to Catholicism, hard work can represent punishment, and disadvantaged groups are encouraged to accept their disadvantage as a means to salvation (Ramírez et al., 2010). Unlike the developmental findings with European Americans in which there was shift in PWE's implication with age, Ramírez et al. (2010) found that PWE was consistently related to egalitarianism among Mestizo (the majority group in Colombia) children, adolescents, and adults.

A recent meta-analysis of PWE's relation to prejudice provides further evidence that sociocultural experiences shape the intergroup implications of PWE (Rosenthal, Levy, et al., 2011). Rosenthal, Levy, et al. (2011) conducted a systematic review of 37 published and unpublished studies across the previous 40 years and found that PWE was more strongly related to prejudice toward disadvantaged groups (poor persons, racial/ethnic minorities, sexual minorities, and women) in Western countries (Canada, England, New Zealand, the United States) than in non-Western countries (India, Jamaica, and Singapore).

In summary, PWE is a belief system with two intergroup implications that depend on people's age, group membership, and cultural context. Research on PWE also suggests that prejudice can develop, at least partially, through adopting a belief system that originally has egalitarian implications.

Maintenance and Change of Belief Systems

Belief systems may develop and change in a variety of ways. On a broad level, cultural factors may produce and maintain belief systems. For example, in a study conducted over six months during the 1997 political transfer of Hong Kong to the People's Republic of China, Hong and colleagues (1999) found that Hong Kong college students' theories moved toward the entity (people cannot change) view of moral character. Hong and colleagues (1999) suggested that students' incremental view shifted toward the entity view because, as the handover approached, the mass media (e.g., news programs) tended to talk about the different characteristics of Hongkongers and Chinese, suggesting that they possessed stable traits. Similarly, Levy et al. (2010) demonstrated a temporary reduction in PWE beliefs among African Americans following the United States government's slow response to Hurricane Katrina's mostly African American victims (also see Levy, Freitas, Mendoza-Denton, & Kugelmaas, 2006). For African Americans, the events surrounding Hurricane Katrina seemed to provide a dramatic reminder of long-standing social injustices and inequities toward African Americans at the hands of the United States government, undermining trust that all groups have an equal opportunity to prosper. African Americans, but not European Americans, reported weaker endorsement of PWE-Equalizer immediately after Hurricane Irene as well as when primed with Katrina months later. While

African Americans' endorsement of PWE-Equalizer returned to levels seen before Katrina or when not primed, these findings show that even prevalent belief systems are sensitive to environmental triggers.

Public policies, private programs, and the popular media can also communicate belief systems in direct and indirect ways. In the United States, affirmative action (a policy that aims to ensure that numerical minority racial groups are represented in various educational and occupational settings) supports multiculturalism, and *Alcoholics Anonymous* (a program that helps alcoholics overcome their addictive behaviors) supports the incremental theory by emphasizing that people can change. The criminal system in some countries suggests that people can change by allowing for release upon rehabilitation, but at the same time, suggests that they cannot change by allowing capital punishment or not allowing people to enter certain careers with a criminal record. Additionally, mass media influences such as films, books, and songs support different belief systems (e.g., the song, "One Love," by Bob Marley and the Wailers promotes egalitarianism; the movie, "Billy Elliot" by British director, Stephen Daldry, supports the incremental theory as the main character's father changes and is shaped by environmental forces).

Belief systems also can be taught indirectly through commonplace practices that occur at home and in schools. For example, Kamins and Dweck (1999) found that a teacher's response to failure on a task could promote either the entity or incremental theory among kindergartners. Children who received feedback that blamed failure on the child as a whole ("I'm very disappointed in you") were more likely to endorse an entity (fixed) view of attributes (goodness or badness) than were children who received feedback that focused on the child's strategies ("The blocks are all crooked and in one big mess; maybe you could think of another way to do it"), who were relatively more likely to endorse the incremental view.

Researchers have explored temporarily altering belief systems or making a particular belief system salient, as noted earlier, in different settings (e.g., educational, laboratory), in different countries (e.g., Canada, the United States) and among different age groups (e.g., elementary school students, undergraduate students). However, the long-term effects of manipulations or influences tend not to be examined (see Rosenthal & Levy, 2010, Stephan et al., 2001).

Despite abundant work showing the far-reaching impact of prevalent belief systems on group processes, the study of how belief systems develop and change is still a relatively understudied area. As more work is increasingly focused on how belief systems can serve people's epistemic, psychological, and social needs, we anticipate that future work will focus on how belief systems develop and change and how they are influenced by people's differing needs within and across cultures. Another trend that we expect to continue is the examination of these belief systems among diverse participants (e.g., in terms of age, race/ethnicity, social status, education) within and across cultures.

Conclusion

The lay belief systems discussed in this article are held by diverse groups of people, to differing extents, within and across cultures. They are often communicated, directly and indirectly, through popular sayings. As such, children are aware of their culture's belief systems from a young age, even though their understanding and use of such belief systems may develop and change over time. Belief systems help the holder to understand and maneuver his or her social world by filtering one's experiences and observations. Such belief systems not only serve people's epistemic needs but also social and psychological needs. As highlighted in this chapter, belief systems affect people's thoughts, feelings, and behaviors toward themselves and others. It is our hope that efforts will be made to identify and facilitate the use and communication of belief systems that both foster intergroup harmony and meet the perceivers' diverse individual needs. We look forward to future work toward this end.

References

- About, F. E. (1988). *Children and prejudice*. New York: Blackwell.
- About, F. E., & Fenwick, V. (1999). Evaluating school-based interventions to reduce prejudice in preadolescents. *Journal of Social Issues, 55*, 767-785.
- Allport, G. W. (1954). *The nature of prejudice*. Cambridge, MA: Addison-Wesley.
- Altemeyer, B. (1998). The other "authoritarian personality." *Advances in Experimental Social Psychology, 30*, 47-92.
- Banks, J. A. (2004). Multicultural education: Historical developments, dimensions, and practice. In J. A. Banks & C. A. M. Banks (Eds.). *Handbook of research in multicultural education*. (pp. 3-30). San Francisco, CA: Jossey Bass.
- Bastian, B., & Haslam, N. (2006) Psychological essentialism and stereotype endorsement. *Journal of Experimental Social Psychology, 42*, 228-235.
- Berry, J., & Kalin, R. (1995). Multicultural and ethnic attitudes in Canada: An overview of the 1991 national survey. *Canadian Journal of Behavioural Science, 27*, 301-320.
- Bigler, R. S. (1999). The use of multicultural curricula and materials to counter racism in children. *Journal of Social Issues, 55*, 687-705.
- Brewer, M. B., & Miller, N. (1984). Beyond the contact hypothesis. Theoretical perspectives on desegregation. In N. Miller M. B. Brewer (Eds.), *Groups in contact: The psychology of desegregation* (pp. 281-302). New York: Academic Press.
- Bruner, J. S. (1957). Beyond the information given. In J. S. Bruner, E. Brunswick, L. Festinger, F. Heider, K. F. Muenzinger, C. E. Osgood et al. (Eds.), *Contemporary approaches to cognition* (pp. 41-69). Cambridge, MA: Harvard University Press.
- Chiu, C-y., Hong, Y. Y., & Dweck, C. (1997). Lay dispositionism and implicit theories of personality. *Journal of Personality and Social Psychology, 73*, 19-30.

- Church, T. A., Ortiz, F. A., Katigbak, M. A., Avdeyeva, T. V., Emerson, A. M., Vargas Flores, J., & Ibáñez Reyes, J. (2003). Measuring individual and cultural differences in implicit trait theories. *Journal of Personality and Social Psychology, 85*, 332–347.
- Correll, J., Park, B., & Smith, J. A. (2008). Colorblind and multicultural prejudice reduction strategies in high-conflict situations. *Group Processes and Intergroup Relations, 11*, 471-491.
- Crandall, C. S. (2000). Ideology and ideologies of stigma: The justification of stigmatization. In T. F. Heatherton, R. E. Kleck, M. R. Hebl & J. G. Hull (Eds.), *The social psychology of stigma* (pp. 126-150). New York: The Guilford Press.
- Crandall, C. S., & Martinez, R. (1996). Culture, ideology, and antifat attitudes. *Personality and Social Psychology Bulletin, 22*, 1165-1176.
- Duckitt, J. & Sibley, C. G. (2007). Right wing authoritarianism, social dominance orientation and the dimensions of generalized prejudice. *European Journal of Personality, 21*, 113-130.
- Dweck, C. S. (1999). *Self-theories: Their role in motivation, personality, and development*. Philadelphia, PA: Psychology Press.
- Dweck, C. S., Chiu, C-y., & Hong, Y. Y. (1995a). Implicit theories and their role in judgments and reactions: A world from two perspectives. *Psychological Inquiry, 6*, 267-285.
- Dweck, C. S., Chiu, C-y., & Hong, Y. Y. (1995b). Implicit theories: Elaboration and extension of the model. *Psychological Inquiry, 6*, 322-333.
- Esses, V. M., & Gardner, R. C. (1996). Multiculturalism in Canada: Context and current status. *Canadian Journal of Behavioural Science, 28*, 145-152.
- Flint, K. (2006). Indian-African encounters: Polyculturalism and African therapeutics in Natal, South Africa, 1886-1950s. *Journal of Southern African Studies, 32*, 367-385.
- Furnham, A., Bond M., Heaven, P., Hilton, D., Lobel, T., Masters, J., Payne, M., Rajamanikam, R., Stacey, B., & Daalen, H. V. (1993). A comparison of Protestant work ethic beliefs in thirteen nations, *The Journal of Social Psychology, 133*, 185-197.
- Gaertner, S., & Dovidio, J. (2000). *Reducing intergroup bias: The common ingroup identity model*. Philadelphia, PA: Psychology Press.
- Gaertner, S.L., Dovidio, J. F., Anastasio, P.A., Bachman, B.A., & Rust, M.C. (1993). The common ingroup identity model: Recategorisation and the reduction of intergroup bias. In W. Stroebe & M. Hewstone (Eds.), *European Review of Social Psychology* (Vol. 4, pp. 1-26). Chichester, UK: Wiley.
- Heider, F. (1958). *The psychology of interpersonal relations*. New York: Wiley.
- Higgins, E. T. (1996). Knowledge activation: Accessibility, applicability and salience. In E. T. Higgins & A. E. Kruglanski (Eds.), *Social psychology: Handbook of basic principles* (pp.133-168). New York: Guilford.
- Hong, Y. Y., Chiu, C-y. Yeung, G., & Tong, Y. Y. (1999). Social comparison during the political transition: Interaction of entity versus incremental beliefs and social identities. *Journal of Intercultural Relations, 23*, 257-279.

- Hong, Y. Y., Levy, S. R., & Chiu, C.-y. (2001). The contribution of the lay theories approach to the study of groups. *Personality and Social Psychology Review*, 5, 98-106.
- Hong, Y. Y., Chan, G., Chiu, C., Wong, R. Hansen, I., Lee, S., Tong, Y., & Fu H. (2003). How are social identities linked to self-conception and intergroup orientation: The moderating effect of implicit theories. [*Journal of Personality and Social Psychology*](#), 85, 1147-1160.
- Kamins, M. L., & Dweck, C. S. (1999). Person versus process praise and criticism: Implications for contingent self-worth and coping. *Developmental Psychology*, 35, 835-847.
- Karafantis, D.M., & Levy, S.R. (2004). The role of children's lay theories about the malleability of human attributes in beliefs about and volunteering for disadvantaged groups. *Child Development*, 75, 236-250.
- Kelley, R. D. G. (1999). The people in me. *Utne Reader*, 95, 79-81.
- Kelly, G. A. (1955). *The psychology of personal constructs*. New York: Norton.
- Levy, S. R., Chiu, C.-y., & Hong, Y. Y. (2006). Lay theories and intergroup relations. *Group Processes and Intergroup Relations*, 9, 5-24.
- Levy, S. R., Freitas, A. L., Mendoza-Denton, R., & Kugelmaas, H., & Rosenthal, L. (2010). When Sociopolitical Events Strike Cultural Beliefs: Divergent Impact of Hurricane Katrina on African Americans' and European Americans' Endorsement of the Protestant Work Ethic. *Basic and Applied Social Psychology*, 32, 1-10.
- Levy, S.R., Freitas, A.L., Mendoza-Denton, R., & Kugelmaas, H. (2006). Hurricane Katrina's Impact on African Americans' and European Americans' Endorsement of the Protestant Work Ethic. *Analyses of Social Issues and Public Policy*, 6, 75-85.
- Levy, S.R., Plaks, J.E., Hong, Y.Y., Chiu, C.Y., & Dweck, C.S. (2001). Static vs. dynamic theories and the perception of groups: Different routes to different destinations. *Personality and Social Psychology Review*, 5, 156-168.
- Levy, S. R., Stroessner, S. J., & Dweck, C. S. (1998). Stereotype formation and endorsement: The role of implicit theories. *Journal of Personality and Social Psychology*, 74, 1421-1436.
- Levy, S. R., West, T., & Ramírez, L. (2005). Lay theories and intergroup relations: A social developmental perspective. *European Review of Social Psychology*, 16, 189-220.
- Levy, S. R., West, T., Ramírez, L., & Karafantis, D. M. (2006). The Protestant work ethic: A lay theory with dual intergroup implications. *Group Processes and Intergroup Relations*, 9, 95-115.
- Lewin, K. (1951). *Field theory in social science: Selected theoretical papers*. New York: Harpers.
- Plaks, J., Levy, S. R., & Dweck, C. (2009). Lay theories of personality: Cornerstones of meaning in social cognition. *Social and Personality Psychology Compass*, 3, 1069-1081.
- Plaks, J. E., Stroessner, S. J., Dweck, C. S., & Sherman, J. (2000). Person theories and attention allocation: Preferences for stereotypic versus counter stereotypic information. *Journal of Personality and Social Psychology*, 80, 876-893.

- Plaut, V. C., Thomas, K. M., & Goren, M. J. (2009). Is multiculturalism or color blindness better for minorities? *Psychological Science, 20*, 444-446.
- Prashad, V. (2001). *Everybody was Kung Fu fighting: Afro-Asian connections and the myth of cultural purity*. Boston: Beacon Press.
- Pratto, F., Sidanius, J., Stallworth, L. M., & Malle, B. F. (1994). Social dominance orientation: A personality variable predicting social and political attitudes. *Journal of Personality and Social Psychology, 67*, 741-763.
- Ramírez, L., Levy, S. R., Velilla, E., & Hughes, J. M. (2010). Considering the roles of culture and social status: The Protestant work ethic and egalitarianism. *The Revista latinoamericana de Psicología, 42*, 381-390.
- Richeson, J. A., & Nussbaum, R. J. (2004). The impact of multiculturalism versus color blindness on racial bias. *Journal of Experimental Social Psychology, 40*, 417-423.
- Rosenthal, L., & Levy, S. R. (2012). The relation between polyculturalism and intergroup attitudes among racially and ethnically diverse adults. *Cultural Diversity and Ethnic Minority Psychology, 18*, 1-16.
- Rosenthal, L., & Levy, S. R. (2010). The colorblind, multicultural, and polycultural ideological approaches to improving intergroup attitudes and relations. *Social Issues and Policy Review, 4*, 215-246.
- Rosenthal, L., Levy, S. R., & Moss, I. (2012). Polyculturalism and openness about criticizing one's culture: Implications for sexual prejudice. *Group Processes and Intergroup Relations, 5*, 149-166.
- Rosenthal, L., Levy, S. R., & Moyer, A. (2011). Protestant work ethic's relation to intergroup and policy attitudes: A meta-analytic review. *European Journal of Social Psychology, 41*, 874-885.
- Rosenthal, L., London, B., Levy, S. R., Lobel, M., & Herrera-Alcazar, A. (2011). The relation between the Protestant work ethic and undergraduate women's perceived identity compatibility in nontraditional majors. *Analyses of Social Issues and Public Policy, 11*, 241-262.
- Ryan, C. S., Casas, J. F., & Thompson, B. K. (2010). Interethnic ideology, intergroup perceptions, and cultural orientation. *Journal of Social Issues, 66*, 29-44.
- Ryan, C. S., Hunt, J. S., Weible, J. A., Peterson, C. R., & Casas, J. F. (2007). Multicultural and colorblind ideology, stereotypes, and ethnocentrism among Black and White Americans. *Group Processes and Intergroup Relations, 10*, 617-637.
- Schofield, J. W. (1986). Causes and consequences of the colorblind perspective. In J. F. Dovidio & S. L. Gaertner (Eds.), *Prejudice, discrimination, and racism* (pp. 231- 254). New York: Academic Press.
- Sleeter, C. E. (1991). *Empowerment through multicultural education*. Albany, NY: State University of New York Press.
- Stephan, C. W., Renfro, L., & Stephan, W. G. (2004). The evaluation of multicultural education programs: Techniques and meta-analysis. In W. G. Stephan & P. G. Vogt, (Eds.), *Education programs for improving intergroup relations: Theory, research, and practice* (pp. 227-242). New York: Teachers College Press.

- Stephan, W. G., & Stephan, C. W. (2001). *Improving intergroup relations*. Thousand Oaks, CA: Sage.
- Turner, J. C., & Oakes, P. J. (1997) The socially structured mind. In C. McGarty & S. A. Haslam (Eds.), *The message of social psychology* (pp. 355-373). Oxford, MA: Blackwell.
- Verkuyten, M. (2005). Ethnic group identification and group evaluation among minority and majority groups: Testing the multiculturalism hypothesis. *Journal of Personality and Social Psychology, 88*, 121-138.
- Verkuyten, M. (2009). Self-esteem and multiculturalism: An examination among ethnic minority and majority groups in the Netherlands. *Journal of Research in Personality, 43*, 419-427.
- Vorauer, J. D., Gagnon, A., & Sasaki, S. J. (2009). Salient intergroup ideology and intergroup interaction. *Psychological Science, 20*, 838-845.
- Wegener, D. T., & Petty, R. E. (1998). The naive scientist revisited: Naive theories and social judgment. *Social Cognition, 16*, 1-7.
- Wolsko, C., Park, B., & Judd, C. M. (2006). Considering the tower of Babel: Correlates of assimilation and multiculturalism among ethnic minority and majority groups in the United States. *Social Justice Research, 19*, 277-306.
- Wolsko, C., Park, B., Judd, C. M., & Wittenbrink, B. (2000). Framing interethnic ideology: Effects of multicultural and color-blind perspectives on judgments of groups and individuals. *Journal of Personality and Social Psychology, 78*, 536-654.
- Yzerbyt, V., Judd, C.M., & Corneille, O. (Eds.). (2004). *The psychology of group perception: Perceived homogeneity, entitativity, and essentialism*. New York: Psychology Press.
- Zirkel, S. (2008). Creating more effective multiethnic schools. *Social Issues and Policy Review, 2*, 187-241.

Related Webpages

<http://www.understandingprejudice.org/>

This website is for students, teachers, and other concerned individuals who want to understand the causes and consequences of prejudice. It is a vast website with 2000 links for researchers. With a grant from the National Science Foundation, Professor Scott Plous of Wesleyan University developed UnderstandingPrejudice.org. The website is comprehensive with over 2000 links to resources including readings, videos, syllabi, and more.

http://psychology.ucdavis.edu/rainbow/html/prej_defn.html

This website discusses prejudice toward people with homosexual and bisexual orientations, and explains how this prejudice exists at the individual and societal levels.

<http://www.tolerance.org>

<http://www.splcenter.org/teachingtolerance/tt-index.html>

These websites are dedicated to fighting hate and promoting intergroup harmony. They are part of Teaching Tolerance, an educational program sponsored by the Southern Poverty Law Center. The websites track prejudice in the news, supply tools for fighting prejudice, and offer classroom resources for elementary school through college students.

<http://www.publiceye.org/tooclose/scapegoating-04.html>

This website discusses prejudice as a problem of society, rather than merely techniques such as scapegoating (blaming a particular group for the problems of others) to avoid fixing the complex and difficult problems of society.

About the Authors

Sheri R. Levy is an Associate Professor of Psychology at Stony Brook University. She earned a Ph.D. in Psychology from Columbia University. One main line of her research concerns the pivotal role of people's lay (everyday) belief systems on academic, health, and social outcomes relevant to prejudice, stigmatization, and intergroup relations. Levy's website can be found at <http://www.psychology.stonybrook.edu/slevy-/Levylab/Home.html>. Levy may be contacted at sheri.levy@stonybrook.edu

Tara West earned her Ph.D. in Social and Health Psychology from Stony Brook University in 2003 and her J.D. from New York University in 2008. She is a family and divorce mediator in Manhattan, and information about her practice can be found at www.tarawestmediation.com. West may be contacted at tara@tarawestmediation.com.

Lisa Rosenthal earned her Ph.D. in Social and Health Psychology from Stony Brook University in 2011 and is currently a Post-Doctoral Associate in Public Health at Yale University. Her research focuses on prejudice, discrimination, and intergroup relations, including the social, academic, and health consequences of being a member of a stigmatized group. Rosenthal may be contacted at lisa.rosenthal@yale.edu.

Questions for Discussion

1. How are lay belief systems similar to and different from scientific theories?
2. Why would we find cross-cultural similarities and differences in the extent to which people agree with the belief systems discussed in this chapter?
3. What is the evidence that these belief systems may be, in part, environmentally caused?

4. How might people benefit from holding the different belief systems discussed in this chapter?
5. Why might particular belief systems be more or less accessible to a given individual?
6. In what ways do the entity and incremental theories (beliefs about the malleability of human attributes) relate to increased and decreased prejudice?
7. In what ways do beliefs about diversity (colorblindness, multiculturalism, and polyculturalism) relate to increased and decreased prejudice?
8. In what ways does the Protestant work ethic belief system relate to prejudice?
9. What strategies for altering people's belief systems seem most versus least effective?
10. Why would it be difficult to alter people's belief systems?

Activities

The activities are is intended to illustrate the social transmission of belief systems, and to illustrate some of the ways that beliefs systems serve people's epistemic, social, and psychological needs:

1. Generate a list of as many proverbs from your culture as you can. Which ones are your favorite proverbs (the ones you use the most in your everyday life)? Where did you learn your favorite proverbs – e.g., family members, friends, teachers, mass media? Are your favorite ones also the favorite ones of people you admire or interact with frequently? Why do you think those proverbs are your favorites? In other words, how do those proverbs help you in your everyday life? Other proverbs on your list may not be your favorite ones; however, you are likely familiar with them because you hear others use them. Are these the favorite proverbs of family members, friends, teachers, or mass media outlets? Why do you think those proverbs are other people's favorite proverbs? In other words, how do those proverbs help them in their everyday lives? What proverbs do you or would you ideally like to teach to the next generation (children), and why?
2. Politicians sometimes reinforce belief systems such as Entity and Incremental Theories, Multiculturalism, Colorblindness, Polyculturalism, and the Protestant Work Ethic. Think back to speeches you have heard by politicians, observe a political debate, or review transcripts of such speeches or debates and see whether you can identify the use of one or more of these belief systems. How was the belief system used to address a goal or need by the politician? How effective do you think the use of the belief system was?

3. Try to match each of the following English proverbs to the belief systems you read about in this chapter (Entity and Incremental Theories, Multiculturalism, Colorblindness, Polyculturalism, and the Protestant Work Ethic):
- The early bird catches the worm;
 - Don't judge a book by its cover;
 - It's never too late to turn over a new leaf;
 - Vive la difference;
 - You can't teach an old dog new tricks;
 - Anyone can pull themselves up by their bootstraps;
 - All that glitters is not gold;
 - A leopard never changes its spots;
 - Be an ant, not a grasshopper.