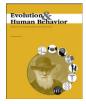
ELSEVIER

Original Article

Contents lists available at SciVerse ScienceDirect

Evolution and Human Behavior



journal homepage: www.ehbonline.org

The behavioral immune system and social conservatism: a meta-analysis

John A. Terrizzi Jr.^{a,*}, Natalie J. Shook^a, Michael A. McDaniel^b

^a West Virginia University

^b Virginia Commonwealth University, Morgantown, WV

ARTICLE INFO

Article history: Initial receipt 13 August 2012 Final revision received 18 October 2012

Keywords: Behavioral immune system Social conservatism Disgust

ABSTRACT

The behavioral immune system (BIS) is a cluster of psychological mechanisms (e.g., disgust) that have evolved to promote disease-avoidance (Schaller M. (2006). Parasites, behavioral defenses, and the social psychological mechanisms through which cultures are evoked. *Psychological Inquiry*, 17, 96–101). Recent evidence suggests that the BIS may promote avoidance of outgroup members, an historical source of contamination, by evoking social conservatism (Terrizzi JA Jr, Shook NJ, & Ventis WL. (2010). Disgust: A predictor of social conservatism and prejudicial attitudes toward homosexuals. *Personality and Individual Differences*, 49, 587–592; Terrizzi J, Shook N, Ventis L. (2012). Religious conservatism: An evolutionarily evoked disease-avoidance strategy. *Religion, Brain & Behavior*, 2, 105–120.). That is, the BIS mechanisms may encourage the endorsement of socially conservative beliefs, which promote social exclusivity, tradition, and negativity toward outgroups. The current study provides a systematic review and meta-analysis of 24 studies to evaluate the hypothesis that the BIS is predictive of social conservatism. The results indicate that behavioral immune strength, as indicated by fear of contamination and disgust sensitivity, is positively related to social conservatism (i.e., right-wing authoritarianism, social dominance orientation, religious fundamentalism, ethnocentrism, collectivism, and political conservatism). These findings provide initial evidence that socially conservative values may function as evolutionarily evoked disease-avoidance strategies.

© 2013 Elsevier Inc. All rights reserved.

1. Introduction

Historically, infection and disease have posed adaptive challenges for humans. In order to overcome these evolutionary hurdles, humans are equipped with both a biological immune system, which removes contaminants once they have entered the body, and a behavioral immune system (BIS), which is composed of psychological mechanisms that encourage disease-avoidance (Schaller, 2006). The adaptive advantage of the BIS is that it promotes prophylactic behavior, providing organisms with a first line of defense against contamination. If an organism has a sensitive or reactive BIS, it would not have to use the valuable resources that the biological immune system requires. As other people are a significant source of infectious disease, the BIS has important implications for social interaction and may play an important role in the emergence of culture. The current paper provides a systematic meta-analysis of the existing data to evaluate whether individual differences in the BIS are predictive of adherence to socially conservative value systems (i.e., ideological systems that promote ingroup homogeneity and outgroup avoidance).

E-mail address: jterriz1@mix.wvu.edu (J.A. Terrizzi).

1.1. Behavioral immune system

Activation of the BIS occurs when individuals are exposed to sensory information that is indicative of potential contamination, i.e., gustatory (e.g., sour milk), olfactory (e.g., garbage), auditory (e.g., clearing throat), visual (e.g., vomit), or tactile (e.g., sticky substance) input. Stimuli that resemble substances which can transmit disease (e.g., vomit, urine, feces, pus, and blood) are particularly effective elicitors of BIS activation (Curtis & Biran, 2001; Curtis, Aunger, & Rabie, 2004). In reaction to such stimuli, the BIS automatically induces adaptive affective (e.g., disgust), cognitive (e.g., thoughts of contamination), and behavioral (e.g., avoidance) responses that promote diseaseavoidance. In other words, the BIS encourages individuals to avoid situations that could lead to contamination. One of the primary mechanisms of the BIS is disgust, a cross-culturally recognized emotion that invokes feelings of revulsion when individuals are exposed to repulsive stimuli (Ekman, 1970). Disgust serves a protective function by indicating that a specific stimulus may pose a disease-threat and should be avoided (Curtis & Biran, 2001; Faulkner, Schaller, Park, & Duncan, 2004; Navarrete & Fessler, 2006; Oaten, Stevenson, & Case, 2009).

Although the BIS is conceptualized as a cluster of adaptive diseaseavoidance mechanisms, there is significant variability in BIS sensitivity and reactivity. The BIS is not simply a system that an individual either has or does not have, but rather a system that varies in strength across individuals. Thus, the BIS, can be assessed as a chronic personality trait.

^{*} Corresponding author. West Virginia University, Department of Psychology, PO Box 6040, Morgantown, WV 26506–6040. Tel.: +1 304 212 5657.

^{1090-5138/\$ -} see front matter © 2013 Elsevier Inc. All rights reserved. http://dx.doi.org/10.1016/j.evolhumbehav.2012.10.003

People who have a strong BIS are preoccupied with thoughts of contamination and are prone to Type I errors (i.e., perceiving something as a disease threat when it is not). Consequently, the cost of a strong BIS is that potentially viable resources will be neglected due to fear of contamination, whereas the benefit is reduced exposure to disease. On the other hand, people with a weak BIS may be less likely to miss out on valuable resources but more likely to be exposed to deadly contagions. However, some exposure to infectious disease can have long-term immunological benefits such as increasing immunological memory. Measures of individual differences in the BIS include the perceived vulnerability to disease scale, (PVD; Duncan, Schaller, & Park, 2009), the three domain disgust scale (Tybur, Lieberman, & Griskevicius, 2009), and the disgust sensitivity scale (Haidt, McCauley, & Rozin, 1994).

The BIS has implications for social interactions and intergroup attitudes. As long as humans have lived in groups, they have shared diseases. Other people, especially outgroup members who may harbor novel pathogens, are potential sources of infectious disease. As such, Schaller and Duncan (2007) have argued that the BIS should encourage individuals to prefer ingroup members over outgroup members. Indeed, researchers have demonstrated that the BIS as indexed by PVD is correlated with negative attitudes toward outgroups including individuals who are disabled, obese, or foreign (Park, Faulkner, & Schaller, 2003; Faulkner et al., 2004; Navarrete & Fessler, 2006; Park, Schaller, & Crandall, 2006). Likewise, disgust sensitivity has been correlated with prejudice toward homosexuals using both explicit and implicit measures (Inbar, Pizarro, Knobe, & Bloom, 2009; Olatunji, 2008; Terrizzi, Shook, & Ventis, 2010). Moreover, activating the BIS (e.g., priming disease-threat) increases negative attitudes toward outgroups and increases positive attitudes toward the ingroup (Faulkner et al., 2004; Navarrete & Fessler, 2006). Together, these results suggest that BIS strength and activation of the BIS encourage individuals to exhibit positivity toward ingroup members and negativity toward outgroup members.

Beyond intergroup attitudes, the BIS may have broader socially relevant correlates, which have implications for the emergence of culture. More specifically, the BIS may prepare individuals to avoid potentially contaminated outgroups by facilitating the adoption of sociocultural value systems that promote ingroup homogeneity and outgroup exclusion. Theoretically, those who have a stronger BIS may be more likely to endorse socially conservative values that result in smaller, more cohesive and less diverse ingroups.

1.2. Social conservatism

Social conservatism can be defined broadly as any sociocultural value system that encourages strict adherence to social norms and emphasizes social exclusivity. Individuals who adopt such value systems are devoted to social conventions and traditions, which function as a means of promoting ingroup cohesion (Altemeyer, 1988). Adherence to social norms helps to ensure that ingroup members do not behave in ways that are contrary to the group's best interest and helps to distinguish ingroup members from outgroup members (Triandis, 1994). Social conservatives have little tolerance for individuals who deviate from social conventions. Thus, they are more discriminating in terms of who they consider an ingroup member, resulting in a narrower ingroup and a more diverse outgroup (Gudykunst, Gao, Schmidt, Nishida, et al., 1992).

Right-wing authoritarianism (RWA) and social dominance orientation (SDO) are examples of socially conservative value systems. RWA is an adherence to tradition, submission to authority, and aggression toward outgroup members (Altemeyer, 1988). Similarly, SDO is an individual's belief in a hierarchical social structure (Pratto, Sidanius, Stallworth, & Malle, 1994). Both of these belief systems are similar in that they promote ingroup cohesion and negativity toward outgroup members. A meta-analysis demonstrated that they are both consistently, positively correlated with prejudice toward outgroups including ethnic and sexual minorities (Sibley & Duckitt, 2008).

Cultural value systems can also promote social conservatism. Collectivism emphasizes strict adherence to social norms, or social conservatism, whereas individualism promotes autonomy and independence (Triandis, 1994). More recently, collectivism has been divided into horizontal and vertical subtypes. In cultures that exhibit horizontal collectivism, group members are seen as equals, whereas vertical collectivism is more socially conservative in that it emphasizes social hierarchies (i.e., some individuals are better than others; Singelis, Triandis, Bhawuk, & Gelfand, 1995). Collectivism, like other forms of social conservatism, promotes an increased ingroup bias. For example, collectivism encourages increased within group reciprocity but not between group reciprocity (Yamagishi, Jin, & Miller, 1998) and greater discrimination between ingroup and outgroup members (Gudykunst et al., 1992).

Social conservatism can also be described as a strict adherence to specific value systems (e.g., religious conservatism, ethnocentrism, political conservatism). For example, religious conservatism is a dogmatic allegiance to a specific religious worldview including adherence to religious texts, doctrines, and rituals. It is characterized by a general intolerance for alternative worldviews and has long been known to correlate with prejudice toward outgroup members (Altemeyer & Hunsberger, 2004). Furthermore, the relation between religious conservatism and prejudice is mediated by social conservatism (e.g., RWA), suggesting that it is the socially conservative nature of religious conservatism that promotes prejudice (Laythe, Finkel, & Kirkpatrick, 2001).

Likewise, social conservatism may manifest itself in terms of ethnocentrism, a value system in which individuals believe that their ethnic group is inherently superior to other groups. For example, American ethnocentrism is associated with ingroup bias (e.g., patriotism) and negative attitudes toward foreign others (Neuliep & McCroskey, 1997; Navarrete & Fessler, 2006). Another form of social conservatism may be political conservatism. However, it is important to note that there are two types of political conservatism: social/ cultural conservatism, which is associated with dogmatism and adherence to tradition, and economic conservatism (Johnson & Tamney, 2001). Although social conservatism and economic conservatism are positively correlated, social conservatism is more relevant to social injustices such as prejudice whereas economic conservatism is concerned with distribution of wealth (Jost, Federico, & Napier, 2009). Thus, social, not economic, political conservatism is relevant to the current discussion. Politically conservative social attitudes (e.g., conservative attitudes toward immigration) are more indicative of social conservatism and have implications for group norms and intergroup interactions. Indeed, political conservatism has been positively correlated with prejudice toward African Americans and homosexuals (Sears & Henry, 2003; Terrizzi et al., 2010).

The evidence presented here suggests that social conservatism can take a variety of forms including RWA, SDO, collectivism, religious fundamentalism, ethnocentrism, and political conservatism. These forms of social conservatism function as a means of promoting ingroup cohesion and cooperation (Yamagishi et al., 1998), as well as encouraging avoidance of and prejudice toward outgroup members (Gudykunst et al., 1992; Neuliep & McCroskey, 1997; Sears & Henry, 2003; Altemeyer & Hunsberger, 2004; Sibley & Duckitt, 2008; Terrizzi et al., 2010). Thus, social conservatism may function as a social strategy that promotes adherence to traditions and norms, sharp boundaries between ingroup and outgroup members, and avoidance of and negativity toward outgroup members.

1.3. BIS and social conservatism

The primary function of the BIS is to encourage individuals to avoid potential sources of contamination. One potential source of Download English Version:

https://daneshyari.com/en/article/943246

Download Persian Version:

https://daneshyari.com/article/943246

Daneshyari.com