UCLA

Title

Feeling Valued in (Racial, Ethnic, Sexual Minority, Student-based and Organizational) Groups: How One Comes to Feel Valued, and Its Downstream Health Implications

Permalink

https://escholarship.org/uc/item/1460j137

Author

BEGENY, CHRISTOPHER THOMAS

Publication Date

2017

Peer reviewed|Thesis/dissertation

UNIVERSITY OF CALIFORNIA

Los Angeles

Feeling Valued in (Racial, Ethnic, Sexual Minority, Student-based and Organizational) Groups:

How One Comes to Feel Valued, and Its Downstream Health Implications

A dissertation submitted in partial satisfaction of the requirement for the degree of

Doctor of Philosophy in Psychology

by

Christopher Thomas Begeny

2017

ABSTRACT OF THE DISSERTATION

Feeling Valued in (Racial, Ethnic, Sexual Minority, Student-based and Organizational) Groups:

How One Comes to Feel Valued, and Its Downstream Health Implications

by

Christopher Thomas Begeny

Doctor of Philosophy in Psychology

University of California, Los Angeles, 2017

Professor Yuen J. Huo, Chair

This program of research examines how individuals come to feel valued and admired within the social groups they belong to (*intragroup status*), and its downstream implications for health. Four studies (Papers 1 and 2; total $N = 1,807$) first examine the downstream mental health implications of feeling valued within one's own ethnic or sexual minority group. Results support the proposed intragroup status and health (ISAH) model, which explains how feeling valued in one's minority group has benefits for health but also indirect costs (through the way it shapes minorities' identity and discrimination experiences). Stepping back, three additional studies (Paper 3; total $N = 1,007$) examine *how individuals come to feel admired* within social groups. Tests of a new conceptual model that applies not just to members of minority groups but other groups as well (e.g., workgroups, student groups) suggest that when individuals experience *distinctive treatment* in a group—instances where other group members seek out their guidance, or ask them to provide some form of expertise that can benefit the group—it emboldens their

sense of intragroup status and, downstream, promotes greater mental health (explained via identity-based processes). Overall, this program of research offers integration and advancement of multiple theoretical frameworks that ultimately aim to help explain how individuals' health is shaped by their everyday experiences within a variety of important social groups.

The dissertation of Christopher Thomas Begeny is approved.

Sandra Graham

Steven P. Reise

Margaret Shih

Heather J. Smith

Yuen J. Huo, Committee Chair

University of California, Los Angeles

2017

To

Milo Fox & Tyler Marie

For the infinite love, support and joy you provide.

Table of Contents

Vita

EDUCATION

M.A	University of California, Los Angeles	2012
B.A.	Kalamazoo College	2008

ACADEMIC APPOINTMENTS

Collegium of University Teaching Fellow (UCLA)	2016 - 2017
URM Research Program Supervisor (UCLA)	2015 - 2016
Teaching Associate / Fellow (UCLA)	2012 - 2015
Junior Research Staff (Rush Alzheimer's Disease Center)	2009 - 2011
Junior Research Fellow (Lewis Walker Institute)	2008 - 2009

RESEARCH GRANTS, AWARDS & FELLOWSHIPS

UCLA Research Initiative for Diversity and Equity Grant (Co-PI)	2014 - 2017
Society for Personality and Social Psychology Student Travel Grant	2016
UCLA Psychology Department Conference Travel Grant	2013 - 2015
UCLA Graduate Summer Research Mentorship Travel Grant	2013 & 2012
Monica Salinas Research Fellowship (UCLA)	2015
National Science Foundation Graduate Research Fellowship, Hon. Mention	2013 & 2012
American Psychological Association & Psi Chi Junior Scientist Fellowship	2012
UCLA Graduate Summer Research Mentorship Award	2012
UCLA Distinguished University Fellowship	2011 - 2012

PUBLICATIONS

Begeny, C. T. & Huo, Y. J. (in press). When identity hurts: How positive intragroup experiences can yield negative mental health implications for ethnic and sexual minorities. *European Journal of Social Psychology*.

Begeny, C. T. & Huo, Y. J. (2016). Is it always good to feel valued? The psychological benefits and costs of higher perceived status in one's ethnic minority group. *Group Processes & Intergroup Relations.* Advance online publication. doi:10.1177/1368430216656922

Huo, Y. J., Binning, K. R., & Begeny, C. T. (2015). Promoting social engagement and well-being in diverse groups: The role of respect. In S. Otten, I. van der Zee, & M. Brewer (Eds), *Toward inclusive organizations: Determinants of successful diversity management at work.* Psychology Press.

Wilson, R. S., Boyle, P. A., Segawa, E., Yu, L., Begeny, C. T., Anagnos, S. E., Bennett, D. A. (2013). The Influence of cognitive decline on well-being in old age. *Psychology and Aging, 28, 2*, 304-313. doi: 10.1037/a0031196

Barnes, L. L., Lewis, T. T., Begeny, C. T., Yu, L., Bennett, D. A., Wilson, R. S. (2012). Perceived discrimination and cognition in older African Americans. *Journal of the International Neurological Society, 18, 5,* 856-865. doi: 10.1017/S1355617712000628

Wilson, R.S., Begeny, C. T., Boyle, P.A., Schneider, J.A., Bennett, D.A. (2011). Vulnerability to stress, anxiety, and development of dementia in old age. *American Journal of Geriatric Psychiatry, 19,* 327-334. doi: 10.1097/JGP.0b013e31820119da

PRESENTATIONS

Symposium Chair

Begeny, C. T. & Greenaway, K. H. (2017, January). *The power to harm and heal: How identities impact health.* Symposium held at the annual meeting of the Society for Personality and Social Psychology, San Antonio, TX.

Conference Talks & Symposia Presentations

Begeny, C. T. & Huo, Y. J. (2017, January). Everyday interactions turn the strength of "me" into the strength of "we." In C. T. Begeny & K. H. Greenaway (chairs), *The power to harm and heal: How identities impact health.* Symposium held at the annual meeting of the Society for Personality and Social Psychology, San Antonio, TX.

Begeny, C. T. & Huo, Y. J. (2016, July). Is it always good to feel valued? The psychological benefits *and* costs of high status in one's ethnic minority group. In H.J. Smith & Y.J. Huo (chairs), *Inequity and Health.* Symposium held at the meeting of the International Society for Justice Research, Canterbury, England.

Begeny, C.T. (2016, July). Knowing your place in the group: Intragroup status and the experience of distinctive treatment. Presentation given at the meeting of the International Society for Justice Research Ph.D. Workshop, Canterbury, England.

Begeny, C. T. & Huo, Y. J. (2015, February). The psychological benefits (and costs) of feeling valued in one's ethnic minority group: Ethnic intragroup status and mental health among Asians, Blacks and Latinos in the U.S. In T.A. Kirby & C.R. Kaiser (chairs), *Detecting and responding to inclusion cues: Implications for racial minorities.* Symposium held at the annual meeting of the Society for Personality and Social Psychology, Long Beach, CA.

Poster Presentations   (list available upon request)

TEACHING AWARDS, FELLOWSHIPS & GRANTS

UCLA Distinguished Teaching Award, with Dissertation Year Fellowship	2016 - 2017
UCLA Office of Instructional Development Teaching Grant	2016 - 2017
Collegium of University Teaching Fellowship (UCLA)	2016 - 2017
Shepherd Ivory Franz Distinguished Teaching Award (UCLA)	2015
AmeriCorps Education Award	2008

TEACHING EXPERIENCE

Instructor (UCLA)	
Social Hierarchies & Our Status in Groups	2017
Psychology Research Opportunities Program	2015 - 2016
Teaching Associate / Fellow (UCLA & Kalamazoo College)	2007 - 2017

MENTORING EXPERIENCE

URM Research Mentoring Program Supervisor (UCLA)	2015 - 2016
Research Mentor (UCLA)	
Postgraduate Student Mentoring	2012 - 2016
Undergraduate Individual Research Projects	2013 - 2016
Undergraduate Research Apprenticeships in Psychology	2013 – 2016

Overview

This program of research examines how individuals come to feel valued and admired within the different social groups they belong to (*intragroup status*) and its downstream implications for their mental health. The groups examined in these studies range from ethnic minority groups (Papers 1, 2 and 3) and sexual minority groups (Paper 2), to work organizations (Paper 3) and undergraduate communities (Paper 3).

Papers 1 and 2

The Health Implications of Feeling Valued in One's Ethnic or Sexual Minority Group

In Papers 1 and 2 (Begeny & Huo, 2016, Begeny & Huo, in press), I examine the downstream mental health implications of feeling valued within one's own ethnic or sexual minority group. Four studies (total $N = 1,807$) test a new conceptual model, referred to as the intragroup status and health (ISAH) model. It posits that when individuals feel valued in their minority group it has benefits for health, but also certain indirect costs. Costs arise because when individuals feel valued in their minority group it bolsters their group identification; with greater identity-centrality, individuals tend to view daily social interactions through the 'lens' of their minority group and ultimately perceive more group-based discrimination. Discrimination, in turn, negatively shapes individuals' mental health (e.g., more anxiety and depressive symptoms). Thus, feeling valued in one's minority group may have benefits for health but also indirect costs.

Results of all four studies supported the ISAH model's predictions. Studies 1 and 2 (Paper 1) tested the ISAH model within each of the three largest U.S. ethnic minority groups (Asian/Asian American, Black/African American, Latino/Hispanic), including among both college students and a more general community sample (minorities living throughout the U.S.). These studies also tested alternative theoretical perspectives (e.g., whether the strength of one's

1

minority group identity buffers the adverse effects of discrimination on health) and found very little support for them.

To better assess how processes outlined in the ISAH model function over time, Study 3 (Paper 2) tested the ISAH model longitudinally in a cohort of Asian/Asian American and Latino(a)/Hispanic college students followed over a one-year span. Results again supported the ISAH model's predictions. There was again very little support for alternative predictions.

To assess whether the ISAH model might also be helpful in understanding the experiences and health of individuals in other stigmatized groups, particularly those with a more *concealable* stigmatized identity, Study 4 (Paper 2) examined the predictive utility of the model among sexual minorities (men in the Gay community). Results again supported the ISAH model but while also evincing support for an adapted form of it, designed for use in the context of more concealable stigmatized identities (sexual minorities).

Thus, overall, these four studies indicate that while feeling valued in one's own ethnic or sexual minority group has unequivocal benefits for individuals' health, there are also certain costs that arise as a function of how it shapes individuals' minority group identity and vigilance to expressions of discrimination in everyday life.

Paper 3

Considering How Individuals Come to Feel Valued and Admired in Groups

Finding that individuals' sense of status in their minority group has downstream health implications prompts the question: how do individuals *develop* a sense of their status in groups?

Studies 5, 6 and 7 (Paper 3; total $N = 1,007$) examine this question, among others. Most notably: how might individuals not only develop a sense of status in groups (to feel valued and admired) but also a sense of belonging in groups (to feel included, accepted and well-liked)? In

efforts to understand how individuals develop a sense of status and belonging in groups, I outline and test a new conceptual model that aims to shed light on these antecedent processes. Notably, this model seems to apply not just to members of stigmatized minority groups but also other, non-stigmatized groups (e.g., work organizations, student communities).

The model builds from the fundamental idea that individuals discern their belonging and status in groups based on how others in that group treat them during everyday interactions (Tyler, Degoey & Smith, 1996). This includes how employees in a company are treated by their co-workers, how students are treated by peers at school, and how ethnic minority individuals are treated by other members of their own ethnic minority group. Yet unlike past work, which generally describes a single form of group-based treatment (being treated in ways that conveys respect and care for one's well-being) the proposed framework outlines a second form (being treated in ways that convey recognition and appreciation for one's distinct qualities, skills, etc.) and suggests that each differentially shape individuals' sense of belonging and status (respectively). Thus, compared to previous theorizing the current framework aims to provide a more precise and comprehensive understanding of how individuals develop a sense of being accepted and well-liked (belonging) and/or valued and admired (status) within the groups they engage with in everyday life (work organizations, student communities, ethnic minority groups).

Additionally, this framework explains how individuals' sense of belonging and status in groups yield downstream health consequences. It integrates past work on intragroup processes (Huo, Binning & Molina, 2010) with recent advances in 'social cure' research (Greenaway et al., 2015) to explain how a strong sense of belonging and status in groups can promote individuals' health, in part by strengthening their identification with the group and overall sense of control over life.

Results of all three studies supported the model's predictions. Overall, this suggests that when individuals engage with others in certain key social groups they are attuned to whether others convey respect and care for them (cues that elicit a sense of belonging) and whether others convey interest and appreciation for their particular skills, perspective or knowledge (cues that elicit a sense of status). Ultimately, being attuned to these messages reflect individuals' attention to two distinct forms of group-based treatment. Results further suggest that when groups provide individuals with a sense of belonging and status, via these forms of group-based treatment, it has important downstream implications for their identification with the group, sense of control over life and ultimately their health.

References

Anderson, C., Hildreth, J. A. D., & Howland, L. (2015). Is the desire for status a fundamental human motive? A review of the empirical literature. *Psychological Bulletin, 141*(3), 574–601. doi:10.1037/a0038781

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117*(3), 497–529. doi:10.1037/0033-2909.117.3.497

Begeny, C. T., & Huo, Y. J. (2016). Is it always good to feel valued? The psychological benefits *and* costs of higher perceived status in one's ethnic minority group. *Group Processes & Intergroup Relations.* Advance online publication. doi:10.1177/1368430216656922

Begeny, C. T. & Huo, Y. J. (in press). When identity hurts: How positive intragroup experiences can yield negative mental health implications for ethnic and sexual minorities. *European Journal of Social Psychology*.

Greenaway, K. H., Haslam, S. A., Cruwys, T., Branscombe, N. R., Ysseldyk, R., & Heldreth, C. (2015). From "we" to "me": Group identification enhances perceived personal control with consequences for health and well-being. *Journal of Personality and Social Psychology, 109*(1), 53–74. doi:10.1037/pspi0000019

Huo, Y. J., Binning, K. R., & Molina, L. E. (2010). Testing an integrative model of respect: Implications for social engagement and well-being. *Personality and Social Psychology Bulletin, 36*(2), 200-212. doi:10.1177/0146167209356787

Tyler, T. R., Degoey, P., & Smith, H. J. (1996). Understanding why the justice of group procedures matters. *Journal of Personality and Social Psychology*, *70*(5), 913-930. doi: 10.1037/0022-3514.70.5.913

Paper 1

Is It Always Good to Feel Valued?

The Psychological Benefits and Costs of Higher Perceived Status

in One's Ethnic Minority Group

Christopher T. Begeny [a]

Yuen J. Huo [a]

[a] University of California, Los Angeles, Department of Psychology

Abstract

Two studies (*N*=1,048) examined how Blacks', Asians' and Latinos' perceived value within their own ethnic group (ethnic intragroup status) shapes mental health (depression, anxiety, psychological distress). The proposed intragroup status and health (ISAH) model predicts that feeling valued among ethnic ingroup members has benefits for health, but also indirect costs. Costs arise because individuals who feel highly valued in their ethnic group see their ethnicity as more central to their self-concept; with stronger identity-centrality, individuals more frequently view daily social interactions through the 'lens' of their ethnicity and ultimately perceive/experience more discrimination. Discrimination, in turn, adversely shapes mental health. Results of structural equation modeling supported these predictions across all groups in both studies. Thus, feeling valued in one's minority group may be a double-edged sword for mental health. Overall, the ISAH model reveals how intragroup processes, when considered from an intergroup perspective, advance our understanding of minority mental health.

Keywords: social identity; discrimination; status; health and well-being

Is It Always Good to Feel Valued? The Psychological Benefits *and* Costs of Higher Perceived Status in One's Ethnic Minority Group

By 2040, ethnic minorities are projected to outnumber Whites in the United States (U.S. Census, 2012). Despite representing a large and growing portion of the U.S. population, minorities continue to encounter ethnic discrimination, which negatively affects mental health (Pascoe & Smart Richman, 2009; Williams, Neighbors & Jackson, 2003). Undoubtedly, intergroup experiences such as ethnic discrimination contribute to the state of minorities' mental health. But relations with ethnic ingroup members also play an important role. Emerging research shows that minorities who feel valued and respected among members of their own ethnic group have lower levels of psychological distress, anxiety and greater well-being (Huo, Binning & Begeny, 2015; Postmes & Branscombe 2002; Wolff, Subramanian, Acevedo-Garcia, Weber & Kawachi, 2010).

Based on these two bodies of research, one may reasonably conclude that discrimination has negative implications for minorities' mental health, while feeling valued in one's ethnic group (i.e., looked up to or highly regarded) has positive implications. However, this straightforward assessment (that inter- and intragroup experiences have independent effects on health) may not adequately capture the dynamic between ingroup and outgroup sources of social evaluative feedback (Ellemers, Doosje, & Spears, 2004). In the current research, we introduce a novel conceptual model that describes how feeling highly valued in one's ethnic group shapes mental health both directly and indirectly through its influence on minorities' experiences with outgroup members (i.e., with ethnic discrimination). In a departure from past research, which focuses on the benefits of feeling valued and respected among ingroup members (e.g., for

psychological well-being; Huo, Binning, & Molina, 2010; Postmes & Branscombe, 2002; Smith, Tyler, & Huo, 2003), the proposed intragroup status and health (ISAH) model suggests that these benefits, when considered in the context of intergroup relations, may be accompanied by downstream costs for mental health.

Integrating theories on intragroup relations, self-categorization processes and minority health, the ISAH model explains how feeling admired and highly valued within one's ethnic minority group can have both benefits and potential costs for mental health. Costs arise because higher perceived status among ingroup members can shape one's self-concept in ways (e.g., greater perceived embodiment of prototypical qualities, more salient ethnic identity) that lead to more frequent perceptions/experiences of ethnic discrimination, which can negatively impact mental health. Thus, overall, the ISAH model proposes two pathways through which perceptions of status in one's ethnic minority group shape mental health. The benefits path captures the positive effects of feeling highly valued among ingroup members, and the costs path explains its negative indirect effects on mental health (see Figure 1).

While the health benefits of intragroup status are consistent with previous work on intragroup processes, the mental health *costs* outlined in this model have not been considered before. They are only illuminated when intragroup relations are considered in the context of key intergroup experiences (i.e., expressions of discrimination). Previous research has not conceptually integrated these processes in a way that would reveal such health costs and so the ISAH model represents a unique perspective on the dynamic between inter- and intragroup sources of social evaluative feedback. Thus, overall, the ISAH model provides a novel, theoretically integrated framework for understanding the multiple ways through which intragroup relations shape individuals' mental health.

Two studies assessed the validity of the ISAH model. While relevant previous work has focused largely on a single racial/ethnic group (Blacks/African Americans), the current studies examine the experiences of Blacks along with the two fastest growing ethnic groups in the U.S.– Asians and Latinos. This enables direct empirical comparisons across groups.

Benefits of Intragroup Status

The benefits path of the ISAH model highlights the positive association between feeling valued in one's ethnic group and mental health. This pathway is motivated by theory and research suggesting that within self-relevant groups individuals attend to signals coming from other group members (authority figures and ingroup peers) indicating their standing within the group (Ellemers et al., 2004; Tyler & Blader, 2003; Tyler, Degoey, & Smith, 1996). Individuals are motivated to discern their standing within groups because it provides identity-relevant information and guides appraisals of self-worth (Smith et al., 2003). In the current research, individuals' standing in a group is referred to as intragroup status (akin to intragroup standing and status-based respect; see Huo et al., 2010), which reflect perceptions of being looked up to, highly regarded or admired by other ingroup members. From this perspective, intragroup status does not reflect a formally established position in the group (e.g., based on job title) but instead reflects a subjective 'position' based on the degree to which one's personal qualities and characteristics are collectively admired by the group (Emler & Hopkins, 1990).

Previous research suggests higher perceived intragroup status may be beneficial for mental health. For example, field studies and lab experiments show that it bolsters individuals' self-esteem, life satisfaction and general well-being (Anderson, Kraus, Galinsky & Keltner, 2012; Huo et al., 2010; Smith et al., 2003). Notably, however, previous work has focused on the more distal aspects of mental health (e.g., self-esteem, well-being). It remains unclear whether

10

perceived intragroup status also shapes more direct indicators of mental health per se (e.g., anxiety, depressive symptoms). These indicators are important in their own right, but are also critical to examine because they are linked to several physical health outcomes including diabetes, increased blood pressure, body fat distribution and increased risk of mortality (Adler, Epel, Castellazzo & Ickovics, 2000; Moussavi et al., 2007; Russ et al., 2012).

Previous research has also not considered the mental health implications of feeling valued (or devalued) within *ethnic* groups (though, for minority-related work on intragroup respect in the context of other types of groups, see Huo et al., 2010). Because racial and ethnic groups are culturally salient social categorizations in the United States, particularly for ethnic minorities, perceived status within these groups may be a particularly relevant referent for self-evaluative purposes and thus shape mental health. Also, for targets of ethnic discrimination, the ethnic ingroup can serve as a preferred, arguably more legitimate source of social evaluation (Crocker & Major, 1989). Thus, for multiple reasons, minorities' perceived status within their ethnic group is likely to have meaningful implications for their mental health.

Indirect Costs of Intragroup Status

In contrast to the benefits path, the costs path of the ISAH model highlights the indirect negative association between intragroup status and mental health. This path describes how perceptions of ethnic intragroup status can frame minorities' experiences with ethnic outgroup members and yield negative downstream consequences for mental health (i.e., by shaping their ethnic identity in ways that increase perceptions/experiences with discrimination). Integrating theory and research on intragroup relations, self-categorization processes and minority mental health, the costs path highlights the novel possibility that higher intragroup status is not uniformly positive, as previous research suggests.

Intragroup status and identity. Intragroup research suggests that being valued in a group not only promotes mental health but also greater cognitive attachment to the group. Meaning, individuals with higher perceived status are more likely to view that group as important or central to their self-concept (i.e., stronger ethnic identity-centrality; Leach et al., 2008; Simon & Stürmer, 2003; Tyler & Blader, 2002). This may be in part because individuals with higher perceived status are seen as more prototypical—representing a stronger embodiment of the values and characteristics that help define the group as a whole (Fielding & Hogg, 1997; Hogg, 2001). With a stronger perceived 'fit' or match between their personal characteristics and those that define the group as a whole, higher status individuals are more likely to see that group as defining or central to who they are (van Knippenberg & van Knippenberg, 2005; for a similar argument see Wright, Aron and Tropp, 2002).

Identity, discrimination and health. While stronger identity-centrality has positive implications for group functioning (e.g., increased group-oriented behavior; Tyler & Blader, 2003), research on intergroup relations suggests that it also has some *negative* implications for individuals' mental health. Individuals whose ethnic identity is central to their self-concept are more likely to use that identity as a cognitive schema or 'lens' through which they view and interpret their social experiences (Smith, Coats, & Walling, 1999). Consequently, they are more vigilant to threats to their ethnic group and perceive more discrimination (Crocker, Voelkl, Testa, & Major, 1991; Sellers & Shelton, 2003). Perceptions of discrimination in turn predict adverse mental health outcomes (Pascoe & Smart Richman, 2009). In support of this perspective, laboratory experiments found that minorities high in ethnic identity-centrality perceive greater discrimination than those low in identity-centrality (Operario & Fiske, 2001). Longitudinal research also found that Black college students higher in ethnic identity-centrality report more

12

frequent experiences of discrimination over time (controlling for baseline reports of discrimination), and that discrimination predicts higher levels of psychological distress over time (controlling for initial levels of distress; Sellers & Shelton, 2003). Together, these findings suggest that stronger ethnic identity-centrality can increase perceptions/experiences of discrimination in daily life and, consequently, adversely impact mental health. Thus, another key prediction of the ISAH model is that intragroup status will predict lower mental health through its promotion of identity-centrality and heightened perceptions of discrimination (ethnic intragroup status → identity-centrality → perceived discrimination → lower mental health; the costs path).

To note, highly identified minorities may not only *perceive* more discrimination but also be *subject to* more discrimination. Research shows that Whites actually express more negative attitudes toward highly identified minorities (Kaiser & Pratt-Hyatt, 2009). Therefore, the link between ethnic identity-centrality and discrimination may be explained by internal cognitive factors (e.g., perceptions of discrimination in ambiguous situations, greater vigilance and detection of discrimination), as well as external factors (e.g., Whites' attitudes toward highly identified minorities). Importantly, these perspectives converge on the prediction that highly identified minorities will report more frequent experiences of discrimination.

It is also important to note that some researchers have previously considered the dynamics between minority intragroup relations, perceived discrimination and well-being (e.g., the rejection-identification model; Branscombe, Schmitt & Harvey, 1999; Postmes & Branscombe, 2002). However, this work has not focused on how positive intragroup relations can promote perceptions/experiences of discrimination, nor how positive intragroup relations can have negative indirect health effects. Previous work has also tended to focus on affective

13

dimensions of ethnic identity (e.g., pride) whereas the current research focuses on cognitive aspects (see Leach et al., 2008). Thus, the conceptual framework and predictions provided by the ISAH model are quite distinct from those outlined in previous work.

Evaluating the ISAH Model among Blacks, Asians and Latinos

The current research tests the validity of the ISAH model among Blacks, Asians and Latinos. Relevant research has largely focused on Blacks, so it remains unclear whether the hypothesized processes in the ISAH model will function similarly among other minority groups. One possibility is that these processes will be more evident among Blacks compared to Asians or Latinos. Given the unique degree of segregation Black Americans face (e.g., residential; Williams & Collins, 2001), ethnic intragroup relations may be particularly frequent, salient or meaningful and thus have more bearing on mental health. Similarly, the enduring forms of discrimination Black Americans face (compared to Asians and Latinos; Sears & Savalei, 2006) may uniquely shape their experiences with outgroup members (e.g., greater vigilance to discrimination). Thus, the ISAH model may capture the psychological experiences of Black Americans better than those of Asians or Latinos. However, there is also evidence that the processes outlined in the ISAH model may function similarly across minority groups. For example, research shows that discrimination negatively impacts not only Blacks' but also Asians' and Latinos' psychological health (e.g., Moradi & Risco, 2006). Moreover, an extensive meta-analysis found that ethnicity did not moderate the relationship between perceived discrimination and mental health (e.g., among Asians, Blacks, Hispanics, Native Americans; Pascoe & Smart Richman, 2009). Additionally, experimental data show that highly identified Blacks, Asians and Latinos are all more likely to perceive discrimination than those less identified with their ethnic group (Operario & Fiske, 2001). These findings suggest that

processes outlined in the ISAH model may represent 'core' psychological processes—those that operate similarly across minority groups. The current research will empirically assess whether predictions outlined in the ISAH model generalize beyond Blacks to Asians and Latinos.

Overview of the ISAH Model

The intragroup status and health (ISAH) model suggests that feeling valued in one's ethnic minority group can be a double-edged sword—associated with benefits, but also indirect costs for mental health (Figure 1). Costs arise because minorities who feel valued in their ethnic group are more likely to see their ethnicity as central to their self-concept, which leads to more frequent perceptions/experiences of discrimination in daily life. Perceived discrimination in turn negatively affects mental health.

While previous research has focused on the benefits of intragroup status, the ISAH model suggests there may also be costs to feeling valued, particularly for targets of discrimination. Thus, the ISAH model represents an integrative framework for explaining how minorities' experiences with ingroup members can influence the 'lens' through which they view intergroup experiences. It provides a novel perspective on the multiple ways through which intragroup relations shape minorities' mental health.

Current Research

Two large-scale field studies examined how Blacks', Asians', and Latinos' perceptions of being valued within their ethnic group shape mental health in both positive and negative ways. Study 1 sampled students from a public university. Study 2 sampled adults recruited from the general U.S. population. These field data capture individuals' real-world, lived experiences among ethnic ingroup and outgroup members and enable us to assess how perceptions of being valued predict the levels of anxiety, distress and depression individuals experience in their

everyday life. The validity of the ISAH model was tested using structural equation modeling.

To more thoroughly evaluate the unique contributions of the ISAH model, key alternative theoretical models were tested. The first alternative model was derived from the rejection-identification model (RIM), which makes competing predictions about how intragroup relations shape minorities' experiences with discrimination (e.g., Postmes & Branscombe, 2002). Both ISAH and RIM suggest that perceived discrimination negatively impacts health and well-being, but RIM also suggests that experiencing discrimination strengthens minorities' identification with their ethnic group, which in turn positively shapes psychological health. Thus, according to RIM, the negative effects of discrimination are offset by its indirect positive effects on ethnic identity. By comparison, the ISAH model suggests that identification *increases* experiences with discrimination and has no direct influence on mental health. In extensions of RIM, it has also been suggested that positive intragroup relations indirectly promote well-being through ethnic identity (Postmes & Branscombe, 2002). Therefore, an alternative rejection-identification model was designed to test these competing predictions (Figure 2A).

A second alternative model tested the role of resilience, which reflects individuals' capacity to buffer the adverse effects of stressful experiences through adaptive response (Luthar, Cicchetti, & Becker, 2000). Resilience has been used as a framework for explaining how the strength of minorities' ethnic identity can buffer the adverse effects of discrimination on psychological health (Sellers, Caldwell, Schmeelk-Cone & Zimmerman, 2003). Ethnic identity may buffer these effects because highly identified minorities maintain a larger repertoire of coping strategies (Sellers et al., 2003) or perceive greater access to ingroup social support (Haslam, O'Brien, Jetten, Vormedal & Penna, 2005). Consistent with the resilience framework, Sellers and colleagues (2003) found that ethnic identity-centrality not only leads to more

16

frequent perceptions of discrimination but also attenuates the relationship between discrimination and psychological health. To examine this alternative resilience-based perspective, we added an identity-by-discrimination interaction term to the ISAH model (see Figure 2B – top interaction term). This tested whether the negative effects of discrimination on mental health were buffered by the strength of individuals' ethnic identity. This alternative model is referred to as the identity-resilience model.

A third alternative model was also motivated by a resilience framework. This model tested whether feeling valued in one's ethnic group buffered the negative effects of discrimination on health. Amidst experiences of discrimination, which convey devaluation among outgroup members, feeling valued among ethnic ingroup members may serve as an alternative point of reference for evaluating self-worth (Crocker & Major, 1989). Rather than gauging one's self-worth based on the devaluation expressed by outgroup members, one may turn their focus toward their ethnic ingroup. This shift in referents may reduce the adverse psychological impact of discrimination. To examine this possibility, we added an intragroup status-by-discrimination interaction term to the ISAH model (Figure 2B – bottom interaction term). This tested whether the negative effects of discrimination on mental health varied as a function of minorities' perceived status in their ethnic group. This alternative model is referred to as the ingroup comparisons model, reflecting the potential buffering effect that occurs when shifting one's referent toward ingroup comparisons and away from outgroup comparisons.

Lastly, with the ISAH model predicting benefits *and* costs to feeling valued among ingroup members, an important question arises: Overall, is feeling valued more helpful or harmful to one's mental health? In the current research, we address this question by examining the total effect of intragroup status on mental health in the ISAH model, which reflects the

17

positive and negative effects of intragroup status together. If the total effect is positive then the benefits of feeling valued empirically 'outweigh' the costs.

Study 1 Method

Participants

Participants were 581 students from the University of California, Los Angeles (59 Black/African American, 203 Asian/Asian American, 319 Latino(a)/Hispanic; 73% female, M_{age} = 20). The smaller number of Blacks/African Americans is proportional to their representation at the university. Recruitment e-mails were sent from the registrar's office to a random sample of U.S.-born students aged 18+, self-identified as either Asian/Asian American, Black/African American, or Latino(a)/Hispanic. We limited our sample to U.S.-born minorities because reactions to and experiences with discrimination are meaningfully different for foreign-born minorities (Perez, Fortuna & Alegrõa, 2008).

Procedure

Participants completed an online survey described as being about experiences with social groups and well-being. To recruit a more diverse and representative sample, we did not describe the study as being about discrimination nor mention any selection criteria. Individuals first completed an eligibility questionnaire; those who qualified for the study were invited to participate. Participants were entered into a $100 lottery.

Measures

Ethnic Intragroup Status. Four items measured individuals' perceptions of their status within their ethnic group. Items began with the stem, "When I am around people of my own racial/ethnic group, I generally feel that they…": "hold me in high regard," "look up to me," "see me as a leader in my racial/ethnic group," "see me as a role model for others in my racial/ethnic

group." Items were rated on a 7-point scale (1 *strongly disagree* – 7 *strongly agree*) and were reliable (α ≥ .92 for each ethnic group).[1]

Ethnic Identity-Centrality. Three items measured ethnic identity-centrality (Leach et al., 2008). Participants' race/ethnicity was piped in to the text of each item (Asian/Asian American, Black/African American, Latino(a)/Hispanic; e.g., "The fact that I am [ ] is an important part of how I see myself,"). Items were rated on a 7-point scale (1 *strongly disagree* – 7 *strongly agree*) and were reliable (α ≥ .82 for each ethnic group). [1]

Perceived Discrimination. Five items measured the frequency of experiencing racial/ethnic discrimination (see Postmes & Branscombe, 2002). This scale was selected because of its applicability to members of different ethnic groups (i.e., because the specific nature and content of discrimination can vary widely for members of different ethnic groups). Items began with the stem, "In the past year, how often have you felt that…" (e.g., "you were being discriminated against because of your race/ethnicity?," "you were being treated according to racial/ethnic stereotypes?"). These items likely capture the sum of minorities' discrimination experiences including blatant and subtle forms. Items were rated on a 5-point scale (1 *never* – 5 *very often*) and were reliable (α ≥ .90 for each ethnic group). [1]

Trait-Anxiety. Six items from the State-Trait Anxiety Inventory-Trait scale measured general perceptions of anxiety (Spielberger, 1983). Participants indicated how often they would describe themselves in each of several ways (e.g., "I worry too much over something that doesn't really matter," "I feel pleasant;" reverse scored). Items were measured on a 5-point scale (1 *never* – 5 *very often*) and were reliable (α ≥ .81 for each ethnic group).

Psychological Distress. Six items from the Perceived Stress Scale (Cohen, Kamarck & Mermelstein, 1983) measured individuals' general appraisals of stress (e.g., "In the past four

weeks, how often have you felt nervous and 'stressed'?"). Items were measured on a 5-point scale (1 *never* – 5 *very often*) and were reliable (α ≥ .78 for each ethnic group).

  Depressive Symptoms. Depressive symptoms were measured using the ten-item Boston Form of the Center for Epidemiological Studies Depression symptoms index (CES-D; Kohout, Berkman, Evans, Cornoni-Huntley, 1993). Participants indicated how often they felt the following ways over the past week (e.g., "I felt depressed," "I enjoyed life;" reverse scored). Items were measured on a 4-point scale (0 *never/rarely* – 3 *very often*) and were reliable (α ≥ .76 for each ethnic group).

<div align="center">

Results

</div>

  Hypotheses were tested using structural equation modeling (SEM) in EQS Version 6.2 (Bentler, 2006). Latent factors were constructed to estimate ethnic intragroup status, ethnic identity-centrality, perceived discrimination (using the aforementioned items as indicators) and mental health (using composites of the three aforementioned measures as indicators; this enabled unbiased estimates of structural parameters without specifying an overly-complex measurement model). Data were analyzed using robust maximum likelihood estimation (Satorra & Bentler, 1990). [2] Model fit was assessed using the comparative fit index (CFI; values ≥ 0.95 indicating good fit) and the root-mean-square error of approximation (RMSEA; values ≤ 0.06 with confidence intervals upper-bounded at ≤ 0.08 indicating good fit; Browne & Cudeck, 1993; Hu & Bentler, 1999). The conventional chi-square goodness-of-fit index is also reported, but with large sample sizes it is difficult to yield non-significant chi-square values even when the model fits well (Bentler, 2006). Summary statistics and bivariate correlations are presented in Table 1.

Testing for Ethnic Group Differences

  To determine whether the ISAH model fit equally well for each ethnic group, we ran

multiple groups analyses, which essentially test whether ethnicity is a moderator of the hypothesized model. It simultaneously analyzes the data from each ethnic group separately and determines whether a single model can reproduce the sample covariance matrices for each within sampling accuracy. Parameter constraints are added to further test assumptions that the psychological processes examined in the model operate similarly across groups (Bentler, 2006). To provide a highly conservative test of these assumptions we added constraints to all free parameters in the model. Only item error variances were free to vary. In so doing, we tested: (a) whether variables used in this model conceptually reflected the same underlying constructs for each ethnic group, and (b) whether each construct was related to the others in the model in the same way for each ethnic group.

Results of the multiple groups analyses indicated that the hypothesized model fit similarly across all ethnic groups, Satorra-Bentler χ^2 (286, N = 581) = 436.9, $p < .001$, CFI = 0.97, RMSEA = .05 (CI: .04 - .06). We tested the model with fewer restrictions and model fit did not significantly change (e.g., ΔCFI < .01). We also ran tests of invariance for each constrained

path in the model. Each path was indeed statistically invariant across ethnic groups. Taken together, this indicated that the variables used in this model conceptually reflected the same underlying constructs and each construct was related to the others in the same way for each ethnic group. Therefore, subsequent analyses were conducted with data collapsed across groups. For ease of interpretation, model fit estimations by ethnic group are provided in Table 2.

Testing the ISAH Model

To test the ISAH model, we specified a model in which ethnic intragroup status predicted mental health directly (benefits path) and indirectly through identity-centrality and perceived discrimination (costs path; Figure 1). As expected, the ISAH model fit very well, χ^2 (86, N =

581) = 258.7, $p < .001$, CFI = 0.97, RMSEA = .06 (CI: .05 - .07), overall $R^2_{\text{mental health}}$ = .24. We also examined the model's path coefficients (Figure 3). As predicted, ethnic intragroup status was directly associated with greater mental health ($\beta = .33$, $p < .001$). Additionally, as predicted, ethnic intragroup status was positively associated with identity-centrality ($\beta = .27$, $p < .001$), indicating that minorities with higher perceived status in their ethnic group viewed their ethnicity as more central to their self-concept. Stronger identity-centrality was associated with more frequent experiences of discrimination ($\beta = .27$, $p < .001$), and in turn lower levels of mental health ($\beta = -.38$, $p < .001$). Thus, all paths were significant and consistent with predictions. To assess whether the benefits of feeling valued outweighed the indirect psychological health costs, we examined the total effect of intragroup status on mental health, which was positive ($\beta = 0.31$, $p < .001$), indicating that feeling valued was overall more helpful than harmful to minorities' mental health.

Additionally, we confirmed that no alternative structural models empirically fit the data better, nor that a more parsimonious version of the hypothesized model approximated the data equally well. We did this by conducting a Wald test beginning with a fully saturated structural model. This procedure examines the strength of pathways between each and every factor and determines which set of pathways should be kept and which should be removed to optimally fit the data. Results showed that all structural paths in the hypothesized model should be kept, while all structural paths *not* included should be removed.

Alternative Theoretical Models

Rejection-identification, identity-resilience and ingroup comparisons models. To further assess the validity of the ISAH model, we tested three alternative theoretical models (Figure 2). The first reflected predictions derived from the rejection-identification model (RIM;

Postmes & Branscombe, 2002). Two others reflected predictions from a resilience framework (e.g., Sellers et al., 2003). These resilience-based models predicted that the adverse effects of discrimination on health could be buffered, either by the strength of minorities' ethnic identity (identity-resilience model) or through perceptions of being valued in their ethnic group (ingroup comparisons model). In each of these models, an interaction term was added to test these buffering effects (identity-by-discrimination, intragroup status-by-discrimination, respectively). Each interaction term was modeled as a latent factor using an unconstrained approach with three indicator variables, each representing cross-product terms created from mean centered main effect variable indicators using a matched pairs strategy (Marsh, Wen & Hau, 2004).

All alternative models were first subjected to multiple groups analyses following the same protocols described earlier. Results indicated that each alternative model fit similarly across groups. Subsequent analyses were therefore conducted with data collapsed across groups. Overall, the fit of RIM was reasonable but appeared to be worse than that of the ISAH model, Satorra-Bentler χ^2 (86, N = 581) = 307.7, $p < .001$, CFI = 0.96, RMSEA = .07 (CI: .06 - .08). Additionally, compared to the ISAH model, RIM seemed to account for less variance on mental health, $R^2_{mental\ health}$ = .14 (this value is nearly half that of the ISAH model's). This suggested that RIM was a weaker model for predicting minorities' mental health overall, compared to the ISAH model (in terms of anxiety, depressive symptoms and psychological distress). Similarly, the fit of the two alternative (more complex) resilience models appeared to be no better than that of the ISAH model: identity-resilience model, Satorra-Bentler χ^2 (130, N = 581) = 290.0, $p < .001$, CFI = 0.97, RMSEA = .04 (CI: .04 - .05); ingroup comparisons model, Satorra-Bentler χ^2 (130, N = 581) = 269.6, $p < .001$, CFI = 0.97, RMSEA = .04 (CI: .04 - .05). Most importantly, the interaction terms in both resilience models did not significantly predict mental health (identity-

23

centrality interaction term: $\beta = .07$, $p = .10$; intragroup status interaction term: $\beta = .04$, $p = .48$).

These findings indicated that the relationship between discrimination and mental health did not

vary as a function of the strength of individuals' ethnic identity, nor as a function of their

perceived status in their ethnic group.

Discussion

Study 1 results provided support for the ISAH model. Minorities with higher perceived

status in their ethnic group reported less anxiety, distress and fewer depressive symptoms.

However, they also reported greater ethnic identity-centrality, which was associated with more

frequent experiences of discrimination and, in turn, reduced mental health. Results of Study 1

also revealed that the ISAH model fit well not only among Blacks but also Asians and Latinos.

Alternative theoretical and empirical models were evaluated and the ISAH model appeared to

consistently surface as the best fitting and most parsimonious model.

Although Study 1 provided initial support for the ISAH model, it had some limitations.

Consistent with the university population sampled, the number of Blacks was small compared to

Asians and Latinos. To be more confident that the psychological processes outlined in the ISAH

model operate similarly across ethnic groups, we wanted to rule out the possibility that group

differences exist but our ability to detect them was limited by a small sample of Black

individuals. Another limitation comes from sampling students from a liberal university. Minority

students, compared to minority adults in non-university contexts, more strongly identify with

their ethnic group and more firmly oppose prejudiced attitudes (Henry, 2008). This suggests that

our student sample may attach greater meaning to ethnic group feedback and be more likely to

detect and respond to prejudice expressions than a general adult sample. Therefore, the

psychological processes outlined in the ISAH may not be as apparent in a more general adult

24

sample (because, e.g., less meaning is attached to ethnic identity, vigilance to discrimination is lower). For these reasons it is prudent to evaluate the ISAH model using data from a general adult sample. In Study 2, we address Study 1 limitations by sampling relatively equal numbers of Black, Asian, and Latino adults from different U.S. communities.

Study 2 Method

Participants & Procedure

Participants were 467 U.S.-born ethnic minority adults (171 Black/African American, 144 Asian/Asian American, 152 Latino(a)/Hispanic; 56% female, $M_{age} = 30$) recruited through Amazon Mechanical Turk. Individuals were asked to complete an online study about their experiences with social groups and their well-being in exchange for a small remuneration. As in Study 1, recruitment advertisements did not describe the study as being about discrimination nor mention any selection criteria. Individuals completed a brief eligibility questionnaire; those who qualified for the study proceeded to the main survey.

Measures

Because the user platform in Study 2 (Amazon mTurk) generally requires more brevity, we developed a condensed version of the Study 1 survey. Ethnic intragroup status, identity-centrality, trait-anxiety and psychological distress were measured using Study 1 items (all $\alpha \geq$ .85). Perceived discrimination was measured with a single item capturing the most essential and ubiquitous feature of discrimination: "In the past year, how often have you been treated unfairly because of your race/ethnicity?" (Landrine & Klonoff, 1996). It was measured on a 5-point scale (1 *never* – 5 *very often*). The CES-D was not included.

Results and Discussion

Our hypotheses were again tested using EQS Version 6.2. Latent factors were constructed

in the same fashion as in Study 1. Data were analyzed using robust maximum likelihood estimation. [2] Summary statistics and bivariate correlations are presented in Table 3. Notably, the frequency of perceived discrimination, strength of ethnic identity and level of intragroup status were all higher in our student sample (Study 1) compared to this general adult sample (all differed at $p < .001$). This is consistent with our suggestion that students attach greater meaning to ethnic group feedback and are more likely to detect prejudice than adults.

As in Study 1, we first ran a conservative multiple groups analysis and results indicated the ISAH model fit equally well for each ethnic group, Satorra-Bentler χ^2 (122, N = 467) = 146.3, $p = .07$, CFI = 0.99, RMSEA = .04 (CI: .00 - .06). We also tested the model with fewer restrictions and fit did not significantly change (e.g., ΔCFI < .01). We also examined univariate tests of invariance for each constrained path in the model. Of the 26 tests, one indicated slight lack of invariance. [3] Together, these results suggested that variables used in this model conceptually reflected the same underlying constructs and each construct was generally related to the others in the same way for each ethnic group. Subsequent analyses were therefore run with data collapsed across groups. For ease of interpretation, model fit estimations by ethnic group are provided in Table 4.

Testing the ISAH Model

As expected, the hypothesized model fit the data very well, Satorra-Bentler χ^2 (32, N = 467) = 56.1, $p = 0.005$, CFI = 0.99, RMSEA = .04 (CI: .02 - .06), $R^2_{mental\ health}$ = .28. Examining path coefficients, all were significant and in the hypothesized direction (Figure 4). We also found the total effect of intragroup status on mental health was positive ($\beta = 0.46$, $p < .001$) indicating that feeling valued was overall more helpful than harmful to minorities' mental health.

We also confirmed that no alternative structural models better approximated the data, nor

that a more parsimonious version of the hypothesized model approximated the data equally well. In Wald tests beginning with a fully saturated structural model, [4] results showed that all hypothesized paths should be kept, and all paths not included in the ISAH model should be removed.

Alternative Theoretical Models

Rejection-identification, identity-resilience and ingroup comparisons models. As in Study 1, we tested three alternative theoretical models reflecting predictions from the rejection-identification model (RIM) and resilience framework (Figure 2). Each alternative model was subjected to multiple groups analyses following protocols described earlier. Results indicated that each model fit similarly for each ethnic group. Subsequent analyses were conducted with data collapsed across groups.

For RIM, the overall fit was reasonable but appeared to be worse than that of the ISAH model, Satorra-Bentler χ^2 (32, N = 467) = 125.1, $p < .001$, CFI = 0.97, RMSEA = .08 (CI: .07 - .09). Compared to the ISAH model, RIM also seemed to account for less variance on mental health, $R^2_{mental\ health}$ = .11 (this value is less than half that of the ISAH model's), suggesting that it was a weaker explanatory model overall for predicting minorities' mental health. Similarly, the fit of the (more complex) resilience models was no better than that of the ISAH model and, most importantly, the resilience models' interaction terms were not associated with mental health (identity-centrality interaction term, $\beta = .02$, $p = .69$; intragroup status interaction term, $\beta = .02$, $p = .65$). This indicated that the relationship between discrimination and mental health did not vary as a function of the strength of individuals' ethnic identity, nor as a function of perceived status in their ethnic group.

Consistent with Study 1, Study 2 provided support for the ISAH model. Among Blacks,

Asians and Latinos, feeling highly valued in one's ethnic group had direct benefits but indirect costs for mental health. By sampling an adult population recruited from multiple U.S. communities with balanced subsamples, Study 2 provided greater confidence that the psychological processes outlined in the ISAH model operate similarly across ethnic groups and, moreover, are not limited to the unique experiences of college students from a liberal university context.

General Discussion

Given the projected growth of minorities in the United States (U.S. Census, 2012), the persistent health disparities between ethnic groups (Keppel, 2007) and the associated economic costs (LaVeist, Gaskin & Richard, 2009), it is more critical than ever to understand the psychological forces shaping minorities' mental health. In previous efforts, the importance of intragroup relations has frequently been overshadowed by a focus on intergroup relations (i.e., with discrimination). The ISAH model, by comparison, provides an integrative framework for systematically examining both the influence of minorities' inter- and intragroup experiences on health. Moreover, it sheds light on how minorities' intragroup experiences shape their health not just directly but also indirectly, by influencing the framing or 'lens' around certain negative intergroup experiences (e.g., by influencing appraisals of racial/ethnic discrimination). Thus, the current research provides empirical support for a novel framework that explains the multiple ways through which intragroup relations shape minorities' mental health. Moreover, we find support for this framework across the three largest U.S. minority groups—Blacks, Asians, Latinos.

Theoretical Contributions

The ISAH model calls into question the tacit assumption that feeling valued among

28

ingroup members is solely beneficial. Although research has focused on its benefits (e.g., for self-esteem, collective identification, coping with discrimination; Crocker & Major, 1989; Postmes & Branscombe, 2002; Tyler et al., 1996), the current findings suggest that feeling highly valued has indirect health costs that can arise in intergroup contexts. Evidence of these costs emerge when theory on intragroup processes is expanded to explain how in-group experiences frame minorities' out-group experiences. Specifically, we found that feeling valued in one's ethnic group was associated with a stronger ethnic identity-centrality, which was linked to more frequent experiences/perceptions of discrimination that in turn predicted poorer mental health. To our knowledge, the current research is the first to explicate and test the mechanisms that explain this counter-intuitive, negative relationship between intragroup status and mental health.

The current research tested several alternative theoretical perspectives, which either directly challenged the relationships outlined in the ISAH model or challenged the model's basic premise (i.e., that there are benefits and costs to feeling valued—costs that are not easily buffered). One alternative model was derived from the rejection-identification model (RIM; Postmes & Branscombe, 2002). We found modest support for RIM but it appeared to be weaker than that of the ISAH model. Moreover, in both studies RIM appeared to account for less of the total variance on mental health (i.e., RIM had smaller R^2 values on mental health, around half the magnitude of those for the ISAH model), suggesting that it was a weaker model overall for explaining minorities' mental health (in terms of anxiety, depressive symptoms and psychological distress). Notably, some of the differences in empirical support for RIM and the ISAH model may underscore that the two contain similar but meaningfully distinct constructs. For example, with regard to ethnic identity, RIM focuses on individuals' affective feelings toward their ethnic group while the ISAH model examines its cognitive centrality to the self-

concept. Though it is common for researchers to conceive of ethnic identity as a unidimensional construct, evidence suggests it has multiple dimensions (Leach et al., 2008). The current results suggest that these dimensions may also have distinct downstream implications (e.g., for mental health, discrimination experiences). Future studies should consider the unique implications of these dimensions (among other constructs with potentially important distinctions; e.g., intragroup status vs. general sense of belonging; Huo et al., 2010) when examining the effects of ethnic intragroup relations on discrimination and health.

Two other alternative models were derived from a resilience framework. One model tested whether the strength of ethnic identity buffered the adverse effects of discrimination (Sellers et al., 2003). We did not find support for this idea. While some research has found evidence of this buffering effect, other studies have not (Sellers & Shelton, 2003; Yoo & Lee, 2005). One possible explanation for this discrepancy is that constructs *related to* ethnic identity-centrality buffer the adverse effects of discrimination, but identity-centrality itself does not. For example, research shows that minorities' who believe outgroup members view their ethnic group poorly (low ethnic public regard) are able to buffer some of the adverse effects of discrimination (Sellers & Shelton, 2003). Public regard also tends to co-vary with ethnic identity-centrality (Sellers et al., 2003). Thus, an apparent buffering effect of identity-centrality may be in part because it co-varies with other more relevant factors (e.g., public regard). It will be important in future research to discern exactly which components of identity or other related factors influence the discrimination-health link. A second resilience model tested whether feeling valued in one's ethnic minority group buffered the adverse effects of discrimination. We also did not find support for this idea. This suggests that feeling valued in an intragroup context does not supplant the devaluation one feels in an intergroup context. Both may independently contribute to mental

30

health.

Generalizability of the ISAH Model across Ethnic Minority Groups

Previous research on ethnic intergroup relations has focused on the experiences of Black individuals. Therefore, it has been unclear how processes integrated into the ISAH model may operate among other ethnic groups, including Asians and Latinos. Given differences in the treatment of Blacks versus Asians and Latinos in the U.S. (Sears & Savalei, 2006), it would not be surprising to find group differences in the functioning of the ISAH model. However, the current research found consistent evidence that the processes in the ISAH model operate similarly across groups. This suggests the ISAH model captures core psychological processes— those that operate similarly across groups. This is consistent with other lines of work, including research showing that ethnic discrimination impacts Blacks', Asians' and Latinos' mental health similarly (Pascoe & Smart Richman, 2009) and that ethnic identity-centrality increases perceptions of discrimination similarly among members of different ethnic minority groups (Operario & Fiske, 2001). To further assess the ISAH model's generalizability, it will be important to test whether it captures the experiences of individuals in other stigmatized groups (e.g., religious and sexual minority groups). If so, the ISAH model may serve as a reliable foundation for explaining how identity and status concerns shape mental health among members of stigmatized groups.

Implications for Minority Mental Health

Finding both benefits and costs associated with perceived intragroup status gives rise to the question of whether feeling valued is, overall, more helpful or harmful to one's mental health. We assessed this question in each study by examining the total effect of intragroup status on mental health (see Results). In both studies we found that the total effect was positive, which

suggests that the benefits of feeling valued empirically 'outweighed' the costs. Thus, overall, feeling valued appears to be more helpful than harmful to minorities' mental health. Nevertheless, while the benefits of feeling valued (direct effects) clearly outweighed the costs (indirect effects), those costs were significant (in both studies, $p < .001$) and so the adverse effects associated with feeling valued should also be considered as we look for the most effective ways to maintain and promote minority mental health. We suggest a two-pronged approach that includes promoting feelings of value in one's ethnic minority group coupled with targeted strategies for attenuating the negative consequences that arise from feeling valued.

When considering how to attenuate the negative consequences of feeling valued, note that perceived discrimination has the most proximal negative influence on mental health in the ISAH model. If this negative relationship could be attenuated it would help mitigate the adverse consequences of feeling valued. Although the negative effects of discrimination on health are well documented, and the current findings suggest neither strongly identifying with one's ethnic group nor feeling valued among ingroup members buffers its adverse effects, there are other ways that the effects of discrimination may be tempered. For example, certain forms of social support (e.g., from ethnic ingroup members; Cohen & Willis, 1985; Haslam et al., 2005) or adopting certain coping strategies may buffer these negative effects (Noh & Kaspar, 2003). Thus, if individuals feel admired in their ethnic minority group and, at the same time, maintain or seek out relevant social support or practice effective coping strategies, they may reap the mental health benefits of feeling valued while attenuating the downstream costs.

It is important to highlight that the mental health indicators used in the current research (e.g., depressive symptoms, psychological distress) have been linked to a host of physical health outcomes including diabetes and increased blood pressure, along with increased risk of mortality

(e.g., all cause, cardiovascular; Adler et al., 2000; Moussavi et al., 2007; Russ et al., 2012). Findings from the current studies may therefore have translatable implications for minorities' *physical* health. The mental health indicators used in this research also represent an advance in intragroup processes research, which has focused primarily on self-esteem (e.g., Postmes & Branscombe, 2002; Tyler et al., 1996). The current findings demonstrate that intragroup relations not only shape individuals' perceived self-worth (a more controllable aspect of one's well-being; Ratner, Halim & Amodio, 2013), but also less controllable aspects of psychological health— aspects that are linked to important physical health outcomes.

Limitations and Future Directions

Data used in the current research enabled us to examine Asian, Black and Latino individuals' real life experiences with ingroup and outgroup members, and test a conceptual model that integrates theory on inter- and intragroup processes including factors that are not easily manipulated in experimental settings (e.g., ethnic identity). However, while these datasets are rich and psychologically meaningful, their cross-sectional nature limits strong causal claims. While the proposed causal direction of pathways in the ISAH model are supported by experimental and/or longitudinal data (including research that supports hypothesized causal directions and refutes possible reverse-causal directions; e.g., Sellers & Shelton, 2003; Simon & Stürmer, 2003; Masuoka, 2006; Seaton, Yip, Morgan-Lopez & Sellers, 2012), it will be important to test the directionality of these pathways altogether in future research, and specifically across multiple ethnic groups, which has not been done in previous research. Currently, we have a longitudinal study underway that will enable better assessments of causality within the ISAH model while still drawing from individuals' real-word experiences across multiple ethnic groups (Begeny & Huo, 2016).

Recruitment of individuals from ethnic minority groups presents challenges. Despite these challenges we were able to draw reasonably sized samples from three different ethnic minority groups (ranging from 59 to 319 individuals per ethnic group, per study). Nonetheless, by some standards the sample sizes may have been smaller than ideal. While the precise number that is judged to be adequate for testing structural equation models varies (see Muthén & Muthén, 2002; Wolf, Harrington, Clark & Miller, 2013), there were several indicators that our findings were reliable. For example, we replicated our findings across two independent samples (an important strategy for establishing reliability when sample size may be sub-optimal; Schreiber, Nora, Stage, Barlow & King, 2006). We also found support for the ISAH model using statistics that provide appropriate, if not conservative, tests of model fit when one is concerned about relatively small sample sizes (i.e, CFI is good estimator with small samples, RMSEA is a relatively conservative estimator as it tends to overreject good-fitting models with small samples; Chen, Curran, Bollen, Kirby & Paxton, 2008; Hu & Bentler, 1999). We hope that our findings across the two studies will motivate larger scale studies in the future, perhaps with representative community samples and *a priori* estimates of adequate sample sizes using up to date methods (see Muthén & Muthén, 2002), ultimately seeking to replicate the current findings and further unpack the important dynamics between relations with ethnic ingroup members and mental health documented in the current work.

The ISAH model suggests feeling valued in one's ethnic minority group has direct benefits for mental health. Future research should consider mechanisms that might explain this relationship. We suggest that individuals' sense of personal control in life may play an important role (see Greenaway et al., 2015 for a similar argument). Studies have found that individuals with higher perceived status in groups report greater control and fewer constraints on their lives

(Lachman & Weaver, 1998; Kraus, Piff & Keltner, 2009) and this sense of control predicts greater mental and physical health (Johnson & Krueger, 2005; Folkman, Lazarus, Gruen & DeLongis, 1986; Lachman & Weaver, 1998). From a biopsychosocial perspective, this mediated process occurs because lower perceived status comes with reduced access to resources, which contributes to feeling one cannot adequately control their life. A lack of perceived control in turn promotes psychological stress, which sets off physiological processes that increase susceptibility to physical and mental disease (McEwen, 1998). Notably, positive group identity (e.g., pride, felt solidarity with the group) may also help explain the intragroup status-health link, because it enables one to harness the support of ingroup members and more effectively cope with stressors (Haslam et al., 2005). It will be important in future research to examine whether perceived control in life, perceived access to resources (including access to group-oriented support) and/or positive group identification (e.g., pride, solidarity) help explain how intragroup status shapes mental health.

The current research focused on a particular aspect of minorities' experiences with ethnic ingroup members—being looked up to, highly valued and admired (intragroup status). This focus reflected an intention to examine intragroup dynamics that may yield positive *and* negative implications for mental health. However, there are other dynamics that may be useful to explore for generally expanding our understanding of minority mental health. Specifically, minorities' perceptions of acceptance or general belonging in the group may also shape psychological health (Baumeister & Leary, 1995) but without the same costs associated with feeling highly valued (i.e., because it does not shape identity or experiences with discrimination in the same way; see Branscombe et al., 1999). Future research should also consider whether promoting feelings of belonging can minimize the indirect costs of intragroup status while still enabling its benefits

35

(e.g., greater mental health overall, maintaining vigilance to extant forms of discrimination).

Conclusions

The intragroup status and health (ISAH) model explains how feeling highly valued among members of one's own ethnic group shapes mental health both directly and indirectly. Among Blacks, Asians, and Latinos we found converging evidence that being valued and looked up to can be a double-edged sword, having both positive and negative implications for mental health. More generally, this research demonstrates how important intragroup relations are for understanding minorities' intergroup experiences (e.g., with discrimination). Thus, to better understand minorities' health and mitigate the adverse effects of discrimination, we need to consider the multifaceted role of ethnic intragroup relations.

Notes

1. High average inter-item correlations (Chronbach's alpha values) are not a prerequisite to the items' use in SEM. They are provided here only for ease of interpretation.

2. There was substantial variance around each factor but with multivariate non-normality.

3. One of the 26 paths was not invariant when comparing Black and Latino participants ($p = .03$) suggesting the path between perceived discrimination and mental health may be similar but not of the same magnitude on average for these two groups ($B = -.21, -.19, -.41$ for Asians, Blacks and Latinos, respectively).

4. Perceived discrimination was not a latent factor but all parameters between it and the latent factors were estimated during Wald tests.

Table 1

Study 1 means, standard deviations and bivariate correlations among variables

Variable	*Mean*	*SD*	1	2	3	4	5	6
1. Ethnic Intragroup Status	4.77[a]	1.36	-----					
2. Ethnic Identity-Centrality	5.43[a]	1.29	.30***	-----				
3. Perceived Discrimination	2.65[b]	1.04	.15***	.31***	-----			
4. Anxiety	2.58[b]	0.66	-.27***	-.07	.23***	-----		
5. Psychological Distress	2.84[b]	0.73	-.18***	.02	.27***	.68***	-----	
6. Depressive Symptoms	0.62[c]	0.46	-.20***	.02	.21***	.68***	.68***	-----

Note. [a] 1-7 scale, [b] 1-5 scale; [c] 0-3 scale. *** $p < .001$

Table 2

Results of Study 1 model fit estimations by ethnic group for the intragroup status and health model

	n	S-B χ^2	df	p	CFI	RMSEA	CI
All Ethnic Minorities	581	258.7	86	<.001	.97	.06	.05-.07
Black/African American	59	88.4	86	.41	.99	.02	.00-.08
Asian/Asian American	203	153.1	86	<.001	.96	.06	.05-.08
Latino(a)/Hispanic	319	155.8	86	<.001	.98	.05	.04-.06

Note. Satorra-Bentler chi-square (S-B χ^2), Comparative fit index (CFI), Root-mean-square error of approximation (RMSEA) and its confidence interval (CI).

Table 3

Study 2 means, standard deviations and bivariate correlations among variables

Variable	*Mean*	*SD*	1	2	3	4	5
1. Ethnic Intragroup Status	4.33[a]	1.52	-----				
2. Ethnic Identity-Centrality	5.03[a]	1.51	.43***	-----			
3. Perceived Discrimination	2.24[b]	1.12	.18***	.22***	-----		
4. Anxiety	2.62[b]	0.84	-.41***	-.18**	.16**	-----	
5. Psychological Distress	2.84[b]	0.87	-.34***	-.13***	.20***	.80***	-----

Note. [a] 1-7 scale, [b] 1-5 scale. ** $p < .01$; *** $p < .001$

Table 4

Results of Study 2 model fit estimations by ethnic group for the intragroup status and health model

	n	S-B χ^2	df	p	CFI	RMSEA	CI
All Ethnic Minorities	467	56.1	32	.005	.99	.04	.02-.06
Black/African American	171	43.6	32	.08	.99	.05	.00-.08
Asian/Asian American	144	35.9	32	.29	.99	.03	.00-.07
Latino(a)/Hispanic	152	38.0	32	.25	.99	.04	.00-.07

Note. Satorra-Bentler chi-square (S-B χ^2), Comparative fit index (CFI), Root-mean-square error of approximation (RMSEA) and its confidence interval (CI).

Table 5

Study 1 and 2 parameters for the measurement portion of the intragroup status and health model

Latent Factor	Study	Measurement Parameters
Ethnic Intragroup Status	1	.94 (1.33, .05) .86 (1.33, .05) .89 (1.33, .05) .88 (1.24, .05)
	2	.92 (1.48, .05) .88 (1.49, .05) .90 (1.51, .06) .90 (1.42, .06)
Ethnic Identity-Centrality	1	.64 (1.00, .06) .89 (1.15, .06) .93 (1.27, .05)
	2	.75 (1.12, .06) .93 (1.37, .06) .93 (1.35, .06)
Perceived Discrimination	1	.76 (0.89, .04) .75 (0.86, .04) .87 (1.04, .04) .89 (1.00, .04) .92 (1.03, .03)
	2	---
Mental Health	1	-.83 (-.49, .02) -.82 (-.52, .02) -.82 (-.34, .02)
	2	-.86 (-.67, .03) -.93 (-.64, .03)

Note. Standardized parameter coefficients (unstandardized coefficients, standard errors) for each manifest indicator, as predicted by its respective latent factor. All parameters significant at $p < .001$.
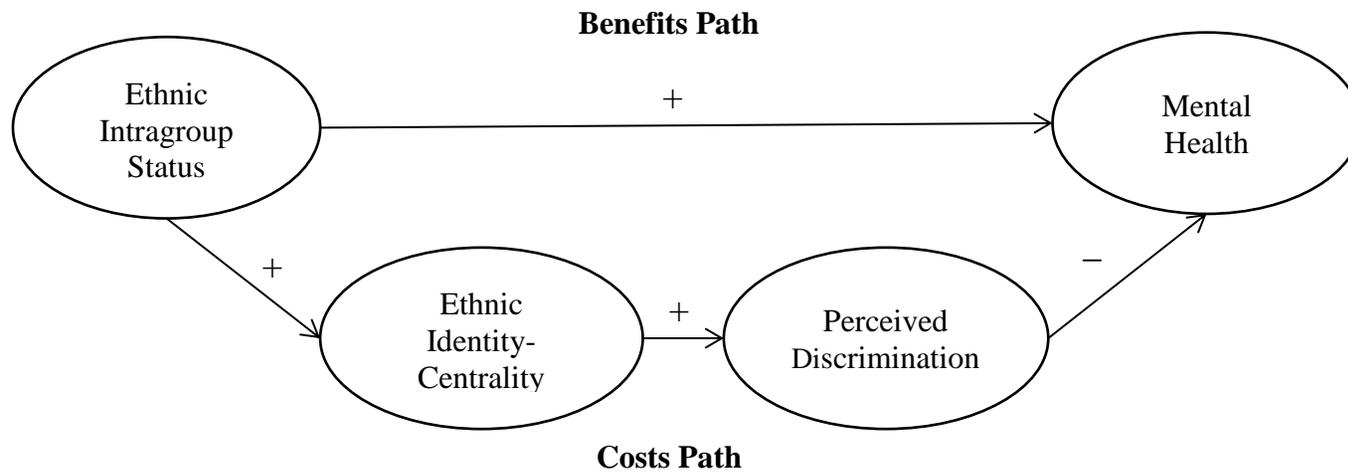
Benefits Path

Ethnic Intragroup Status

Mental Health

+

+

Ethnic Identity-Centrality

+

Perceived Discrimination

−

Costs Path

Figure 1. A schematic representation of the intragroup status and health model. The benefits path (top path) and costs path (bottom path) reflect the direct psychological health benefits and indirect psychological health costs of ethnic intragroup status, respectively.
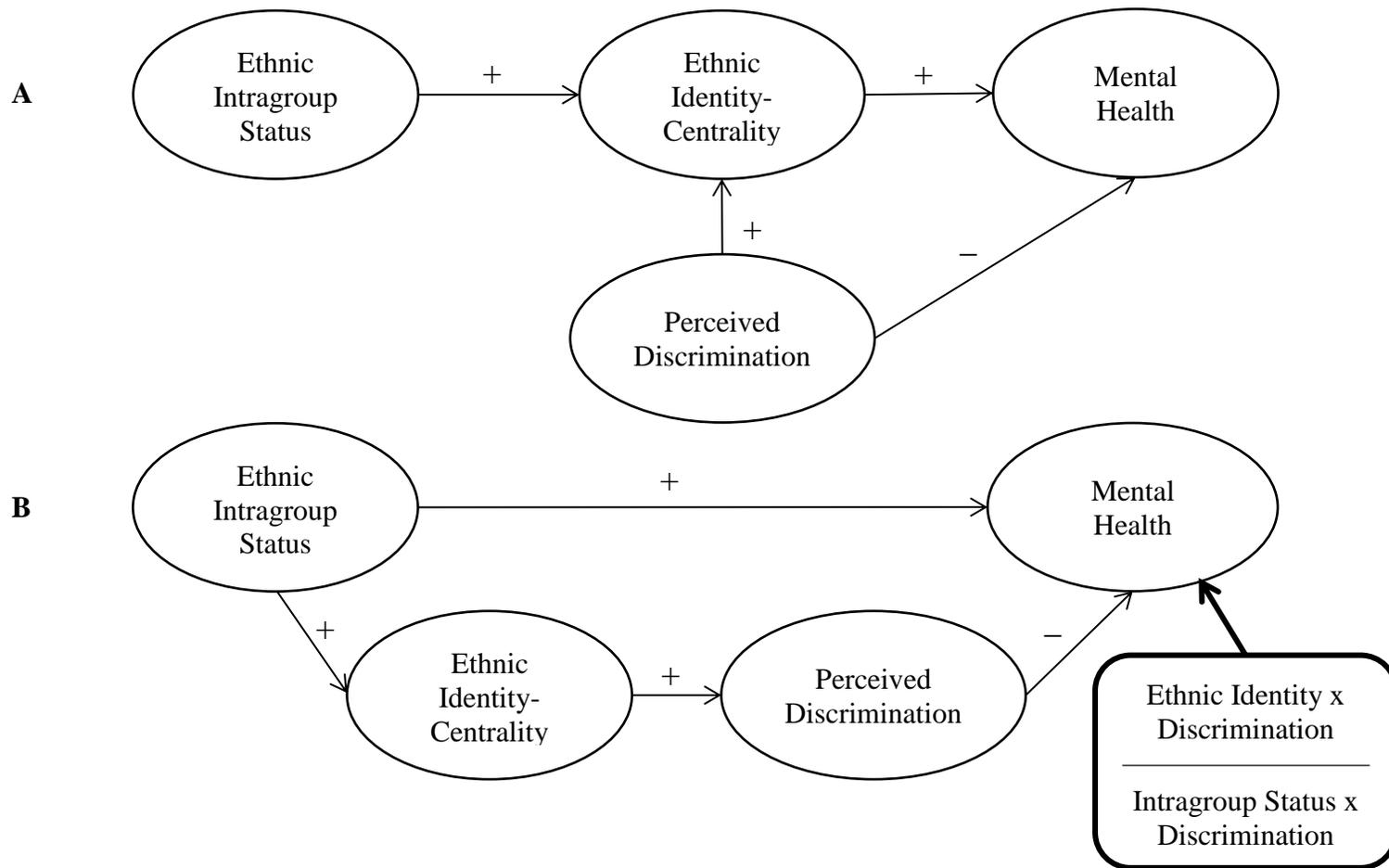
Figure 2. Alternative models reflecting predictions from the rejection-identification model (A) and a resilience framework (B). In one

test of the resilience model, an identity-by-discrimination interaction term was entered to test whether ethnic identity buffered the

negative effects of discrimination. In another, an intragroup status-by-discrimination interaction term was entered to test whether

intragroup status buffered the negative effects of discrimination (in bold).

Figure 3. Results of Study 1. The intragroup status and health model with standardized path coefficients (unstandardized coefficients, standard errors). Path coefficients for the measurement model are in Table 5. *** $p < .001$.
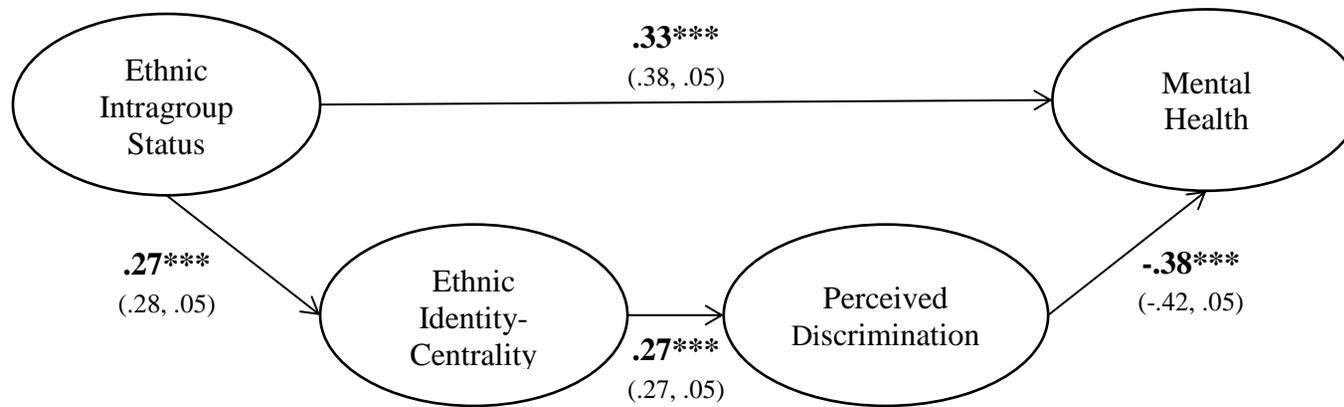
Figure 4. Results of Study 2. The intragroup status and health model with standardized path coefficients (unstandardized coefficients, standard errors). Path coefficients for the measurement model are in Table 5. *** $p < .001$.
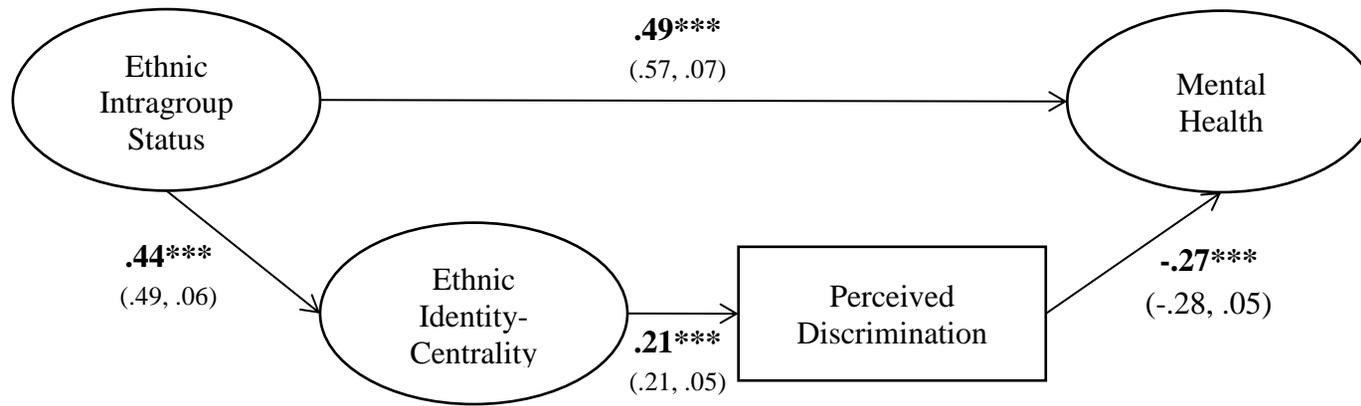
References

Adler, N. E., Epel, E., Castellazzo, G., & Ickovics, J. (2000). Relationship of subjective and

objective social status with psychological and physiological functioning: Preliminary data

in healthy White women. *Health Psychology, 19*(6)*,* 586-592. doi:10.1037/0278-

6133.19.6.586

Anderson, C., Kraus, M. W., Galinsky, A. D., & Keltner, D. (2012). The local ladder effect:

Social status and subjective well-being. *Psychological Science, 23*(7), 764-771.

doi:10.1177/0956797611434537

Begeny, C. T., & Huo, Y. J. (2016). *The psychological benefits and costs of feeling valued in

one's ethnic minority group: Longitudinal evidence from Asian, Black and Latino adults

in the U.S.* Manuscript in preparation.

Bentler, P. M. (2006). *EQS 6 structural equations program manual*. Encino, CA: Multivariate

Software.

Branscombe, N. R., Schmitt, M. T., & Harvey, R. D. (1999). Perceiving pervasive discrimination

among African Americans: Implications for group identification and well-being. *Journal

of Personality and Social Psychology, 77*(1)*,* 135-149. doi:10.1037/0022-3514.77.1.135

Browne, M. W. & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. Bollen & J.

Long (Eds.), *Testing structural equation models*. Newbury Park, CA: Sage.

Chen, F., Curran, P. J., Bollen, K. A., Kirby, J., & Paxton, P. (2008). An empirical

evaluation of the use of fixed cutoff points in RMSEA test statistic in structural equation

models. *Sociological Methods & Research, 36*(4), 462–494.

doi:10.1177/0049124108314720

Chou, C-P., & Bentler, P. M. (2002). Model modification in in structural equation modeling by

imposing constraints. *Computational Statistics & Data Analysis, 41*(2)*,* 271-287.

doi:10.1016/s0167-9473(02)00097-x

Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis.

Psychological Bulletin, 98(2), 310–357. doi:10.1037/0033-2909.98.2.310

Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress.

Journal of Health and Social Behavior, 24(4), 385-396. doi:10.2307/2136404

Crocker, J., & Major, B. (1989). Social stigma and self-esteem: The self-protective properties of

stigma. *Psychological Review, 96*(4), 608-630. doi:10.1037/0033-295x.96.4.608

Crocker, J., Voelkl, K., Testa, M., & Major, B. (1991). Social stigma: The affective

consequences of attributional ambiguity. *Journal of Personality and Social Psychology*,

60(2), 218 228. doi:10.1037/0022-3514.60.2.218

Cross, W. E. (1991). *Shades of black: Diversity in African American identity*. Philadelphia, PA:

Temple University Press.

Ellemers, N., Doosje, B., & Spears, R. (2004). Sources of respect: The effects of being liked by

ingroups and outgroups. *European Journal of Social Psychology*, *34*(2), 155-172.

doi:10.1002/ejsp.196

Emler, N., & Hopkins, N. (1990). Reputation, social identity, and the self. In D. Abrams & M. A.

Hogg (Eds), *Social identity theory: Constructive and critical advances* (pp. 113-130).

New York: Springer-Verlag.

Fielding, K. S., & Hogg, M. A. (1997). Social identity, self-categorization, and leadership: A

field study of small interactive groups. *Group Dynamics: Theory, Research and Practice*,

1(1), 39-51. doi: 10.1037/1089-2699.1.1.39

Folkman, S., Lazarus, R. S., Gruen, R. J., & DeLongis, A. (1986). Appraisal, coping, health

status, and psychological symptoms. *Journal of Personality and Social Psychology, 50(3)*, 571–579. doi:10.1037/0022-3514.50.3.571

Greenaway, K. H., Haslam, S. A., Cruwys, T., Branscombe, N. R., Ysseldyk, R., & Heldreth, C. (2015). From "we" to "me": Group identification enhances perceived personal control with consequences for health and well-being. *Journal of Personality and Social Psychology, 109*(1), 53–74. doi:10.1037/pspi0000019

Haslam, S. A., O'Brien, A., Jetten, J., Vormedal, K., & Penna, S. (2005). Taking the strain: Social identity, social support, and the experience of stress. *British Journal of Social Psychology, 44*(3), 355–370. doi:10.1348/014466605x37468

Henry, P. J. (2008). College sophomores in the laboratory redux: Influences of a narrow data base on social psychology's view of the nature of prejudice. *Psychological Inquiry*, *19*(2), 49-71. doi: 10.1080/10478400802049936

Hogg, M. A. (2001). A social identity theory of leadership. *Personality and Social Psychology Review, 5*(3), 184–200. doi: 10.1207/s15327957pspr0503_1

Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6*(1), 1–55. doi:10.1080/10705519909540118

Huo, Y. J., Binning, K. R., & Begeny, C. T. (2015). Promoting social engagement and well-being in diverse groups: The role of respect. In S. Otten, I. van der Zee, & M. Brewer (Eds), *Toward inclusive organizations: Determinants of successful diversity management at work* (pp. 49-66). New York, NY: Psychology Press.

Huo, Y. J., Binning, K. R., & Molina, L. E. (2010). Testing an integrative model of respect: Implications for social engagement and well-being. *Personality and Social Psychology*

Bulletin, 36(2), 200-212. doi:10.1177/0146167209356787

Johnson, W., & Krueger, R. F. (2005). Higher perceived life control decreases genetic variance in physical health: Evidence from a national twin study. *Journal of Personality and Social Psychology, 88(1)*, 165–173. doi:10.1037/0022-3514.88.1.165.

Kaiser, C. R, & Pratt-Hyatt, J. S. (2009). Distributing prejudice unequally: Do Whites direct their prejudice toward strongly identified minorities? *Journal of Personality and Social Psychology, 96*(2), 432-445. doi:10.1037/a0012877

Keppel, K. G. (2007). Ten largest racial and ethnic health disparities in the United States based on Healthy People 2010 objectives. *American Journal of Epidemiology, 166*(1), 97-103. doi:10.1093/aje/kwm044

Kohout, F. J., Berkman, L. F., Evans, D. A., & Cornoni-Huntley, J. (1993). Two shorter forms of the CES-D depression symptoms index. *Journal of Aging and Health*, *5*(2), 179-193. doi:10.1177/089826439300500202

Kraus, M. W., Piff, P. K., & Keltner, D. (2009). Social class, sense of control, and social explanation. *Journal of Personality and Social Psychology, 97(6)*, 992–1004. doi:10.1037/a0016357.

Lachman, M. E., & Weaver, S. L. (1998). The sense of control as a moderator of social class differences in health and well-being. *Journal of Personality and Social Psychology, 74(3)*, 763–773. doi:10.1037/0022-3514.74.3.763.

Landrine, H., & Klonoff, E. A. (1996). The schedule of racist events: A measure of racial discrimination and a study of its negative physical and mental health consequences. *Journal of Black Psychology, 22*(2), 144–168. doi:10.1177/00957984960222002

LaVeist, T. A., Gaskin, D. & Richard, P. (2011). Estimating the economic burden of racial health

inequalities in the United States. *International Journal of Health Services 41*(2), 231-238. doi:10.2190/hs.41.2.c

Leach, C. W., van Zomeren, M., Zebel, S., Vliek, M. L. W., Pennekamp, S. F., Doosje, B., Ouwerkerk, J. W., & Spears, R. (2008). Group-level self-definition and self-investment: A hierarchical (multicomponent) model of in-group identification. *Journal of Personality and Social Psychology, 95*(1)*,* 144-165. doi:10.1037/0022-3514.95.1.144

Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development, 71(3)*, 543–562. doi:10.1111/1467-8624.00164

Marsh, H. W., Wen, Z., & Hau, K.-T. (2004). Structural equation models of latent interactions: Evaluation of alternative estimation strategies and indicator construction. *Psychological Methods, 9(3)*, 275–300. doi:10.1037/1082-989x.9.3.275.

Masuoka, N. (2006). Together they become one: Examining the predictors of panethnic group consciousness among Asian Americans and Latinos. *Social Science Quarterly, 87(1)*, 993–1011. doi:10.1111/j.1540-6237.2006.00412.x.

McEwen, B. S. (1998). Stress, adaptation, and disease: Allostasis and allostatic load. *Annals of the New York Academy of Sciences, 840(1)*, 33-44. doi:10.1111/j.1749-6632.1998.tb09546.x

Moradi, B. & Risco, C. (2006). Perceived discrimination experiences and mental health of Latino/a American persons. *Journal of Counseling Psychology, 53*(4), 411–421.

Moussavi, S., Chatterji, S., Verdes, E., Tandon, A., Patel, V., & Ustun, B. (2007). Depression, chronic disease, and decrements in health: Results from the World Health Surveys. *The Lancet*, *370*(9590), 851–858. doi:10.1037/0022-0167.53.4.411

Muthén, L. K., & Muthén, B. O. (2002). How to use a Monte Carlo Study to decide on sample

    size and determine power. *Structural Equation Modeling, 9*(4), 599–620.

    doi:10.1207/s15328007sem0904_8

Noh, S., & Kaspar, V. (2003). Perceived discrimination and depression: Moderating effects of

    coping, acculturation, and ethnic support. *American Journal of Public Health, 93(2)*,

    232–238. doi:10.2105/ajph.93.2.232

Operario, D., & Fiske, S. (2001). Ethnic identity moderates perceptions of prejudice: Judgments

    of personal versus group discrimination and subtle versus blatant bias. *Personality and*

    Social Psychology Bulletin, 27(5)*, 550–561. doi:10.1177/0146167201275004

Pascoe, E. A., & Smart Richman, L. (2009). Perceived discrimination and health: A meta-

    analytic review. *Psychological Bulletin, 135*(4), 531-554. doi: 10.1037/a0016059

Perez, D. J., Fortuna, L., & Alegrõa, M. (2008). Prevalence and correlates of everyday

    discrimination among U.S. Latinos. *Journal of Community Psychology, 36*(4), 421–433.

    doi:10.1002/jcop.20221

Postmes, T. & Branscombe, N.R. (2002). Influence of long-term racial environmental

    composition on subjective well-being in African Americans. *Journal of Personality and*

    Social Psychology, 83(3)*, 735-751. doi:10.1037/0022-3514.83.3.735

Ratner, K. G., Halim, M. L., & Amodio, D. M. (2013). Perceived stigmatization, ingroup pride,

    and immune and endocrine activity evidence from a community sample of Black and

    Latina Women. *Social Psychological and Personality Science*, *4*(1), 82-91.

    doi:10.1177/1948550612443715

Romero, A. J., & Roberts, R. E. (1998). Perception of discrimination and ethnocultural variables

    in a diverse group of adolescents. *Journal of Adolescence, 21(6)*, 641–656.

doi:10.1006/jado.1998.0185.

Russ, T. C., Stamatakis, E., Hamer, M., Starr, J. M., Kivimaki, M., & Batty, G. D. (2012).

Association between psychological distress and mortality: Individual participant pooled

analysis of 10 prospective cohort studies. *BMJ*, *345*, e4933. doi:10.1136/bmj.e4933

Satorra, A., & Bentler, P. M. (1990). Model conditions for asymptotic robustness in the analysis

of linear relations. *Computational Statistics & Data Analysis, 10*(3), 235-249.

doi:10.1016/0167-9473(90)90004-2

Schreiber, J. B., Nora, A., Stage, F. K., Barlow, E. A., & King, J. (2006). Reporting structural

equation modeling and confirmatory factor analysis results: A review. *The Journal of

Educational Research, 99*(6), 323–338. doi:10.3200/joer.99.6.323-338

Sears, D. O., & Savalei, V. (2006). The political color line in America: Many "peoples of color"

or Black exceptionalism? *Political Psychology*, *27*(6), 895-924. doi:10.1111/j.1467-

9221.2006.00542.x

Seaton, E. K., Yip, T., Morgan-Lopez, A., & Sellers, R. M. (2012). Racial discrimination and

racial socialization as predictors of African American adolescents' racial identity

development using latent transition analysis. *Developmental Psychology, 48*(2), 448-458.

doi:10.1037/a0025328

Sellers, R. M., Caldwell, C. H., Schmeelk-Cone, K. H., & Zimmerman, M. A. (2003). Racial

identity, racial discrimination, perceived stress, and psychological distress among African

American young adults. *Journal of Health and Social Behavior, 44(3),* 302.

doi:10.2307/1519781

Sellers, R. M. & Shelton, J. N. (2003). The role of racial identity in perceived racial

discrimination. *Journal of Personality and Social Psychology, 84*(5)*,* 1079-1092.

doi:10.1037/0022-3514.84.5.1079

Simon, B., & Stürmer, S. (2003). Respect for group members: Intragroup determinants of collective identification and group-serving behavior. *Personality and Social Psychology Bulletin, 29*(2), 183–193. doi:10.1177/0146167202239043

Smith, E. R., Coats, S., & Walling, D. (1999). Overlapping mental representations of self, in-group, and partner: Further response time evidence and a connectionist model. *Personality and Social Psychology Bulletin*, *25*(7), 873-882. doi:10.1177/0146167299025007009

Smith, H. J., Tyler, T. R., & Huo, Y. J. (2003). Interpersonal treatment, social identity and organizational behavior. In S. A. Haslam, D. van Knippenberg, M. J. Platow, & N. Ellemers (Eds.), *Social identity at work: Developing theory for organizational practice* (pp. 155-171). Philadelphia, PA: Psychology Press.

Spielberger, C. D. (1983). *Manual for the State-Trait Anxiety Inventory STAI (Form Y).* Palo Alto, CA: Mind Garden.

Tyler, T. R., & Blader, S. L. (2002). Autonomous vs. comparative status: Must we be better than others to feel good about ourselves?. *Organizational Behavior and Human Decision Processes*, *89*(1), 813-838. doi:10.1016/s0749-5978(02)00031-6

Tyler, T. R. & Blader, S. L. (2003). The group engagement model: Procedural justice, social identity, and cooperative behavior. *Personality and Social Psychology Review, 7*(4)*,* 349-361. doi:10.1207/s15327957pspr0704_07

Tyler, T. R., Degoey, P., & Smith, H. J. (1996). Understanding why the justice of group procedures matters. *Journal of Personality and Social Psychology*, *70*(5), 913-930. doi: 10.1037/0022-3514.70.5.913

U.S. Census Bureau, Population Division (2012, December). *Table 4. Projections of the*

    Population by Sex, Race, and Hispanic Origin for the United States: 2015 to 2060

    (NP2012-T4). Retrieved from

    http://www.census.gov/population/projections/data/national/2012/summarytables.html.

van Knippenberg, B., & van Knippenberg, D. (2005). Leader self-sacrifice and leadership

    effectiveness: The moderating role of leader prototypicality. *The Journal of Applied*

    Psychology, 90(1), 25–37. doi: 10.1037/0021-9010.90.1.25

Williams, D. R., & Collins, C. (2001). Racial residential segregation: A fundamental cause of

    racial disparities in health. *Public Health Reports, 116*(5), 404–416. doi:10.1016/s0033-

    3549(04)50068-7

Williams, D., Neighbors, H.W., Jackson, J.S. (2003). Racial/ethnic discrimination and health:

    Findings from community studies. *American Journal of Public Health, 93*(2)*,* 200–208.

    doi:10.2105/ajph.93.2.200

Wolf, E. J., Harrington, K. M., Clark, S. L., & Miller, M. W. (2013). Sample size requirements

    for structural equation models: An evaluation of power, bias, and solution propriety.

    Educational and Psychological Measurement, 73(6), 913–934.

    doi:10.1177/0013164413495237

Wolff, L. S., Subramanian, S. V., Acevedo-Garcia, D., Weber, D., & Kawachi, I. (2010).

    Compared to whom? Subjective social status, self-rated health, and referent

    group sensitivity in a diverse US sample. *Social Science & Medicine, 70*(12), 2019-

    2028. doi: 10.1016/j.socscimed.2010.02.033

Yoo, H. C., & Lee, R. M. (2005). Ethnic Identity and approach-type coping as moderators of the

    racial discrimination/well-being relation in Asian Americans. *Journal of Counseling*

Psychology, 52(4), 497–506. doi:10.1037/0022-0167.52.4.

Paper 2

When Identity Hurts: How Positive Intragroup Experiences

Can Yield Negative Mental Health Implications for Ethnic and Sexual Minorities

Christopher T. Begeny [a]

Yuen J. Huo [a]

[a] University of California, Los Angeles, Department of Psychology

Abstract

Two studies (longitudinal, N=510; cross-sectional; N=249) explain how feeling valued in one's ethnic/sexual minority group has benefits for mental health but also certain costs through the way it shapes minorities' identity. Drawing from the intragroup status and health model (ISAH) we posit that when individuals feel valued in their minority group it bolsters group identification; with greater identity-centrality individuals tend to view daily social interactions through the 'lens' of their minority group and ultimately perceive more discrimination. Discrimination, in turn, negatively shapes health. Thus, feeling valued in one's minority group has benefits for health but also indirect costs, perhaps counterintuitively by strengthening minority group identity. Results of both studies supported these predictions. Study 2 also supported an adapted ISAH model, for use in the context of *concealable* stigmatized identities (sexual minorities). Overall, the ISAH model explains why feeling valued and having strong social identities are not always beneficial, yielding certain costs for stigmatized individuals' health.

Keywords: identity; respect; status; health; well-being; discrimination; stress; stigma; race; ethnicity, sexual minority

When Identity Hurts: How Positive Intragroup Experiences

Can Yield Negative Mental Health Implications for Ethnic and Sexual Minorities

A growing body of research indicates that social identities are good for health. They not only promote health but protect it from adverse social stressors and unhealthy mental states (for reviews, see Greenaway, Cruwys, Haslam & Jetten, 2016; Haslam, Jetten, Postmes & Haslam, 2009; Jetten, Haslam & Haslam, 2012). But are strong social identities *always* good for health?

In the current research we consider contexts in which social identities may have adverse health implications. Specifically, we consider whether in the context of stigmatized groups— those that are targets of discrimination—feeling valued in one's own stigmatized group can have benefits for health but also strengthen one's group identity in ways that yield downstream health *costs*. Thus, we examine whether feeling valued and highly identifying in one's minority group have, perhaps counterintuitively, adverse health implications (we also examine whether these adverse health effects empirically outweigh the aforementioned *benefits* of feeling valued). We examine these possibilities among ethnic and sexual minorities. Given that members of these stigmatized groups face pervasive social stressors (discrimination) and disproportionate rates of illness (Meyer, 2003; Williams & Mohammed, 2009), it is important in this context to develop a clear understanding of how feeling valued and highly identifying with one's minority group shape health, including their potential for benefits *and* costs.

We draw from a recently developed framework, the intragroup status and health model (ISAH; Begeny & Huo, 2016), to explain how feeling valued and highly identifying with one's ethnic or sexual minority group can adversely shape health. This occurs because when individuals feel valued among members of their own minority group it strengthens their group identity in ways that heighten vigilance to expressions of group-based discrimination (by shaping

the cognitive 'lens' through which they view and interpret experiences among outgroup

members). Heightened perceptions of discrimination ultimately create psychological distress and

take a toll on minorities' mental health. Thus, the ISAH model explains how feeling valued

among minority ingroup members can have benefits for health, but also strengthen minorities'

identity in ways that yield negative indirect health effects (Figure 1A; note that in this model one

can also examine the relative empirical weight of the benefits and costs of feeling valued).

An earlier test of the ISAH model offered initial support for its predictions, but only in

one type of group (ethnic minorities) using cross-sectional data (Begeny & Huo, 2016). By

comparison, in the current research we test this framework using more rigorous methodologies

and in new, theoretically meaningful contexts. First, we test the model longitudinally among

ethnic minorities followed over a one-year span (Study 1). This allows us to assess the ISAH

model's predictions across time. Second, we test the model among sexual minorities, whose

identity is generally more *concealable* than ethnic minorities' (Study 2). The relatively

concealable nature of sexual minorities' identity can create a fundamentally distinct experience

around ingroup and outgroup members, as sexual minorities consider how, when and with whom

to conceal or disclose their stigmatized identity (with implications for how they may be treated).

To account for this distinct type of experience, we draw from previous work on concealable

stigmatized identities and outline a novel perspective that explicates how the ISAH model can be

utilized in this context. Thus, overall, the current research has potential to expand our

understanding of how positive intragroup experiences and strong social identities can negatively

shape minorities' health.

Overview of the Intragroup Status and Health (ISAH) Model

The ISAH model (Begeny & Huo, 2016) explains how feeling valued and admired within

one's stigmatized minority group can have benefits for mental health, but also indirect costs (Figure 1A).

The Benefits of Intragroup Status

The *Benefits Path* of the ISAH model highlights the positive health effects of feeling valued in one's minority group. It is motivated by theory suggesting that within self-relevant groups individuals attend to signals coming from other ingroup members (authority figures, peers) that convey information about their standing within the group (Tyler & Blader, 2003; Tyler, Degoey, & Smith, 1996). Individuals' perceived standing in the group is referred to here as *intragroup status* (akin to intragroup standing, status-based respect; see Huo, Binning & Molina, 2010), which reflects perceptions of being looked up to, highly regarded or admired by other ingroup members. It reflects individuals' subjective 'position' in the group based on the degree to which their personal qualities and characteristics are collectively valued by the group (Emler & Hopkins, 1990).

Previous research indicates that higher perceived intragroup status is beneficial for individuals' health. For example, it predicts lower levels of anxiety and depressive symptoms (Begeny & Huo, 2016; Huo, Binning & Begeny, 2015) and has positive health effects across time (e.g., Singh-Manoux, Marmot & Adler, 2005). Thus, higher perceived status among ingroup members should have benefits for minorities' mental health.

The Costs of Intragroup Status

The *Costs Path* of the ISAH model highlights the negative implications of intragroup status for mental health. It describes how perceptions of intragroup status frame minorities' experiences with outgroup members and yield negative downstream health consequences—in particular, by shaping their identity in ways that increase perceptions of discrimination.

Intragroup status and identity. Research suggests that feeling valued in a group

promotes greater psychological attachment to that group, such that individuals with higher

perceived status are more likely to view it as central to their self-concept (i.e., stronger identity-

centrality; e.g., Simon & Stürmer, 2003; Tyler & Blader, 2002). This may be in part because

individuals with higher intragroup status are seen as more prototypical, representing a stronger

embodiment of the values and characteristics that help define the group as a whole (Fielding &

Hogg, 1997; Hogg, 2001). With a stronger perceived fit or match between their personal

characteristics and those that define the group, higher status individuals are more likely to see

that group as defining or central to who they are (van Knippenberg & van Knippenberg, 2005;

for a similar argument see Wright, Aron and Tropp, 2002).

Identity, discrimination and health. While identity-centrality has certain positive

implications (e.g., increased group-oriented behavior; Tyler & Blader, 2003) it can have negative

implications for minorities' health. This is because when minorities' identity is central to their

self-concept it more readily becomes the cognitive schema or 'lens' through which they view and

interpret their social experiences (Smith, Coats, & Walling, 1999). As a result, highly identified

minorities are more vigilant to expressions of group-based discrimination and ultimately

perceive it more often (Crocker, Voelkl, Testa, & Major, 1991; Operario & Fiske, 2001; Sellers

& Shelton, 2003). [1] These perceptions of discrimination in turn negatively affect health (Meyer,

2003; Pascoe & Smart Richman, 2009). Together, this suggests stronger identity-centrality can

increase perceptions of discrimination in daily life and, consequently, adversely shape mental

health (intragroup status → identity-centrality → perceived discrimination → lower mental

health; the *Costs Path*).

Evaluating the ISAH Model among Individuals with

Visible versus Concealable Stigmatized Identities

The ISAH model was initially developed in the context of ethnic minority groups, which represents a more visible type of stigmatized identity. Therefore, it is unclear whether it is useful for understanding the experiences and health of individuals in other types of minority groups, particularly those with more *concealable* stigmatized identities. This includes sexual minorities. As described below, the concealable nature of sexual minorities' identity may produce a distinct type of experience around ingroup and outgroup members, which may be critical to understanding how certain processes within the ISAH model function.

The concealable nature of sexual identities. By virtue of its concealable nature, sexual minorities have to frequently consider whether, how, when and with whom to conceal or disclose their sexual identity (Beals, Peplau & Gable, 2009; Pachankis, 2007). Similarly, they may often consider who 'knows' or suspects something about their sexual identity even if that information has not been voluntarily shared. This means that sexual minorities may think about or be cognizant of their concealable stigmatized identity quite often (Quinn & Chaudoir, 2009). That is, it can be cognitively *salient* in a lot of situations. Most critically, this can be the case even if they do not consider their sexual identity to be *important* to who they are as individuals (i.e., to their self-concept; Quinn & Chaudoir, 2009; Quinn & Earnshaw, 2011; Quinn et al., 2014). For example, Gay men might view their sexual identity as unimportant to their self-concept and choose not to reveal it to others (a potential response to internalized negative stereotypes about homosexuality), yet in the process think about it quite often (e.g., how to conceal it). In this way, for individuals with concealable stigmatized identities the frequency with which that identity is cognitively salient (*identity-salience*) may be quite distinct from the importance placed on it (*identity-importance*; Quinn et al., 2014). So while in ethnic minority research the salience and

importance of minorities' identity are often defined as a single construct (identity-centrality; Leach et al., 2008), among sexual minorities it may be critical to distinguish between these two sub-dimensions of identity-centrality, to understand more precisely how each is involved in shaping individuals' intergroup experiences and health.

The Distinct Roles of Identity-Importance and -Salience within the ISAH Model

An adapted form of the ISAH model was designed to better understand the function of these two identity dimensions in the context of concealable stigmatized identities (Figure 1B). It was tested among sexual minorities (Gay men). Below we describe the role of each dimension within the model.

Intragroup Status → identity-importance. In efforts to maintain a positive sense of self-worth individuals may strategically (though not always consciously) shift the importance they place on certain group identities in defining their overall self-concept, depending on whether those groups value them or not (Tyler & Blader, 2002, 2003). As Tyler and Blader state, individuals will "strategically draw more of their identity from group information when that information is more favorable" (2002, p. 817). This means that individuals should place greater importance on those identities for which the group values them. Therefore, individuals who feel valued in their sexual minority group should tend to place greater importance on that group identity (intragroup status → identity-importance).

Identity-importance → identity-salience → discrimination. The importance individuals place on a social identity can affect its tendency to become salient in everyday situations. As self-categorization theory suggests, the social identity that becomes most salient in a situation is influenced partly by its cognitive accessibility (also termed 'perceiver readiness;' among other situational and cognitive factors; for overviews, see Haslam, 2004; Turner, Oakes, Haslam &

64

McGarty, 1994). The accessibility of a given identity is in part determined by the importance placed on it (Oakes, 1987). This means that, all else equal, an identity that is considered important to an individual's self-concept will more readily be accessible than one that is less important. Thus, on average (across a variety of situations) the degree to which individuals' sexual identity is important to their self-concept should affect how often it becomes salient—ultimately serving as the relevant group referent or 'lens' through which they view and interpret experiences in those situations. As described earlier, this ultimately shapes perceptions of discrimination (i.e., identity-importance → identity-salience → discrimination).

In summary, sexual minorities' perceived intragroup status should influence the level of importance they place on their sexual identity, which in turn influences how often it becomes the salient social 'lens' through which experiences are interpreted. This shapes how often sexual minorities perceive discrimination, with subsequent adverse mental health effects (Figure 1B).

Considering an Alternative Theoretical Perspective: The Rejection-Identification Model

Overall, the ISAH model (Figure 1A/B) proposes that feeling valued in one's minority group has benefits but also indirect costs for mental health. Costs arise through a series of identity-based processes that shape individuals' tendency to perceive discrimination.

In examining the ISAH model it is important to also consider the rejection-identification model (RIM; Branscombe, Schmitt & Harvey, 1999), which provides a distinct framework for understanding the dynamic between minorities' discrimination experiences, identity and health/well-being (also see Jones, Jetten, Haslam & Williams, 2012; Molero, Fuster, Jetten & Moriano, 2011 for a similar framework used in the context of concealable stigmatized identities). While both RIM and the ISAH model suggest perceived discrimination negatively impacts minorities' health/well-being, RIM also suggests perceiving discrimination bolsters minorities'

group identity, which in turn positively shapes health/well-being (thus, indirectly offsetting the adverse effects of discrimination). By comparison, the ISAH model suggests stronger minority identification increases perceptions of discrimination (i.e., identity *shapes* perceptions of discrimination, rather than being *shaped by* them) and has no direct influence on mental health. Considered together, these models raise two important questions: whether minorities' identity *shapes* or is *shaped by* discrimination experiences, and whether identity has any direct positive health effects. Therefore, in examining the ISAH model it is important to test: (1) whether the strength of minorities' identity predicts the frequency of their discrimination experiences (consistent with ISAH) or if discrimination experiences predict the strength of minorities' identity over time (consistent with RIM); (2) whether identity-centrality has any direct effect/relationship with mental health (consistent with RIM) or not (consistent with ISAH).

Current Research

We test the ISAH model in two studies. In Study 1 we do so among ethnic minorities using longitudinal data, assessing how processes in the model function over time. In Study 2 we examine the model among sexual minorities, enabling a test of its predictive strength in the context of a more *concealable* stigmatized identity.

In both studies we also directly assess whether the strength of minorities' identity has negative indirect health effects (as predicted). Additionally, we test two key predictions derived from the RIM: (1) whether discrimination experiences bolster minorities' identity over time; (2) whether identity-centrality has any direct effect/relationship with mental health.

Weighing the benefits and costs of feeling valued. With the ISAH model predicting benefits *and* costs to feeling valued among ingroup members, an important question arises: overall, is feeling valued more helpful or harmful to minorities' mental health? Statistically, this

66

question is addressed by examining the total effect of intragroup status on mental health in the ISAH model, which reflects the positive and negative effects of intragroup status together. If the total effect is positive, the benefits of feeling valued statistically 'outweigh' the costs. We test this possibility in both studies.

Study 1: Longitudinal Examination of the ISAH model (Ethnic Minorities)

To assess how the processes within in the ISAH model function over time, longitudinal data were collected from ethnic minorities at two time points approximately one year apart.

Method

Participants

Participants were 510 U.S.-born ethnic minority students from a large public university (201 Asian/Asian American, 309 Latino(a)/Hispanic; 72% female, $M_{age} = 20$). Of those who responded at Time 1 (T1), 341 participated at Time 2 (T2; 148 Asian/Asian American, 193 Latino(a)/Hispanic; 67% retention rate). Twenty-two participants were omitted from analyses because their self-identified race/ethnicity differed at T1 and T2. As a result, they received fundamentally different questions at each time point. Data were also collected from Black/African American students but were excluded because sample size was inadequate for planned analyses (e.g., multiple groups analyses; at T2, $n = 28$). For evidence of the ISAH model's predictive strength among Blacks/African Americans, see Begeny and Huo (2016).

Procedure

At T1, recruitment e-mails were sent by the university to a randomly generated sample of racial/ethnic minority students. To minimize certain self-selection biases, recruitment emails did not indicate the study was about discrimination nor mention any eligibility criteria (U.S.-born, age 18+, self-identified with one of the aforementioned racial/ethnic groups). Individuals first

completed a brief eligibility questionnaire online; eligible participants immediately proceeded to the study's online survey. Approximately 12 months later, eligible T1 participants were contacted via email to complete the T2 survey. Participants were entered into cash lotteries for participating (T1: $100 prize; T2: five prizes, $50-$200).

Measures

T1/T2 measures were identical. Preceding relevant measures participants were asked to think about their self-selected racial/ethnic group.

Ethnic Intragroup Status. Four items measured individuals' perceived status within their ethnic minority group (see Begeny & Huo, 2016; e.g., "Most of the time I feel that people in my racial/ethnic group…": "look up to me," "hold me in high regard," "see me as a leader in my racial/ethnic group"). Items were rated on a 7-point scale (1 *strongly disagree* – 7 *strongly agree*) and reliable ($\alpha \geq .92$ for each ethnic group at T1 and T2).[2]

Ethnic Identity-Centrality. Three items measured ethnic identity-centrality (Leach et al., 2008). Participants' race/ethnicity was piped in to the text of each item (e.g., "The fact that I am [_] is an important part of how I see myself,"). Items were rated on a 7-point scale (1 *strongly disagree* – 7 *strongly agree*) and reliable ($\alpha \geq .82$ for each ethnic group at T1 and T2). [2]

Perceived Discrimination. Four items measured the frequency of experiencing racial/ethnic discrimination (see Postmes & Branscombe, 2002; "In the past year how often have you felt that…" "you were being discriminated against because of your race/ethnicity?," "you were being treated according to racial/ethnic stereotypes?," "you were being viewed negatively because of your race/ethnicity?," "you were deprived of opportunities (that were available to others) because of your race/ethnicity?"). Items were rated on a 5-point scale (1 *never* – 5 *very often*) and reliable ($\alpha \geq .88$ for each ethnic group at T1 and T2). [2]

Mental Health (Anxiety, Psychological Distress, Depressive Symptoms). Mental health was assessed using measures of trait-anxiety (six items; e.g., "I worry too much over something that doesn't really matter; " 1 *never* – 5 *very often*; Spielberger, 1983), psychological distress (six items, Perceived Stress Scale; e.g., "In the past four weeks, how often have you felt nervous and 'stressed'?;" 1 *never* – 5 *very often*; Cohen, Kamarck & Mermelstein, 1983) and depressive symptoms (ten-item CES-D, Boston Form; Kohout, Berkman, Evans, Cornoni-Huntley, 1993). Each scale was reliable within each ethnic group at T1 and T2 (all $\alpha \geq .76$).

Results

Summary statistics and bivariate correlations are in Table 1.

Analytical Approach

Overview. Initial tests of the ISAH model were done using structural equation modeling (SEM; separately at T1/T2). Primary analyses tested the strength of the model across time using multilevel structural equation modeling (MSEM). This was followed by cross-lagged SEM regression analyses to further examine the robustness of the hypothesized directions of effects across time. All SEM/MSEM analyses were conducted in EQS v6.2 (Bentler, 2006).

In all SEM/MSEM analyses, latent factors were constructed to estimate ethnic intragroup status, identity-centrality and perceived discrimination using the aforementioned items as indicators and mental health using composites of anxiety, psychological distress and depressive symptoms as indicators. Data were analyzed using robust maximum likelihood estimation (Satorra & Bentler, 1990). [3]

Preliminary Analyses

Descriptive patterns of change, correlations across time. Some constructs in the ISAH model may be relatively stable across time (e.g., identity-centrality) so it is important to examine

how much change occurred among participants. While the degree of change was modest on average, 21-31% of participants showed change greater than one standard deviation between T1 and T2 (from the mean difference score; Table 2). Table 2 also illustrates how these changes were correlated (i.e., difference score correlations). All were consistent with predictions. For example, increases in intragroup status over time were associated with increases in identity-centrality. Thus, a sizable portion of participants showed change across time on each construct. Moreover, these changes were associated with changes in other constructs consistent with the ISAH model's predictions.

Testing the ISAH model for ethnic group differences and overall fit at T1 and T2. Before testing the overall fit of the ISAH model at T1/T2, we assessed whether it fit equally well for each ethnic group (running multiple groups analyses, following protocols described in Begeny & Huo, 2016). Results indicated the model fit similarly for Asians and Latinos so data were subsequently collapsed. Testing the overall fit of the ISAH model at each time point also indicated the model fit quite well (Figure 2).

Primary Analyses: Testing the ISAH Model Across Time

Description of MSEM analyses. We assessed the ISAH model across time using MSEM. Because the measurement portion of the between- and within-subjects models were expected to be equally strong, we constrained factor loadings to be equal across them. Invariance tests indicated each was indeed statistically invariant. Also to note, all ICCs were large ($\geq .40$).

Results of MSEM analyses. As expected the ISAH model fit the data very well, in the between-subjects model (average absolute standardized covariance residual: AASCR = .04, largest standardized residual: LSR = .12, Total Effect $_{\text{intragroup status} \rightarrow \text{health}}$: $\beta = .45$, $p < .001$), the within-subjects model (AASCR = .04, LSR = .13, Total Effect $_{\text{intragroup status} \rightarrow \text{health}}$: $\beta = .05$, $p =$

.002) and overall (T_{CRADF} = 212.9, p = .003, F_{RADF} (160, 322) = 1.60, p < .001, SRMR = .05).

Moreover, all paths in the between- and within-subjects models were significant. In the between-subjects model, feeling valued among ethnic ingroup members predicted greater mental health (β = .55, p < .001). Yet minorities who felt valued in their ethnic group also regarded their ethnic identity as more central to their self-concept (β = .49, p < .001), which was associated with more frequent perceptions of discrimination (β = .45, p < .001) and in turn lower levels of mental health (β = -.44, p < .001). Similarly, the within-subjects model revealed all paths were significant and consistent with predictions: intragroup status → mental health, β = .05, p = .03; intragroup status → identity-centrality, β = .09, p < .001; identity-centrality → perceived discrimination, β = .04, p = .02; perceived discrimination → mental health, β = -.26, p < .001. Thus, results evinced support for the ISAH model across individuals and across time.

Further Testing Directional Effects in the ISAH Model: Cross-Lagged SEM Analyses

To complement our primary MSEM analyses we conducted follow-up cross-lagged SEM regression analyses, sequentially testing each section of the ISAH model. Cross-lagged analyses enable slightly stronger inferences about the directionality of effects, as they allow simultaneous examination of hypothesized time-dependent effects (X_{T1} → Y_{T2}) and their alternative, reverse directional effects (Y_{T1} → X_{T2}). While these cross-lagged analyses cannot test the strength of the model as a whole (using this approach would require data from at least three time points) or test indirect effects (e.g., identity on health), they serve as an important complement to MSEM by enabling stronger inferences about the direction of effects.

Description of cross-lagged SEM analyses. Cross-lagged SEM models were set up following a latent change regression framework (McArdle, 2009). They accounted for the extent to which each construct predicted itself across time and the correlation between constructs at T1.

They also specified a latent change factor for each construct, which represents the degree to which individuals' scores on that construct changed from T1 to T2. Modeling these latent change factors allowed us to control for how changes in X over time (e.g., intragroup status) predicted changes in Y (e.g., identity-centrality). This parallels what was tested in our MSEM analyses, and their specification here allowed us to more precisely isolate and distinctly examine how individuals' scores on X at T1 predicted scores on Y at T2, and vice versa ($X_{T1} \rightarrow Y_{T2}$ and $Y_{T1} \rightarrow X_{T2}$). These are the essential cross-lagged parameters for assessing directionality of effects across time.

Results of cross-lagged SEM analyses. We tested the ISAH model in three segments: intragroup status ⇆ identity-centrality; identity-centrality ⇆ discrimination; discrimination ⇆ mental health ⇆ intragroup status. To note, consistent with results of MSEM analyses, each model showed changes in X over time (e.g., intragroup status) significantly predicted changes in Y (e.g., identity-centrality). Also in each cross-lagged model: (a) all manifest indicators were predicted by their respective latent factors (all $p's < .001$), and (b) factor loadings were constrained to be equal at T1/T2 and all were statistically invariant.

Table 3 displays the cross-lagged parameters. As predicted, minorities' perceived status among ethnic ingroup members positively affected the strength of their ethnic identity over time ($\beta = .13, p = .01$). There was no evidence of a reverse-directional effect. Also as predicted, the strength of minorities' identity-centrality positively affected the frequency of perceiving discrimination over time ($\beta = .09, p = .03$). Notably, experiencing more frequent discrimination also predicted subsequently higher levels of ethnic identity ($\beta = .12, p = .01$). Additionally, as predicted, experiences of discrimination negatively affected mental health over time ($\beta = -.05, p = .04$). There was no evidence of a reverse-directional effect. Finally, as predicted, minorities'

perceived status among ethnic ingroup members positively affected their mental health over time (β = .04, p = .07). This last marginally significant effect is in fact highly consistent with predictions—feeling valued among ingroup members has positive effects on mental health, but this is tempered by its indirect negative effects via identity-based processes (these positive and negative effects are embedded in this path coefficient). Notably, greater mental health also had modest positive effects on perceived intragroup status (β = .10, p = .05). Thus, overall, we found support for each of the ISAH model's predicted directional effects, plus two additional effects (i.e., some bi-directionality).

Examining the Negative Effects of Identity on Health

In our MSEM and preliminary SEM analyses we could directly test whether minorities' ethnic identity had negative indirect effects on health. Consistent with predictions, MSEM analyses indicated that ethnic identity-centrality had significant negative indirect health effects (between-subjects model: β = -.20, p < .001, within-subjects model: β = -.01, p = .002). Thus, minorities who saw their ethnic identity as increasingly central to their self-concept over time had slight decreases in mental health because of how those shifts in identity influenced the frequency at which they perceived discrimination. Tests of the ISAH model at T1/T2 similarly revealed ethnic identity's negative indirect health effects (T1: β = -.10, p < .001, T2: β = -.10, p < .001). Thus, results consistently indicated that stronger ethnic identity-centrality had negative indirect effects on minorities' mental health.

Testing Alternative Predictions, derived from the Rejection-Identification Model

We examined two key predictions from RIM: (1) whether discrimination experiences prompt minorities to identify more with their ethnic group (discrimination → identity-centrality); (2) whether the strength of minorities' identity has direct, positive effects on mental health

73

(identity-centrality → mental health). Consistent with the first prediction, as reported above, cross-lagged analyses indicated that while the strength of minorities' ethnic identity positively affected the frequency of perceiving discrimination (consistent with ISAH), perceptions of discrimination also positively affected the strength of their ethnic identity (consistent with RIM).

To test the second alternative prediction we ran an additional set of cross-lagged SEM analyses: identity-centrality ⇆ health. Contrary to RIM's prediction, the strength of minorities' identity had no direct effect on mental health ($\beta = .02$, $p = .44$; nor did mental health impact the strength of minorities' identity; $\beta = -.03$, $p = .48$). We similarly tested if within the ISAH model identity-centrality had any direct, positive effect/relationship with mental health (specifying a new structural parameter, identity-centrality → mental health). For each analytical technique that could assess the full ISAH model (T1/T2 cross-sectional tests, MSEM analyses) we tested whether this parameter was significant and/or improved model fit. Contrary to RIM's prediction, identity-centrality did not predict mental health in any analyses (T1: $\beta = .07$, $p = .21$; T2: $\beta = -.01$, $p = .89$; MSEM between-subjects model: $\beta = .03$, $p = .89$; MSEM within-subjects model: $\beta = -.01$, $p = .59$), nor did the parameter improve model fit. This is also consistent with Table 1 and 2 correlations, showing no significant relationship between identity and mental health. Thus, overall we found support for one of RIM's key predictions (discrimination → identity-centrality) but not the other (identity-centrality → mental health).

Discussion

Study 1 found consistent support for the ISAH model, indicating higher perceived status in one's ethnic minority group positively affects mental health, but also bolsters ethnic identity-centrality in ways that lead to more frequent perceptions of discrimination and, in turn, negatively affects mental health.

Cross-lagged analyses further supported the predicted directionality of effects within the ISAH model. There was some evidence of bi-directionality, as well: intragroup status ⇆ mental health, identity-centrality ⇆ discrimination. Neither of these bi-directional effects are entirely surprising. First, while there is evidence that individuals' perceived status in groups influences health (e.g., Elovainio et al., 2011; Singh-Manoux et al., 2005) there is also some evidence for the reverse effect (Elovainio et al., 2011). Thus, feeling valued among ingroup members may promote health as hypothesized, but individuals' health may also affect the level of value they are afforded by ingroup members. For instance, when individuals are healthy they may spend more time around ingroup members and behave in more group-oriented ways, which may prompt others in the group to confer greater status on them (ultimately shaping their own perceived intragroup status).

Regarding the second bi-directional effect (identity-centrality ⇆ discrimination), while previous experimental evidence indicates one's ethnic identity-centrality shapes the frequency of experiencing discrimination (as hypothesized; e.g., Operario & Fiske, 2001) it has also been suggested that discrimination experiences can prompt minorities to become more cognizant of their ethnic identity and the role it plays in their daily experiences (Cross, 1991). It has further been suggested that with an increased cognizance of their minority identity, individuals may become more vigilant to expressions of discrimination, thus creating a feedback loop between identity-centrality and discrimination (also see Sellers & Shelton, 2003). This may help explain the bidirectional effect found (identity-centrality ⇆ discrimination).

Regarding the two alternative predictions derived from RIM, we found support for one but not the other. In support of RIM's prediction that minorities strengthen their group identity in response to discrimination, we found that discrimination experiences predicted stronger ethnic

identity over time. Notably, this is a different explanation for the same unanticipated reverse time-dependent effect described above (discrimination → identity-centrality). So to say, this effect may reflect an adaptive response that helps preserve minorities' health/well-being as RIM suggests, or it may indicate that discrimination prompts minorities' to be more cognizant of their ethnic identity, as Cross (1991) suggests. Contrary to RIM's other key prediction, we did not find evidence that a strong ethnic identity had direct, positive effects on minorities' mental health (also see correlations in Tables 1 and 2). Thus, overall, support for RIM's predictions was mixed.

Finally, it is important to highlight that our preliminary analyses revealed meaningful change in the strength of individuals' ethnic identity over time. While researchers often presume ethnic identity is stable in adults (and treat it as an individual difference variable), we found evidence of substantial change even in the span of one year. Moreover, this change was associated with meaningful shifts in the valuation individuals felt among ethnic ingroup and outgroup members. This suggests that in some contexts it may be more appropriate to treat ethnic identity as a predictor or outcome variable, as opposed to a stable moderator.

Study 2: Testing the ISAH Model among Individuals with a
Concealable Stigmatized Identity (Sexual Minorities)

Study 2 examines the ISAH model among sexual minorities (Gay men), enabling us to assess whether the model is also useful for understanding the experiences and health of individuals with more *concealable* stigmatized identities. Additionally, we assess whether it is critical in this context to adapt the ISAH model (distinguishing between identity-importance and -salience; see Figure 1B).

Method

Participants & Procedure

Participants were 249 self-identified Gay men recruited through Amazon Mechanical Turk ($M_{age} = 33$). Individuals were asked to complete an online survey about their everyday experiences with social groups in exchange for small remuneration. To avoid certain self-selection biases, recruitment advertisements did not describe the study's eligibility criteria (self-identified Gay men, aged 18+, living in the U.S.). Over 15,000 people were screened for eligibility through a brief questionnaire; those who qualified proceeded to the main survey.

Measures

All measures were identical to those in Study 1 (all $\alpha \geq .84$; where relevant, measures were adapted to make reference to one's sexual minority group). To better explore the identity-importance/-salience distinction we added a fourth identity item: "In a lot of situations, I find myself thinking about the fact that I am Gay." It was coupled with one from the original identity measure to assess -salience ("I often think about the fact that I am Gay"). Identity-importance was assessed using the two other items from the original identity measure ("The fact that I am Gay is an important part of my identity," "Being Gay is an important part of how I see myself").

<div align="center">

Results

</div>

Hypotheses were again tested using EQS v6.2. In tests of the original ISAH model (Figure 1A), latent factors were specified identically to those in Study 1. In tests of the adapted ISAH model (Figure 1B), latent factors were constructed in the same fashion but with identity-importance/-salience specified as two separate factors. Data were again analyzed using robust maximum likelihood estimation.[3] Summary statistics and bivariate correlations are in Table 4.

Preliminary Analyses: Support for the Identity-Importance/-Salience Distinction

Bivariate correlations offered preliminary evidence that the distinction between identity-importance and -salience was critical. For example, men who felt valued within the Gay

community regarded their sexual identity as more important to their self-concept ($\beta = .23$, $p <$ .001) but it was unrelated to how often their sexual identity was salient in everyday life ($\beta = .07$, $p = .29$). The salience of men's sexual identity predicted how often they perceived discrimination ($\beta = .22$, $p < .001$) but the importance of their sexual identity did not ($\beta = .09$, $p = .14$).

Exploratory factor analysis further supported the identity-importance/-salience distinction (note: EFAs are empirically more conservative than CFAs, though a CFA may be justified here; Quinn et al., 2014). Using a principal factor method and oblimin rotation (examining eigenvalues, scree plot) results indicated a two-factor solution. All items loaded onto their appropriate factors and without any substantial cross-loadings (largest cross-loading, $\lambda = 0.04$; identity-importance = 63.37% of total variance; identity-salience = 19.54% of total variance; $r =$ .52). Overall, this suggested that for sexual minorities there is a meaningful distinction between the importance placed on their sexual identity and how often it is cognitively salient.

Testing the Original ISAH Model

We first tested the original ISAH model, with a single identity-centrality construct (following Leach et al., 2008), which indicated a fairly strong fit and with most path coefficients significant (Figure 3). However, most critically, identity-centrality did not predict how often men in the Gay community perceived discrimination ($\beta = 0.12$, $p = .10$). Thus, the original ISAH model was only modestly supported. Results also indicated the model's weakness was in its inability to predict the frequency at which men perceived discrimination, suggesting the process through which identity shapes sexual minorities' discrimination experiences may need to be more precisely explicated (i.e., distinguishing the roles of identity-importance and -salience).

Testing the Adapted ISAH Model (Identity-importance → -Salience)

The adapted ISAH model, with identity-importance/-salience distinguished (Figure 1B),

fit the data well, Satorra-Bentler χ^2 (85) = 154.5, $p < .001$, CFI = .97, SRMR = .06, RMSEA = .06 (CI: .04 - .07), $R^2_{\text{psychological health}}$ = .26, Total Effect $_{\text{intragroup status} \rightarrow \text{health}}$: β = .36, $p < .001$. While the adapted- and original ISAH models are not nested (precluding formal tests of relative fit), there was clear evidence of improved fit (e.g., greater CFI, smaller upper-bound on RMSEA, smaller χ^2/df ratio). Moreover, compared to the original ISAH model, all structural parameters were highly significant (Figure 4) and evinced identity's negative indirect health effects. Both identity-importance (β = -.04, p = .04) and -salience (β = -.08, p = .02) had significant negative indirect effects on sexual minorities' mental health.

Testing an alternative form of the adapted ISAH model (-salience $\rightarrow$ -importance). To better assess the precise theoretical roles of identity-importance/-salience within the ISAH model we not only tested the adapted ISAH model (-importance $\rightarrow$ -salience) but also an alternative form with the roles of these two dimensions reversed (-salience $\rightarrow$ -importance). If these dimensions play precise and specific roles within the ISAH model (i.e., they are not theoretically interchangeable) then the hypothesized form of the adapted ISAH model should fit better than this non-hypothesized alternative.

This alternative model fit reasonably well but was poorer than the hypothesized model (e.g., smaller CFI, larger SRMR, larger upper-bound on RMSEA and χ^2 value). Most critically, path coefficients revealed that individuals' perceived status in the Gay community did not predict how often their sexual identity was salient in everyday contexts (β = .08, p = .33). Moreover, the general importance of their sexual identity did not predict how often they experienced discrimination (β = .11, p = .11). Thus, identity-importance/-salience seem to play precise theoretical roles within the ISAH model (i.e., they are not interchangeable).

Testing Alternative Predictions, derived from the Rejection-Identification Model

79

Study 2 cross-sectional data do not enable tests of directionality between identity and discrimination as proposed by RIM versus the ISAH model (identity ⇄ discrimination), but do enable tests of whether identity is positively associated with mental health, as predicted by RIM. For tests of the original and adapted ISAH models respectively, we added identity-centrality → mental health and -importance/-salience → mental health parameters. Contrary to RIM's prediction, no form of identity had any direct positive association with mental health (identity-centrality: $\beta = .09$, $p = .23$; -importance: $\beta = .09$, $p = .28$; -salience: $\beta = .003$, $p = .97$).

Discussion

Study 2 supported an adapted form of the ISAH model, which explains how intragroup experiences and identity-based processes shape individuals' health in the context of *concealable* stigmatized identities. It explicates the distinct roles of identity-importance and -salience.

We also tested an alternative form of the adapted ISAH model, with the roles of identity-importance and -salience reversed. This enabled a more thorough assessment of our theoretical predictions regarding the precise roles these two dimensions play within the ISAH model. Results indicated that this alternative model lacked predictive strength. Therefore, while identity-importance and -salience may be correlated (as one would expect) [4] they are not theoretically interchangeable. They play distinct and specific roles in explaining how minorities' experiences with ingroup and outgroup members shape mental health.

In Study 2 we could also test one of RIM's key predictions (identity → mental health). As in Study 1, we did not find support for it. Having a strong ethnic identity had no direct positive association with mental health.

General Discussion

The current research explains how for members of stigmatized groups—those that are

targets of discrimination—feeling valued in that group has benefits for health but also bolsters group identification in ways that yield downstream health *costs*. Thus, beyond the more intuitive benefits of feeling valued in groups, the current research explains how feeling valued and highly identifying with one's minority group have certain adverse health implications as well. Specifically, results indicated that feeling valued in one's stigmatized group strengthens group identity in ways that lead to more frequent perceptions of discrimination. This in turn negatively shapes mental health. Results were supported longitudinally among ethnic minorities, and among sexual minorities. Together these studies provide evidence of how positive intragroup experiences and strong social identities can yield adverse health effects, both among individuals with visible and concealable stigmatized identities. [5]

Theoretical Contributions

While previous work has focused on the benefits of social identities for health (see, e.g., Jetten et al., 2012), the current research reveals that they can yield costs as well, particularly for members of stigmatized groups. This research further evinces a key mechanism by which it can occur (by heightening individuals' perceptions of group-based discrimination) and a key antecedent for understanding who within a group tends to develop a strong social identity (those who feel valued and admired in the group).

These insights are also distinct from those of most previous work on *minority* group relations (e.g., on the rejection-identification model; Branscombe et al., 1999; Postmes & Branscombe, 2002). That work has similarly focused on the benefits of identification as opposed to the costs illustrated here. Thus, overall, the current research provides a distinct and useful perspective on how identity-based processes shape stigmatized minorities' health.

The ISAH Model among Individuals with Concealable Stigmatized Identities. The

current research also outlines a novel form of the ISAH model (Figure 1B), developed to better understand how identity-based processes shape the health of individuals with concealable stigmatized identities (e.g., sexual minorities). The support evinced for this model suggests there is a critical distinction between the *importance* individuals place on their concealable stigmatized identity and its tendency to be cognitively *salient* in everyday situations. Thus, while in the context of more visible stigmatized identities (e.g., ethnic minorities) identity-importance and - salience may go hand-in-hand, often considered a single dimension (identity-centrality), in the context of concealable stigmatized identities these two sub-dimensions play distinct roles.

Specifically, the current research indicates that men who feel valued in the Gay community place more importance on their sexual identity (yet feeling valued does little to explain how often that identity is salient in everyday life). The level of importance placed on their sexual identity in turn influences how readily it becomes the salient social 'lens' through which experiences are interpreted. This ultimately prompts more frequent perceptions of group-based discrimination, with subsequent adverse mental health effects. Thus, the adapted ISAH model explicated, tested and supported in the current research provides a stronger basis than the original ISAH model for understanding identity's adverse health implications in the context of concealable stigmatized identities.

The ISAH Model in relation to RIM: Implications of Cognitive and Affective Identity Dimensions. The current research examined two key alternative predictions derived from the rejection-identification model: (1) discrimination experiences bolster the strength of minorities' identity (identity → discrimination); (2) the strength of minorities' identity has a direct positive effect/relationship with mental health (identity → mental health). Overall, support for RIM's predictions was mixed. The first was supported, but with a possible alternative explanation for

the effect (i.e., discrimination prompts individuals to become more cognizant of their minority identity and the role it plays in shaping their daily experiences; Cross, 1991; as opposed to it being an adaptive response that helps preserve minorities' health/well-being). The latter of RIM's two predictions was not supported.

Though it remains unclear, these results might suggest that RIM is not the strongest framework for understanding how certain dimensions of identity are involved in shaping minorities' discrimination experiences and health—in particular, the *cognitive* dimensions examined in the current research (e.g., identity-centrality), which are key to ISAH model. However, RIM is likely a strong framework for explaining how other dimensions of identity are involved in minorities' discrimination experiences and health—namely, those that are more affective in nature (e.g., identity-satisfaction, -solidarity). In fact, previous tests of RIM have often operationalized identity with affective elements mixed in (e.g., Branscombe et al., 1999; Postmes & Branscombe, 2002; Schmitt, Branscombe, Kobrynowicz, & Owen, 2002), which could help explain why that work has generally found positive associations between identity and health/well-being, while the current research and other work examining cognitive dimensions do not (e.g., Begeny & Huo, 2016; Sellers & Shelton, 2003; also see Leach, Mosquera, Vliek, & Hirt, 2010; Postmes & Brancombe, 2002) .

Thus, overall, we posit that cognitive dimensions of identity—the focus of the ISAH model—may primarily *shape* minorities' experiences with discrimination by heightening their vigilance to expressions of it in everyday life, [1] ultimately yielding negative indirect health effects. By comparison, more affective identity dimensions—a focal point in RIM—may be *shaped by* discrimination experiences, strengthened as a means of leveraging greater perceived group support for instance, and in turn positively shaping health. This perspective helps reconcile

the seemingly discordant predictions that ISAH and RIM make. In fact, it suggests that because

these models focus on different identity dimensions (cognitive vs. affective, respectively) they

may very well provide complementary and theoretically compatible perspectives, rather than

competing ones. In other words, the ISAH model and RIM may capture distinct parts of a

broader set of psychosocial processes involved in shaping minorities' discrimination experiences

and health (e.g., explaining identity's role as an antecedent vs. consequence of discrimination).

Looking forward, to develop a more complete understanding of identity's multifaceted

role in shaping minorities' discrimination experiences and health, it will be important to carefully

consider its multidimensional nature. Future work should aim to bridge insights from RIM and

the ISAH model, utilizing high-powered studies to parse out identity's multiple dimensions and

simultaneously examining their effects (e.g., on mental health).

Broader Implications for Minorities' Health

Weighing the Benefits and Costs of Feeling Valued. In addition to explaining identity's

potential adverse health effects, the ISAH model explains how feeling valued in one's minority

group can have benefits *and* costs for health. This raises the question of whether feeling valued

is, overall, more helpful or harmful to minorities' mental health. We tested this question in the

current research. Consistent with previous work (Begeny & Huo, 2016), we found that the

benefits of feeling valued statistically outweighed the costs. Thus, overall, feeling valued is

likely more helpful than harmful to minorities' mental health. Nevertheless, it is important to

consider the adverse effects of feeling valued as we look for the most effective ways to maintain

and promote minority mental health (for a discussion, see Begeny & Huo, 2016).

Implications for physical health. In the current research we used mental health indicators

(e.g., depressive symptoms, psychological distress) that have been linked to a host of physical

health outcomes including diabetes, increased blood pressure and increased risk of mortality (e.g., all cause, cardiovascular; Adler, Epel, Castellazzo & Ickovics, 2000; Moussavi et al., 2007; Russ et al., 2012; also see Earnshaw et al., 2015). Thus, findings from the current studies may have translatable implications for minorities' physical health.

Limitations and Future Directions

The current research utilized longitudinal data to better assess the directionality of effects within the ISAH model across time. Though evidence supported each of the model's hypothesized causal effects, these data cannot truly assert causality. While we tested directional effects in ways that adhere to standards for assessing causality in longitudinal observational research (i.e., cross-lagged regression analyses) and followed additional guidelines for ensuring the reliability of these effects (e.g., using latent factors, testing for invariance of factor loadings across time points), it is impossible to provide causal claims from observational research. Therefore, experimental studies testing processes within the ISAH model will be an important step in the future. Such studies would complement the richness of the current studies, which examine processes within the ISAH model altogether and tap into minorities' real-world experiences of valuation, discrimination and distress.

Conclusions

Amidst efforts to broaden our understanding of the benefits of social identities for health, it is important to consider contexts in which social identities have costs as well. Perhaps nowhere is it more important to carefully consider this than among socially devalued, minority groups— those that already endure disproportionate rates of illness and pervasive forms of social stress. Ultimately, to ameliorate these health inequities and pervasive stressors we need to develop a comprehensive understanding of identity's multifaceted role in shaping health. The current

research strives to offer a meaningful contribution to that effort. It provides a perhaps sobering

but critically important framework for understanding how strong social identities can yield

negative health implications.

Notes

1. Highly identified minorities may also perceive more discrimination because of greater discrimination attributions amidst ambiguous negative treatment, or because they are in fact *treated* more negatively by outgroup members (Kaiser & Pratt-Hyatt, 2009). Importantly, whether it be a function of heightened vigilance, attributions or differential treatment by outgroup members (or a combination of these processes), they converge on the prediction that highly identified minorities will ultimately *experience* more discrimination.

2. High average inter-item correlations are not a prerequisite to the items' use in SEM latent factor specification. They are provided here only for ease of interpretation.

3. There was substantial variance around each factor but with multivariate non-normality.

4. More precisely, Haslam (2004; building from McGarty, 1999) argues that the importance of one's identity to the self-concept shapes its likelihood of becoming salient in a given situation (as the adapted ISAH model predicts); but also, its salience in that situation makes it more likely to become salient in *future* situations (those with conditions that generally enable the fit of that self-categorization to the situation). This is because its salience in the initial situation feeds into the longer-term, enduring state of that identity as a key part of one's self-concept (becoming a 'prior condition'), which ultimately increases one's readiness to perceive situations from that same social identity 'lens' in the future. In this way, the importance of one's identity to the self-concept shapes its tendency to become salient in a situation, and its salience in that situation in turn reinforces its importance to the self-concept (for a visualization of this idea, see Haslam, 2004, Figure A1.1).

5. Notably, as in Begeny and Huo (2016; see that publication for more conceptual discussion), we also tested whether feeling valued among minority ingroup members (intragroup status)

and/or the strength of minorities' identity buffered the adverse effects of discrimination on health. There were no significant buffering effects of intragroup status or identity in either study, nor in any of the analytical frameworks (SEM, MSEM), models tested (original vs. adapted ISAH models) or conceptual approaches to defining identity (-centrality, -importance, -salience).

Table 1

Study 1 means, standard deviations and bivariate correlations among variables at each time point

| Variable | Time 1 | | Time 2 | | (Time 1 correlations above diagonal) | | | | | |
	Mean	SD	Mean	SD	1	2	3	4	5	6
1. Ethnic Intragroup Status	4.74[a]	1.33	4.82	1.27	-----	.31***	.14*	-.37***	-.15**	-.14**
2. Ethnic Identity-centrality	5.42[a]	1.29	5.43	1.28	.34***	-----	.32***	-.02	.06	.07
3. Perceived Discrimination	2.63[b]	1.00	2.58	1.02	.12**	.31***	-----	.14*	.21***	.26***
4. Anxiety	2.63[b]	0.64	2.64	0.66	-.27***	-.06	.21**	-----	.66***	.64***
5. Psychological Distress	2.87[b]	0.72	2.94	0.72	-.16***	.04	.28***	.67***	-----	.67***
6. Depressive Symptoms	0.64[c]	0.46	0.62	0.49	-.19***	.01	.30***	.68***	.68***	-----

Note. Time 1 correlations above diagonal, Time 2 correlations below, [a] 1-7 scale, [b] 1-5 scale, [c] 0-3 scale. ** $p < .01$; *** $p < .001$

Table 2. *Study 1 bivariate correlations among difference scores and percentage of participants changing more than 1 SD over time (from the mean difference score; T1 → T2)*

Change in _____ Over Time	1	2	3	4	5	Participants with change > ±1 SD
1. Ethnic Intragroup Status	-----					30 %
2. Ethnic Identity-Centrality	.12*	-----				21 %
3. Perceived Discrimination	-.01	.13*	-----			27 %
4. Anxiety	-.09	.02	.14*	-----		26 %
5. Psychological Distress	.04	.05	.17**	.42***	-----	31 %
6. Depressive Symptoms	-.05	.08	.13*	.45***	.51***	27 %

Note. * $p < .05$; ** $p < .01$; *** $p < .001$

Table 3. *Study 1, standardized cross-lagged SEM regression coefficients for each segment of the ISAH model*

	STAT ⇆ ID	ID ⇆ DISC	DISC ⇆ HTH	STAT ⇆ HTH
Hypothesized Effect	$STAT_1 \rightarrow ID_2$ .13*	$ID_1 \rightarrow DISC_2$ .09*	$DISC_1 \rightarrow HTH_2$ -.05*	$STAT_1 \rightarrow HTH_2$ .04 [+]
Reverse-effect	$STAT_2 \leftarrow ID_1$ .04, *ns*	$ID_2 \leftarrow DISC_1$ .12*	$DISC_2 \leftarrow HTH_1$ .02, *ns*	$STAT_2 \leftarrow HTH_1$ .10 [+]

Note. STAT = Ethnic Intragroup Status, ID = Ethnic Identity-centrality, DISC = Perceived Discrimination, HTH = Mental Health. Subscripts indicate the time point the construct was measured at. * $p < .05$; [+] $p < .10$

Table 4

Study 2 means, standard deviations and bivariate correlations among variables

Variable	Mean	SD	1	2	3	4	5	6	7
1. Intragroup Status	3.75[a]	1.45	-----						
2. Identity-centrality	4.89[a]	1.45	.20***	-----					
3. Perceived Discrimination	2.55[b]	0.90	.07	.14*	-----				
4. Anxiety	2.71[b]	0.80	-.41***	-.12[+]	.17**	-----			
5. Psychological Distress	2.80[b]	0.84	-.25***	.02	.24***	.65***	-----		
6. Depressive Symptoms	1.10[c]	0.65	-.24***	-.13*	.34***	.71***	.73***	-----	
7. Identity-importance	5.12[a]	1.62	.23***	.94***	.09	-.17**	-.01	-.15*	-----
8. Identity-salience	4.34[a]	1.64	.07	.73***	.22***	.01	.07	.00	.48***

Note. [a] 1-7 scale, [b] 1-5 scale, [c] 0-3 scale. * $p < .05$; ** $p < .01$; *** $p < .001$; [+] $p < .10$
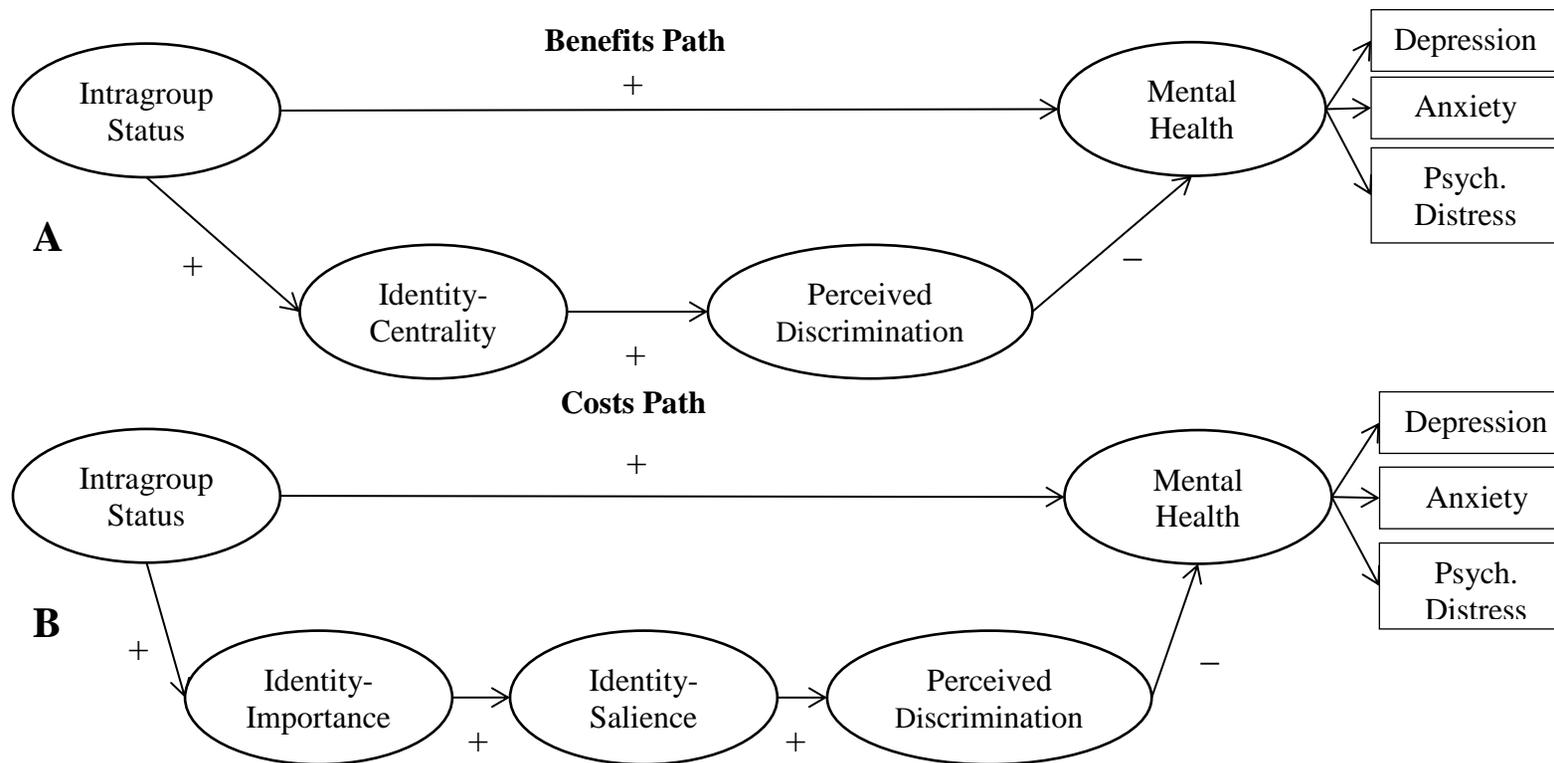
Figure 1. A schematic representation of the intragroup status and health model (A) and an adapted version (B) developed for

examining these processes among individuals with concealable stigmatized identities (study 2). The *Benefits Path* (top path) and *Costs*

Path (bottom path) reflect the direct mental health benefits and indirect mental health costs of minority intragroup status, respectively.

Identity-importance and -salience (B) are two distinct dimensions originally embedded within the broader -centrality construct (A).
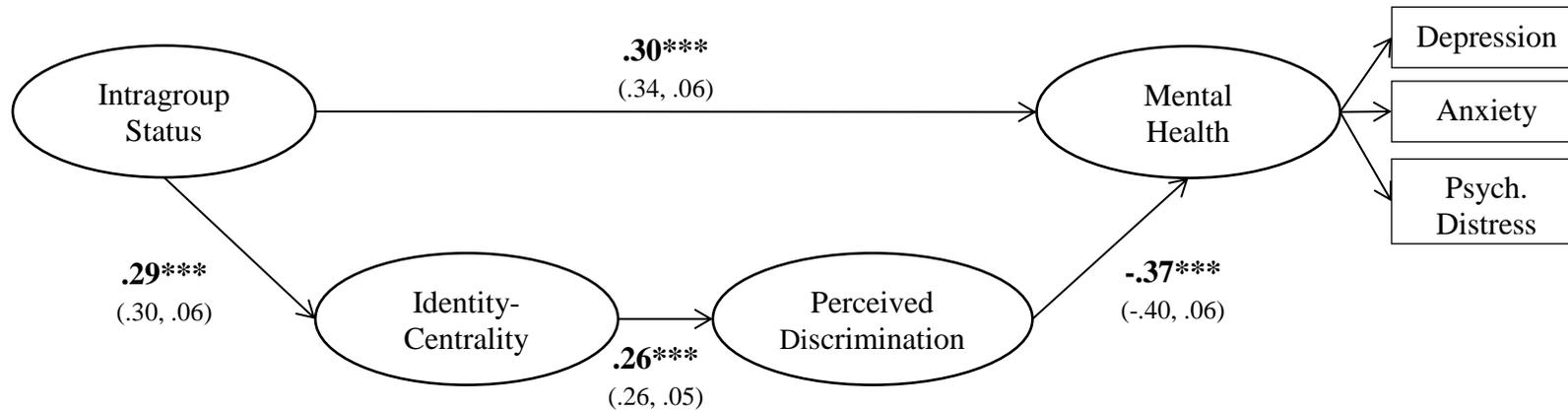
93

Figure 2. Results of Study 1. The intragroup status and health model with standardized path coefficients (unstandardized coefficients, standard errors) at Time 1: Satorra-Bentler χ^2 (73) = 194.4, $p < .001$, CFI = 0.97, SRMR = .06, RMSEA = .06 (CI: .05 - .07), $R^2_{\text{psychological health}}$ = .21, Total Effect $_{\text{intragroup status} \rightarrow \text{health}}$: β = .28, $p < .001$. Factor loadings are omitted for simplicity but all were significantly associated with their respective latent factors at $p < .001$. The significance and magnitude of path coefficients (and overall model fit) at Time 2 were very similar, all $p's < .001$. *** $p < .001$.
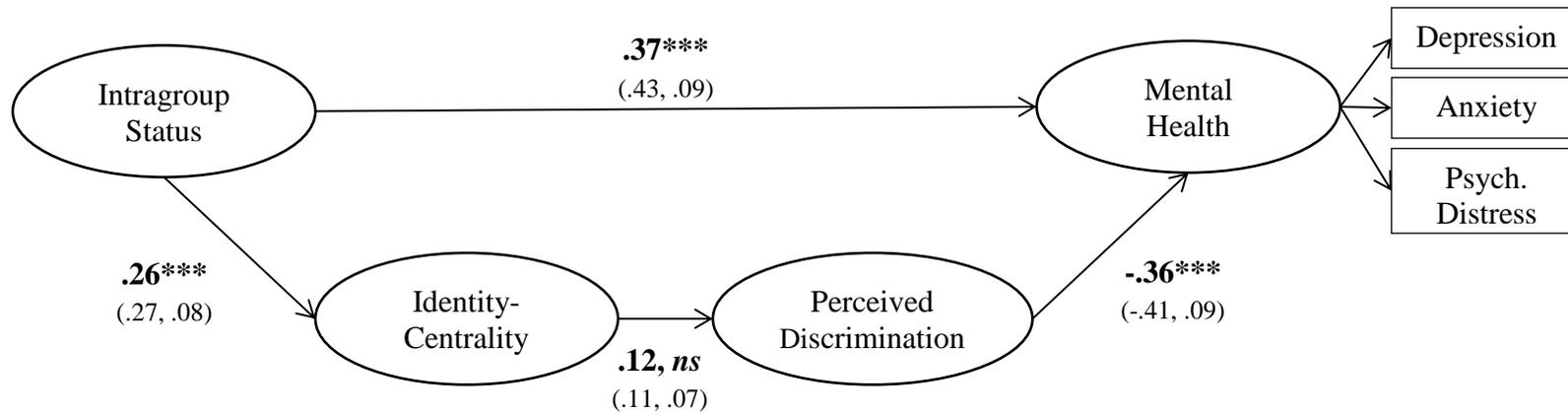
Figure 3. Results of Study 2, original intragroup status and health model in the context of concealable stigmatized identities, with standardized path coefficients (in parentheses: unstandardized coefficients, standard errors): Satorra-Bentler χ^2 (73) = 145.3, $p < .001$, CFI = .96, SRMR = .06, RMSEA = .06 (CI: .05 - .08). Factor loadings are omitted for simplicity but all were significantly associated with their respective latent factors at $p < .001$. *** $p < .001$.

Intragroup Status

.37*
(.43, .09)

.26*
(.27, .08)

Identity-Importance

.53*
(.60, .11)

Identity-Salience

.22*
(.19, .07)

Perceived Discrimination

-.36*
(-.41, .09)

Mental Health

Depression

Anxiety

Psych. Distress
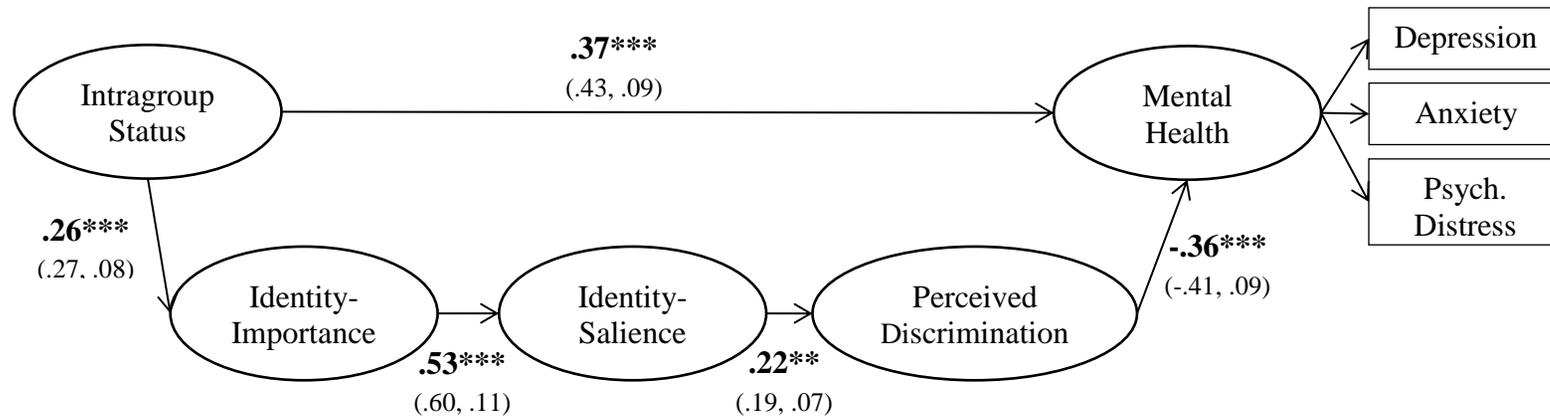
Figure 4. Results of Study 2, an adapted intragroup status and health model developed for use in the context of concealable stigmatized identities, with standardized path coefficients (unstandardized coefficients, standard errors). Factor loadings are omitted for simplicity but all were significantly associated with their respective latent factors at $p < .001$. *** $p < .001$; ** $p < .01$.

References

Adler, N. E., Epel, E., Castellazzo, G., & Ickovics, J. (2000). Relationship of subjective and

    objective social status with psychological and physiological functioning: Preliminary data

    in healthy White women. *Health Psychology, 19*(6)*,* 586-592. doi:10.1037/0278-

    6133.19.6.586

Beals, K. P., Peplau, L. A., & Gable, S. L. (2009). Stigma management and well-being: The

    role of perceived social support, emotional processing, and suppression. *Personality and*

    Social Psychology Bulletin, 35(7), 867–879. doi:10.1177/0146167209334783

Begeny, C. T., & Huo, Y. J. (2016). Is it always good to feel valued? The psychological

    benefits *and* costs of higher perceived status in one's ethnic minority group. *Group*

    Processes & Intergroup Relations. Advance online publication.

    doi:10.1177/1368430216656922

Bentler, P. M. (2006). *EQS 6 structural equations program manual*. Encino, CA: Multivariate

    Software.

Branscombe, N. R., Schmitt, M. T., & Harvey, R. D. (1999). Perceiving pervasive discrimination

    among African Americans: Implications for group identification and well-being. *Journal*

    of Personality and Social Psychology, 77(1)*,* 135-149. doi:10.1037/0022-3514.77.1.135

Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress.

    Journal of Health and Social Behavior, 24(4), 385-396. doi:10.2307/2136404

Crocker, J., Voelkl, K., Testa, M., & Major, B. (1991). Social stigma: The affective

    consequences of attributional ambiguity. *Journal of Personality and Social Psychology*,

    60(2), 218 228. doi:10.1037/0022-3514.60.2.218

Cross, W. E. (1991). *Shades of black: Diversity in African American identity*. Philadelphia, PA:

Temple University Press.

Earnshaw, V. A., Rosenthal, L., Carroll-Scott, A., Santilli, A., Gilstad-Hayden, K., & Ickovics, J. R. (2015). Everyday discrimination and physical health: Exploring mental health processes. *Journal of Health Psychology*. Advance online publication. doi:10.1177/1359105315572456

Elovainio, M., Ferrie, J. E., Singh-Manoux, A., Shipley, M., Batty, G. D., Head, J., … Kivimaki, M. (2011). Socioeconomic Differences in Cardiometabolic Factors: Social causation or health-related selection? Evidence from the Whitehall II Cohort Study, 1991-2004. *American Journal of Epidemiology, 174*(7), 779–789. doi:10.1093/aje/kwr149

Emler, N., & Hopkins, N. (1990). Reputation, social identity, and the self. In D. Abrams & M. A. Hogg (Eds), *Social identity theory: Constructive and critical advances* (pp. 113-130). New York: Springer-Verlag.

Fielding, K. S., & Hogg, M. A. (1997). Social identity, self-categorization, and leadership: A field study of small interactive groups. *Group Dynamics: Theory, Research and Practice*, *1*(1), 39-51. doi: 10.1037/1089-2699.1.1.39

Greenaway, K. H., Cruwys, T., Haslam, S. A., & Jetten, J. (2016). Social identities promote well-being because they satisfy global psychological needs. *European Journal of Social Psychology, 46*(3), 294–307. doi:10.1002/ejsp.2169

Haslam, S. A. (2004). *Psychology in organizations: The social identity approach*. London: Sage

Haslam, S. A., Jetten, J., Postmes, T., & Haslam, C. (2009). Social identity, health, and well-being: An emerging agenda for applied psychology. *Applied Psychology, 58,* 1–23. http://dx.doi.org/10.1111/j.1464-0597.2008.00379.x

Hogg, M. A. (2001). A social identity theory of leadership. *Personality and Social Psychology*

Review, 5(3), 184–200. doi: 10.1207/s15327957pspr0503_1

Huo, Y. J., Binning, K. R., & Begeny, C. T. (2015). Promoting social engagement and well-being in diverse groups: The role of respect. In S. Otten, I. van der Zee, & M. Brewer (Eds), *Toward inclusive organizations: Determinants of successful diversity management at work* (pp. 49-66). New York, NY: Psychology Press.

Huo, Y. J., Binning, K. R., & Molina, L. E. (2010). Testing an integrative model of respect: Implications for social engagement and well-being. *Personality and Social Psychology Bulletin, 36*(2), 200-212. doi:10.1177/0146167209356787

Jetten, J., Haslam, C., & Haslam, S. A. (Eds.). (2012). *The social cure: Identity, health and well-being*. New York, NY: Psychology Press.

Jones, J. M., Jetten, J., Haslam, S. A., & Williams, W. H. (2012). Deciding to disclose: The importance of maintaining social relationships for well-being after acquired brain injury. In J. Jetten, C. Haslam, & S. A. Haslam (Eds.), *The social cure: Identity, health and well-being* (pp. 255-271). London: Psychology Press

Kaiser, C. R, & Pratt-Hyatt, J. S. (2009). Distributing prejudice unequally: Do Whites direct their prejudice toward strongly identified minorities? *Journal of Personality and Social Psychology, 96*(2), 432-445. doi:10.1037/a0012877

Kohout, F. J., Berkman, L. F., Evans, D. A., & Cornoni-Huntley, J. (1993). Two shorter forms of the CES-D depression symptoms index. *Journal of Aging and Health*, *5*(2), 179-193. doi:10.1177/089826439300500202

Leach, C. W., Mosquera, P. M. R., Vliek, M. L. W., & Hirt, E. (2010). Group devaluation and group identification. *Journal of Social Issues, 66*(3), 535–552. doi:10.1111/j.1540-4560.2010.01661.x

Leach, C. W., van Zomeren, M., Zebel, S., Vliek, M. L. W., Pennekamp, S. F., Doosje, B., Ouwerkerk, J. W., & Spears, R. (2008). Group-level self-definition and self-investment: A hierarchical (multicomponent) model of in-group identification. *Journal of Personality and Social Psychology, 95*(1)*,* 144-165. doi:10.1037/0022-3514.95.1.144

McArdle, J. J. (2009). Latent variable modeling of differences and changes with longitudinal data. *Annual Review of Psychology, 60*(1), 577–605. doi:10.1146/annurev.psych.60.110707.163612

McGarty, C. (1999). *The categorization process in social psychology*. London: Sage.

Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin, 129*(5), 674–697. doi:10.1037/0033-2909.129.5.674

Molero, F., Fuster, M. J., Jetten, J., & Moriano, J. A. (2011). Living with HIV/AIDS: A psychosocial perspective on coping with prejudice and discrimination. *Journal of Applied Social Psychology, 41*(3), 609–626. doi:10.1111/j.1559-1816.2011.00729.x

Oakes, P. J. (1987). The salience of social categories. In J. C. Turner, M. A. Hogg, P. J. Oakes, S. D. Reicher, & M. S.Wetherell, *Rediscovering the social group: A self-categorization theory* (pp. 117-141). Oxford, England: Blackwell.

Operario, D., & Fiske, S. (2001). Ethnic identity moderates perceptions of prejudice: Judgments of personal versus group discrimination and subtle versus blatant bias. *Personality and Social Psychology Bulletin, 27*(5)*,* 550–561. doi:10.1177/0146167201275004

Pachankis, J. E. (2007). The psychological implications of concealing a stigma: A cognitive-affective-behavioral model. *Psychological Bulletin, 133*(2), 328–345. doi:10.1037/0033-2909.133.2.328

Pascoe, E. A., & Smart Richman, L. (2009). Perceived discrimination and health: A meta-analytic review. *Psychological Bulletin, 135*(4), 531-554. doi: 10.1037/a0016059

Postmes, T. & Branscombe, N.R. (2002). Influence of long-term racial environmental composition on subjective well-being in African Americans. *Journal of Personality and Social Psychology, 83*(3)*,* 735-751. doi:10.1037/0022-3514.83.3.735

Quinn, D. M., & Chaudoir, S. R. (2009). Living with a concealable stigmatized identity: The impact of anticipated stigma, centrality, salience, and cultural stigma on psychological distress and health. *Journal of Personality and Social Psychology, 97*(4), 634–651. doi:10.1037/a0015815

Quinn, D. M., & Earnshaw, V. A. (2011). Understanding concealable stigmatized identities: The role of identity in psychological, physical, and behavioral outcomes. *Social Issues and Policy Review, 5*(1), 160–190. doi:10.1111/j.1751-2409.2011.01029.x

Quinn, D. M., Williams, M. K., Quintana, F., Gaskins, J. L., Overstreet, N. M., Pishori, A., … Chaudoir, S. R. (2014). Examining effects of anticipated stigma, centrality, salience, internalization, and outness on psychological distress for people with concealable stigmatized identities. *PLoS ONE, 9*(5), e96977. doi:10.1371/journal.pone.0096977

Russ, T. C., Stamatakis, E., Hamer, M., Starr, J. M., Kivimaki, M., & Batty, G. D. (2012). Association between psychological distress and mortality: Individual participant pooled analysis of 10 prospective cohort studies. *BMJ*, *345*, e4933. doi:10.1136/bmj.e4933

Satorra, A., & Bentler, P. M. (1990). Model conditions for asymptotic robustness in the analysis of linear relations. *Computational Statistics & Data Analysis, 10*(3), 235-249. doi:10.1016/0167-9473(90)90004-2

Schmitt, M. T., Branscombe, N. R., Kobrynowicz, D., & Owen, S. (2002). Perceiving

discrimination against one's gender group has different implications for well-being in

women and men. *Personality and Social Psychology Bulletin, 28*, 197–210.

doi:10.1177/0146167202282006

Sellers, R. M. & Shelton, J. N. (2003). The role of racial identity in perceived racial

discrimination. *Journal of Personality and Social Psychology, 84*(5)*, 1079-1092.

doi:10.1037/0022-3514.84.5.1079

Simon, B., & Stürmer, S. (2003). Respect for group members: Intragroup determinants of

collective identification and group-serving behavior. *Personality and Social Psychology

Bulletin, 29*(2), 183–193. doi:10.1177/0146167202239043

Singh-Manoux, A., Marmot, M. G., & Adler, N. E. (2005). Does subjective social status predict

health and change in health status better than objective status? *Psychosomatic Medicine,

67*(6), 855–861. doi:10.1097/01.psy.0000188434.52941.a0

Smith, E. R., Coats, S., & Walling, D. (1999). Overlapping mental representations of self, in-

group, and partner: Further response time evidence and a connectionist model.

Personality and Social Psychology Bulletin, *25*(7), 873-882.

doi:10.1177/0146167299025007009

Spielberger, C. D. (1983). *Manual for the State-Trait Anxiety Inventory STAI (Form Y).* Palo

Alto, CA: Mind Garden.

Turner, J. C., Oakes, P. J., Haslam, S. A., & McGarty, C. (1994). Self and collective: Cognition

and social context. *Personality and Social Psychology Bulletin, 20*(5), 454–463.

doi:10.1177/0146167294205002

Tyler, T. R., & Blader, S. L. (2002). Autonomous vs. comparative status: Must we be better than

others to feel good about ourselves?. *Organizational Behavior and Human Decision

Processes, *89*(1), 813-838. doi:10.1016/s0749-5978(02)00031-6

Tyler, T. R. & Blader, S. L. (2003). The group engagement model: Procedural justice, social

    identity, and cooperative behavior. *Personality and Social Psychology Review, 7*(4)*,* 349-

    361. doi:10.1207/s15327957pspr0704_07

Tyler, T. R., Degoey, P., & Smith, H. J. (1996). Understanding why the justice of group

    procedures matters. *Journal of Personality and Social Psychology*, *70*(5), 913-930. doi:

    10.1037/0022-3514.70.5.913

van Knippenberg, B., & van Knippenberg, D. (2005). Leader self-sacrifice and leadership

    effectiveness: The moderating role of leader prototypicality. *The Journal of Applied*

    Psychology, 90(1), 25–37. doi: 10.1037/0021-9010.90.1.25

Williams, D. R., & Mohammed, S. A. (2009). Discrimination and racial disparities in health:

    evidence and needed research. *Journal of Behavioral Medicine, 32*(1), 20–47.

    doi:10.1007/s10865-008-9185-0

Paper 3

How Individuals Derive a Sense of Belonging and Status from Their Social Groups

And its Implications for Mental Health

Christopher T. Begeny [a]

Yuen J. Huo [a]

[a] University of California, Los Angeles, Department of Psychology

Abstract

Individuals have two fundamental social needs, to feel a sense of belonging and a sense of status, and social groups can be a vital resource for satisfying those needs. Three studies test a conceptual model that explains how in various groups (e.g., workgroups, ethnic minority groups) individuals come to feel a sense of belonging and status in those groups. The model predicts that when individuals are treated by fellow group members in ways that show respect and care for their well-being—an oft-studied form of intragroup treatment—it fosters a sense of belonging. By comparison, when individuals are treated in ways that show interest and appreciation for their distinct qualities and skills—a different form of intragroup treatment introduced here—it fosters a sense of status. The model also explains how these two forms of intragroup treatment have positive downstream health implications, in part by strengthening individuals' identification with the group and promoting a greater sense of control over life. Results of all three studies supported the model's predictions. Thus, overall, the current research helps advance our understanding of how some of individuals' most basic human needs (a sense of belonging, status) can be satisfied through group memberships, and ultimately promote greater health.

Keywords: status; belonging; identity; respect; health; well-being; race; ethnicity; work

How Individuals Derive a Sense of Belonging and Status from Their Social Groups

And its Implications for Mental Health

In recent decades, evidence has grown to suggest that humans possess two fundamental social needs: to feel a sense of belonging (to feel included, accepted and well-liked by others) and to feel a sense of status (to feel valued, admired, and highly regarded by others; Anderson, Hildreth & Howland, 2015; Baumeister & Leary, 1995). To satisfy these needs, individuals may in part rely on their interpersonal relations (e.g., feeling a strong attachment to another person). But they may also rely on their *group memberships* to satisfy these needs (e.g., feeling a strong attachment to a team, organization or other social group). Indeed, social groups can be a powerful force in shaping individuals' sense of belonging and status (Hornsey & Jetten, 2004; Huo & Binning, 2008; Huo, Binning & Molina, 2010).

Moreover, when groups provide a sense of belonging and status it has several important downstream implications. A wealth of research shows for instance that it has implications for individuals' behavior (e.g., willingness to make sacrifices for the group; for a review, see Huo & Binning, 2008). There is also emerging evidence that is has implications for individuals' health (Begeny & Huo, 2016, Begeny & Huo, 2017; Huo, Binning & Begeny, 2015, Huo et al., 2010). Other emerging lines of research help further explain *how* these health implications arise. Specifically, evidence suggests that a strong sense of belonging and status in groups strengthens individuals' psychological connection to that group—that is, their identification with the group (e.g., Huo et al., 2010). With this strong connection or bond, individuals are better able to draw on the strength and support that that group provides as they work to achieve important personal goals and overcome stressors in life (Greenaway, Cruwys, Haslam & Jetten, 2016; Haslam, Jetten, Postmes & Haslam, 2009). Ultimately, this strengthened capacity to achieve goals and

overcome stressors reinforces individuals' sense of control over life, and helps to preserve and promote their health (Greenaway et al., 2015; Greenaway et al., 2016).

Given that social groups can play a vital role in satisfying these two fundamental needs, and give rise to critical downstream consequences (e.g., for health), it is important to understand *how individuals develop a sense of belonging and status in groups*. In the current research, we outline a theoretical framework that aims to shed new light on these antecedent processes. It builds from the fundamental idea that individuals discern their belonging and status in groups based on how others in the group treat them during everyday interactions (Lind & Tyler, 1998, Tyler, Degoey & Smith, 1996; Tyler & Lind, 1992; Smith & Tyler, 1997). This includes how employees at an organization are treated by their co-workers, and how students are treated by peers at school. Yet unlike past work, which generally describes a single form of group-based treatment (that which conveys respect and care for one's well-being) the proposed framework outlines a second, distinct form (that which conveys recognition and appreciation for one's distinct qualities) and suggests that each differentially shape individuals' sense of belonging and status (respectively). Thus, compared to previous theorizing the current framework aims to provide a more precise and comprehensive understanding of how individuals develop a sense of being accepted and well-liked (belonging) versus valued and admired (status) within the groups they engage with in everyday life (e.g., work organizations, student communities).

Additionally, this framework explicates how individuals' sense of belonging and status in groups can yield downstream health consequences. It integrates work on intragroup processes (e.g., Huo et al., 2010) with recent advances in 'social cure' research (Greenaway et al., 2015) to explain how a strong sense of intragroup belonging and status can promote individuals' health, in part by strengthening identification with the group and ultimately their sense of control over life.

Developing a Sense of Belonging and Status in Groups

Within self-relevant groups individuals are motivated to understand what that group generally thinks of them—that is, to discern the group's general attitudes and opinions of them (Emler & Hopkins, 1990). This is in part because it provides identity-relevant information and guides appraisals of self-worth (Ellemers, Doosje & Spears, 2004; Smith, Tyler & Huo, 2003). Individuals generally discern what the group thinks of them based on how they are treated during everyday interactions (e.g., by authority figures, ingroup peers). During these interactions group members provide valuable cues (social evaluative information) that signal to the individual what the group thinks. This ultimately guides how that individual views him or herself (Lind & Tyler, 1998, Tyler et al., 1996; Tyler & Lind, 1992).

Experiences of Inclusive Treatment

In examining this general process whereby treatment from others in a group shapes one's self-concept, previous theory and research have focused largely on individuals' experiences with a particular type of group-based treatment—that which conveys fairness, dignity and care for one's well-being. This is referred to here as *inclusive treatment* and aligns with what has been described as the general 'quality of one's treatment' in groups (Tyler & Blader, 2003). It is also similar to what others have called interactional or interpersonal justice (Greenberg, 2006) and to the concept of procedurally fair treatment but without the emphasis on fairness and care being expressed through formal group procedure (Tyler et al., 1996).

Past research on inclusive treatment has produced robust effects, showing in a variety of groups that when individuals are treated by other group members in ways that are dignified and considerate it affects their sense of being *respected* in that group (e.g., Tyler et al., 1996; Simon & Stürmer, 2003; Smith & Tyler, 1997). Yet while the link between inclusive treatment and

respect is robust, 'respect' as a construct has been defined in different and sometimes muddled

ways. At times it has been defined as one's sense of belonging in a group, and other times as

one's sense of status (if not some mix of the two; for overviews, see Huo & Binning, 2008; Huo

et al., 2010). Yet several lines of work now indicate that these are in fact distinct elements of

respect. 'Respect' includes both one's sense of belonging in a group *and* one's sense of status

(Huo & Binning, 2008, Huo et al., 2010; Rogers & Ashforth, 2014; Spears, Ellemers & Doosje,

2005; also see De Cremer & Tyler, 2005; Ellemers, Sleebos, Stam & de Gilder, 2013; van

Prooijen, van den Bos & Wilke, 2004). [1] Ultimately, because these two elements may have been

conflated in past work it is difficult to know whether inclusive treatment primarily shapes one's

sense of belonging in groups or one's sense of status (or perhaps both equally).

Inclusive Treatment May Primarily Shape Individuals' Sense of Belonging

When considering some of the key conceptual features of inclusive treatment it can be

argued that it likely shapes individuals' sense of belonging in groups, more so than their status.

To understand why this might be it is key to recognize that inclusive treatment conceptually

reflects a set of behaviors that can and should be distributed to every group member. In fact, at

its core it reflects a set of "rights and entitlements *due* to every group member" (Tyler et al.,

1996, pp. 914; italics added; also see Binning & Huo, 2012; Blader & Tyler, 2003; Huo, 2002).

Thus, everyone in a group can and should be treated in ways that are generally considerate,

---

[1] *Intragroup status* is defined as one's relative sense of being admired, looked up to or highly regarded by others in a group (Begeny & Huo, 2016, 2017; Huo et al., 2010). Assessing one's status involves a comparative process (discerning one's position relative to others in the group and/or comparing oneself to the group's ideal prototype). For discussion on how this differs from related constructs (e.g., power, prestige), see Blader and Chen (2014).

Intragroup belonging is defined as one's general sense of being accepted, included and well-liked by others in a group (Huo et al., 2010). Compared to intragroup status, which is a more 'vertical' or hierarchical construct (one's perceived standing relative to others), intragroup belonging is a more 'horizontal' or nonhierarchical construct. This is akin to the distinction between one's sense of "getting ahead" (status) versus "getting along" (belonging; see Anderson et al., 2015). For a more detailed discussion on the intragroup status-belonging distinction, see work by Huo and others (e.g., Huo & Binning, 2008; Huo et al., 2010; Rogers & Ashforth, 2014).

caring and dignified. In support of this idea, when Huo (2002) asked members of a group to decide how they would treat a collection of individuals who either adhered to the norms of that group or violated them, she found that while members were less likely to treat those who violated group norms the same way in certain respects (e.g., sharing economic resources) members were just as likely to advocate that they be treated in a considerate and dignified manner (inclusive treatment). Moreover, group members' overall level of endorsement for the (equal) distribution of inclusive treatment was much higher than it was for the other forms of treatment. As Huo notes, this indicates that inclusive treatment is something that *all members* of a group are seen as entitled to, even those violating group norms. Ultimately, because it is seen as a basic right or entitlement due to all group members, this most likely shapes members' expectations about receiving this type of treatment. Specifically, all are likely to expect to receive inclusive treatment (i.e., being treated in ways that are dignified and considerate).

Because inclusive treatment is a form of group-based treatment that everyone generally expects—an entitlement to all members, regardless of one's particular rank or status in the group—it also likely shapes the type of information individuals can reliably derive about themselves when it is received. Specifically, if the presumed basis for distributing this type of treatment is *not* their particular status in the group but instead based on whether they are considered full-fledged members of the group, it logically follows that receiving it should not suggest much about their status in the group. Similarly, inclusive treatment should not make individuals feel particularly special, unique or valued relative to others in the group, or suggest much about their personally distinguishing qualities (their specific skills, talents or expertise) because this is also not the expected basis for receiving it. Ultimately, because these types of individuating qualities are more so the basis for discerning relative status in groups (Cheng,

Tracy & Heinrich, 2010; Hardy & Van Vugt, 2006) inclusive treatment may not do much to shape individuals' perceptions of their intragroup status.

Instead, by virtue of its nature as a perceived entitlement and group-wide expectation, inclusive treatment more likely communicates messages about whether individuals are accepted as full-fledged members of the group. In other words, it may largely shape individuals' sense of belonging (for a similar argument, see Rogers & Ashforth, 2014). Huo (2002) similarly suggests that a restriction of one's access to inclusive treatment conveys that one is not accepted and does not belong in that group (also see Tyler & Lind, 1990).

Understanding How Individuals Discern Their Status in Groups:

Identifying Another Form of Group-Based Treatment

The above theorizing suggests that inclusive treatment is vital to promoting a sense of belonging in groups but may not help individuals discern their relative status, as it does not highlight distinct or individuating qualities. Thus, it remains unclear how individuals might ascertain their relative status in groups. In keeping with the core theoretical frame of this work (i.e., individuals' self-concept is shaped by how others in the group treat them; Tyler et al., 1996) we consider whether another form of group-based treatment can be identified here —one that does more to shape individuals' sense of status in a group (e.g., being admired, looked up to). [2]

---

[2] Our aim is to identify a form of group-based treatment through which individuals' sense of relative status in groups is shaped. There are of course other perhaps more 'direct' ways individuals' sense of status can be shaped. In organizational settings for instance, an individual's job title, or their salary relative to other employees, carries a fairly straightforward message about their relative status. While these more direct status indicators are important to understanding how individuals discern their status in groups, they are notably found only in select groups (e.g., those with formally structured hierarchies, assigned titles/positions). So, they cannot explain individuals' perceived status in a variety of other important social groups (e.g., those without formally designated titles/positions). Therefore, it is critical to consider whether there might also be other more subtle or indirect ways through which individuals' sense of relative status in groups is shaped. In fact, it would be quite valuable if one could identify a set of cues that operate similarly across a wide variety of groups—including both large and small groups, those with well-defined structures (e.g., work organizations) and those with more diffuse structures (e.g., racial/ethnic groups), those without explicit roles (e.g., friendship groups), as well as subgroups (e.g., workers in an company all with the same job title). This is the central aim of the current research.

To understand how other group members' treatment of an individual may shape his or her sense of status, it is informative to consider previous research that explores the 'types' of individuals that are commonly seen by others in a group as having high status (Cheng et al., 2010, Flynn, Reagans, Amantullah & Ames, 2006, Hardy & Van Vugt, 2006). In short, that work indicates that individuals who are highly valued in groups tend to be those who: (a) behave in the most group-oriented ways, (b) possess skills, knowledge, or forms of expertise that are valuable to the group, and (c) those that are able to give good advice. There is also one other critically important theme that emerges when characterizing those who are highly valued: (d) *others in the group seek them out* for their advice, or rely on them for their knowledge, skills or expertise. This is critical because it suggests how the actions or behaviors of other group members—the act of going to an individual to seek out his or her guidance—might in turn shape that individual's perceptions of his or her *own* status (a process of reflected appraisals, whereby the actions of others toward one shape his or her self-concept; Mead, 1913). Together, this suggests that individuals' sense of status in groups might be shaped by instances where others in the group come to them for guidance, or call upon them to utilize a particular group-relevant skill, base of knowledge or form expertise that they possess.

Conceptualizing *Distinctive Treatment*

Building from these previous insights, we propose that individuals may discern their status in groups from experiences with a form of group-based treatment we refer to as *distinctive treatment*. Distinctive treatment represents a collection of behaviors and other verbal/nonverbal expressions coming from other group members during everyday interactions that signal to an individual that s/he possess unique qualities that are valued by the group. This includes instances when other group members call upon an individual to provide some type of guidance or expertise

that can benefit the group, particularly when it requires one to employ a valuable skill or base of knowledge. For example, in a work organization this may include when one is called upon by a subgroup of employees who are trying to solve a problem for which they are seeking guidance. Other examples of distinctive treatment include when a nurse in a hospital reaches out to another nurse for guidance on how to handle an issue, or when members of a religious group seek advice from another member on how to resolve a moral dilemma. In each of these cases, members are calling upon another to provide some type of guidance or help that utilizes a particular skill, perspective or base of knowledge that the individual has. We posit that when others call upon an individual to provide this type of skilled (group-relevant) guidance it conveys a message that s/he possesses qualities or characteristics that are valued by other group members, ultimately implying that s/he holds a distinct level of admiration or status in the eyes of other group members. These messages in turn guide reflected appraisals of one's own intragroup status.

Key Conceptual Features of Distinctive Treatment

Conceptually, distinctive treatment focuses squarely on the actions of *other group members* toward an individual, and not on the individual's *own* actions. It includes instances where one is called upon by others to provide some form of guidance or expertise, but it does not reflect how often one actually *provides* guidance (whether solicited or unsolicited). This focus is consistent with theory suggesting that status is conferred upon individuals through the actions of others (being called upon to provide help), rather than being derived from one's *own* behaviors (unsolicited helping behavior; Lind & Tyler, 1988; Tyler & Lind, 1992; for a similar theoretical argument, see Berger, Cohen, & Zelditch, 1972).

Unlike inclusive treatment, which can and should be widely distributed (in theory to all group members), distinctive treatment is assumed to not be so widely distributed. It is expressed

more selectively to those in the group with relatively distinct skills, knowledge or competencies (as perceived by other group members). This is in part what enables this form of treatment to elicit an awareness of one's relative intragroup status (compared to inclusive treatment, which with a wider distribution precludes much discernment of individuation/differentiation).

Finally, it is important to note that while others have considered the antecedents of intragroup status (e.g., Anderson, John, Keltner & Kring, 2001; Anderson & Kilduff, 2009; Anderson & Cowan, 2014; Hardy & Van Vugt, 2006) that work has arguably taken a more 'individualistic' approach—focusing on how one's *own* actions shape their intragroup status (e.g., by actively asserting dominance or establishing prestige in a group, making self-sacrifices in order to advance the group's goals; see Anderson et al., 2015). This approach may not be the most effective though, given that individuals' own status-seeking behavior does not always correspond to the level of status they are granted in groups (e.g., individuals might exert a lot of status-enhancing behaviors but for various reasons never be granted higher status). So to say, even if there is an effortful pursuit, an individual's status (and perceptions thereof) is still ultimately determined by the actions of the *group*. [3] Therefore, we suggest that while individuals' own actions may play a part in shaping their perceived status, it is more fruitful and reliable to understand the development of status as it manifests in the actions of others. Conceptually, distinctive treatment is designed to reflect this other- or more group-oriented approach.

Downstream Implications of Inclusive and Distinctive Treatment for Individuals' Health

The current theorizing centrally aims to delineate a form of group-based treatment,

---

[3] It is notable that in past work focused on how one's *own* actions shape their status in groups, that work still draws from a theoretical framework that suggests individuals' status is ultimately conferred by others (Berger et al., 1972). Thus, the current research may in fact complement that work by identifying an aspect of the status conferral process that has generally been acknowledged but remains underdeveloped and rarely empirically studied (i.e., how others functionally, or quite literally, confer status upon one; via distinctive treatment).

distinctive treatment, that together with inclusive treatment provide unique and differentiated

value in understanding how individuals come to feel that two of their most fundamental social

needs (belonging and status) can be satisfied through group memberships.

Secondarily, this theorizing aims to bridge previously distinct lines of research so to

explain how distinctive and inclusive treatment yield downstream consequences for individuals'

health (e.g., mental health). Specifically we posit, as one line of work has shown, that when

individuals feel a sense of belonging and status in groups it emboldens their cognitive attachment

to the group—that is, their group identification (Begeny & Huo, 2016, 2017; Huo et al., 2010;

Simon & Stürmer, 2003). We further posit, as another line of work shows, that when individuals'

feel a strong attachment to a group it fosters their capacity to draw on the strength and support of

that group as they work to achieve important personal goals and overcome stressors. This

capacity is reflected in an emboldened sense of personal control over life, and it ultimately helps

to preserve and promote individuals' health (Greenaway et al., 2015; Greenaway et al., 2016).

For a graphical depiction of these processes, see Figure 1.

Overview of the Proposed Conceptual Model (Figure 1)

Overall, the current theorizing yields a conceptual model in which two different forms of

group-based treatment, distinctive and inclusive treatment, differentially shape individuals'

perceived status and belonging in groups respectively. This model also integrates past work on

intragroup- and identity-based processes to explicate how individuals' sense of status and

belonging in groups yield downstream mental health consequences (Figure 1).

Summary of Predictions

Primary Predictions

Overall, the hypothesized model suggests that individuals' experiences with distinctive

treatment should largely shape their sense of status in groups, and inclusive treatment should primarily shape their sense of belonging. Downstream, a strong sense of status and belonging should embolden individuals' identification with that group. This should in turn foster their sense of personal control over life and ultimately promote greater mental health.

While distinctive treatment may primarily shape individuals' sense of status, and inclusive treatment primarily shape their sense of belonging, each may also have some modest 'cross-over effects.' That is, distinctive treatment and inclusive treatment may have some bearing on individuals' sense of belonging and status respectively (Figure 1, structural paths represented by dashed lines). Regarding the possibility that inclusive treatment has some bearing on individuals' sense of status, this may be because inclusive treatment is in reality not always evenly distributed across members of a group (despite its potential to be). As such, if individuals *are* treated with dignity and care it might signal that they have more value or status than certain others in the group. Thus, experiences of inclusive treatment may shape individuals' sense of status to some extent. Regarding the possibility that distinctive treatment has some bearing on individuals' sense of belonging, this may be because when others in a group decide to seek out one's guidance or expertise they also likely consider whether s/he is generally liked and approachable. As such, when one is sought out for his or her guidance or expertise it likely carries a secondary message that s/he is also generally well-liked and accepted by others. Thus, experiences with distinctive treatment may shape one's sense of belonging to some extent.

Secondary Predictions

The current theorizing posits that while individuals' *own* actions might play a role in shaping their perceived status (e.g., Anderson et al., 2001; Anderson & Kilduff, 2009) their sense of status is ultimately determined by other group members' actions toward them. So to say, even

when accounting for individuals' own status-enhancing behaviors in a group (e.g., how often they do things beyond what is expected of them to help improve the group), their experiences with distinctive treatment should remain a strong predictor of their perceived intragroup status.

Current Research

In the current research, we provide three initial tests of the hypothesized model across three different types of social groups. In study 1 we examine individuals' experiences with distinctive and inclusive treatment in their workplace, and assess whether it predicts their intragroup status and belonging in that company/organization (along with their mental health, downstream). Testing our framework in this context is important for at least two reasons. First, work organizations tend to have formally structured hierarchies where individuals' status in the group is also signaled by more objective status indicators (e.g., whether one holds a managerial/ supervisory position, one's salary relative to others). As such, in this context we are able to test our predictions regarding distinctive treatment in a particularly conservative manner—testing whether experiences with distinctive treatment predict individuals' status *over and above* these other more objective status indicators. One could imagine for instance that if an individual holds a managerial/supervisory position in the organization they may naturally experience more distinctive treatment (e.g., others coming to them for guidance). So, it is important to assess whether distinctive treatment predicts one's status even after controlling for these other related status indicators. Second, it is important to test this framework within work organizations because this is a context in which individuals often spend a substantial portion of their lives (often 40+ hours/week). As such, individuals' experiences at work likely play a substantial role in shaping their overall health. Thus, it may be particularly valuable to understand the functioning of distinctive treatment in this (widely applicable) context.

In studies 2 and 3 we test the framework in two other group contexts: undergraduate communities (students' experiences among fellow undergraduates) and ethnic minority groups (ethnic minorities' experiences among members of their respective ethnic minority group). Like individuals' experiences in the workplace, these contexts reflect where a lot of individuals spend their time (e.g., interacting with peers at school). Yet these groups are also structurally quite different from work organizations. They do not have the same degree of formal hierarchy built in and generally represent more diffuse types of social groups (particularly ethnic minority groups). As a result, it is possible that in these contexts individuals do not develop very meaningful conceptions of their status. Concomitantly, experiences with distinctive treatment may not be all that relevant (e.g., predictive of their group identification or health, downstream). Therefore, testing the functioning and predictive strength of distinctive treatment within these groups provides a strong way of assessing just how useful distinctive treatment is for understanding individuals' sense of status, group identification and health across a wide variety of groups.

In all three studies, we also test other important questions. This includes: (a) whether experiences of distinctive treatment predict individuals' sense of status *over and above* their own (status-enhancing) behaviors, and (b) whether accounting for distinctive treatment improves our overall capacity to explain variability in individuals' sense of status in groups, compared to an alternative model that only accounts for individuals' experiences with the oft-studied inclusive treatment.

Study 1: Work Organizations

In study 1 we tested the hypothesized model by examining individuals' experiences within their work organizations. In addition to testing the overall model (using structural equation modeling), we also tested (in hierarchical regression analyses) whether distinctive

treatment predicted individuals' sense of status in their organization over and above: (a) more objective status indicators (e.g., whether one held a managerial/supervisory position), (b) the frequency at which individuals engaged in status-enhancing behaviors, and (c) inclusive treatment (expected to predict intragroup status, at least to some extent).

Method

Participants and Procedure

Participants were 494 individuals employed at different companies/organizations across the United States. Most worked full-time (88%) and nearly half held managerial/supervisory positions (44%). Participants were 45% female with a mean age of 35 (84% White/Non-Hispanic). The vast majority reported regularly interacting with other employees in a typical workday (98%), and most belonged to organizations with at least 10 employees (93%). Participants completed an online survey via Amazon Mechanical Turk, described as being about their work experiences. Some participants did not complete every measure in the survey, so the number of participants in each set of analyses varied slightly (at the lowest, $n = 460$).

Measures

For a full list of items used to measure each main variable, see Appendix A. In the online survey, the order of items for a given construct was randomized (within block randomization). The ordering of constructs across the survey was kept consistent and generally arranged in the opposite direction of the hypothesized model's predictions (e.g., participants were always asked about their mental health first, their experiences with distinctive and inclusive treatment last). This ordering of constructs was to help avoid any priming of effects in hypothesized directions (e.g., *not* asking participants about their experiences with distinctive treatment and then about their perceived intragroup status so to not prime participants to recall positive intragroup

119

experiences immediately before reflecting on their sense of status in the group).

Distinctive Treatment. Drawing on insights from previous work (e.g., Cheng et al., 2010) we developed four items to measure how often participants were treated in a distinctive manner by other employees. Items began with the stem, "When you interact with other employees in this organization, how often do they...": "ask you to share your opinions and ideas about things," "ask you for advice," "ask you for help because of certain knowledge, skills or perspectives you have," "look to you for guidance when they have a question or problem." Items were rated on a 5-point scale and reliable (1 *never* – 5 *very often*, α = .89). It is important to highlight that these items assess the frequency of *other group members' behaviors* toward the participant, and not the frequency at which the participant him or herself does anything in particular. These items were also designed to be general enough to be used across different types of social groups (see studies 2 and 3).

Inclusive Treatment. Four items measured how often participants were treated in a dignified and considerate manner by other employees (adapted from Blader & Tyler, 2003; Huo, 2002). Items began with the stem, "When you interact with other employees in this organization, how often do they...": "treat you fairly," "show care for your well-being," "treat you with openness and honesty," "take your needs into consideration." Items were rated on a 5-point scale and reliable (1 *never* - 5 *very often*, α = .88). As with the measure of distinctive treatment, these items assess the frequency of other group members' behaviors toward the participant.

Intragroup Status. Four items measured participants' perceived status in the organization (Begeny & Huo, 2016, 2017); Items began with the stem, "Within this organization (among employees), I feel that I am…": "looked up to," "held in high regard," "seen as a leader within this organization," "seen as a role model for others in this organization." Items were rated on a 7-

point scale and reliable (1 *strongly disagree – 7 strongly agree*, α = .92). This measure focuses

on participants' own self-perceptions (how they view themselves in the context of that group).

Intragroup Belonging. Four items measured participants' sense of belonging in the

organization (Huo et al., 2010). Items began with the stem, "Within this organization (among

employees), I feel that I am…": "accepted for who I am," "considered a nice person to have

around," enjoyed for my company," "well-liked as a person"). Items were rated on a 7-point

scale and reliable (1 *strongly disagree – 7 strongly agree*, α = .92). As with the measure of

intragroup status, this measure centers on the participant's own internal self-perceptions.

Organizational Identity. Four items measured the strength of participant's identification

with their organization (e.g., "Being a part of this organization is an important part of how I see

myself," "I am glad to be a part of this organization;" items reflect the centrality of that identity

to one's self-concept and one's satisfaction with membership in that group; Leach et al., 2008).

Items were rated on a 7-point scale and reliable (1 *strongly disagree – 7 strongly agree*, α = .91).

Perceived Control. Six items measured participant's perceived control over life (e.g.,

"Whether or not I am able to get what I want is in my own hands," "I have little control over the

things that happen to me," reverse coded; reflecting both perceived mastery and constraints;

Lachman & Weaver, 1998; Prenda & Lachman, 2001). Items were rated on a 7-point scale and

reliable (1 *strongly disagree – 7 strongly agree*; α = .89).

Mental Health (Anxiety, Depressive Symptoms). Mental health was assessed using

measures of trait-anxiety (six items; e.g., "I worry about things that don't really matter;"

Spielberger, 1983; 1 *never – 5 very often*, α = .76) and depressive symptoms (ten-item CES-D,

Boston Form; Kohout, Berkman, Evans, Cornoni-Huntley, 1993; 0 *never – 3 very often*, α = .90).

Other Indicators of Status. To more thoroughly assess the predictive strength of

distinctive treatment we measured several additional constructs that may predict individuals'

perceived status in their work organization. In a set of regression analyses, we tested whether

distinctive treatment predicted intragroup status over and above these. This included measures of

more 'objective' status indicators: (a) whether participants held a managerial/supervisory

position; (b) their salary relative to others in the organization; (c) the number of years employed

at the organization. Additionally, because some work has emphasized the importance of one's

own behaviors in shaping her/his intragroup status (as opposed to the behaviors of others toward

one), we also assessed how often participants engaged in status-enhancing behaviors (3 items, α

= .83; e.g., "how often do you do things over and above what is expected of you to help improve

the organization?"). Finally, given that some work suggests opportunities to make downward

comparisons might elevate one's own relative sense of status (see Wills, 1981), we also asked

participants how much time they typically spent interacting with employees who have lower

standing than them (a work environment that lends itself to downward comparisons). Each of

these measures were used in a set of hierarchical regression analyses.

<div align="center">

Results

</div>

Summary statistics and bivariate correlations are in Table 1. Results of hierarchical

regression analyses are in Table 2.

Preliminary Analyses

Empirically distinguishing distinctive treatment and inclusive treatment. We first

wanted to ensure that distinctive treatment and inclusive treatment represented empirically

distinct constructs. To do this we ran an exploratory factor analysis in SPSS v20 using principal

axis factor method and direct oblimin rotation. Eigenvalues and the scree plot indicated a clear

two-factor solution. All items loaded onto their appropriate factors, and without substantial

<div align="center">

122

</div>

cross-loadings (three largest, $\lambda = .16, .05, .04$; distinctive treatment = 53.5% of total variance; inclusive treatment = 21.4% of total variance; $r = .47$; for details and related analyses, Table 7). Overall, this suggested that expressions of dignity and care coming from others in the organization were discernably unique from those conveying interest and appreciation for one's qualities. In other words, it indicated that they represent two different forms of group-based treatment.

Examining the frequency of distinctive treatment versus inclusive treatment. In the current theorizing we posit that distinctive treatment is expressed in groups more 'selectively' compared to inclusive treatment, which is more widely distributed because it reflects a more universal right/entitlement due to all group members. To empirically test this idea, we examined the relative frequency at which individuals experienced distinctive versus inclusive treatment. Finding that experiences of distinctive treatment were less common overall than experiences of inclusive treatment would support this prediction. Indeed, that is what we found. Distinctive treatment was experienced less often ($M = 3.58$, $SD = 0.82$) than inclusive treatment ($M = 3.76$, $SD = 0.76$), $t(468) = 4.80$, $p < .001$.

Additionally, because we expected individuals to experience distinctive treatment less often than inclusive treatment *and* we expected distinctive treatment to primarily predict individuals' sense of status (with inclusive treatment primarily predicting belonging), we further expected individuals to report lower levels of status in their work organization on average (and perhaps with greater variability) compared to levels of belonging. That is what we found. Levels of perceived intragroup status were lower on average ($M = 4.75$, $SD = 1.29$) compared to levels of perceived intragroup belonging ($M = 5.56$, $SD = 1.03$) and with seemingly greater variability, $t(471) = 16.21$, $p < .001$. Overall, this provided support for the idea that inclusive treatment

represents a more universal 'right'—one that is more widely and evenly distributed across group members, concomitantly generating a more widely shared experience of intragroup belonging. By comparison, experiences of distinctive treatment and high intragroup status are less common and more variable (and thus, more individuating).

Primary Analyses

Testing the predictive strength of distinctive treatment, over and above other status indicators (Table 2). Before testing our hypothesized model, we wanted to assess whether distinctive treatment predicted individuals' perceived status in their organization over and above other status-relevant indicators. To do this we ran a hierarchical regression analysis with several status indicators in the first step. This included: (a) more objective status indicators (e.g., holding a managerial or supervisory position); (b) the tendency to engage in status-enhancing behaviors; (c) one's opportunities for downward comparisons (how often one spent time with employees of relatively lower status); (d) experiences of inclusive treatment (expected to predict intragroup status to some extent). After controlling for these other status indicators we added distinctive treatment to a second step of the model. Overall, results showed that each of these other indicators did predict individuals' sense of status. However, when distinctive treatment was added it emerged as one of the strongest predictors (Table 2; Total $R^2 = .54$, $\Delta R^2 = .06$, $F(1, 452) = 57.86$, $p < .001$; local effect size, Cohen's $f^2 = .13$ = small to medium effect; Cohen, 1988).

Perhaps most importantly, the results showed that when adding distinctive treatment to the model all of the other predictors *remained significant*. This suggested that experiencing distinctive treatment was not simply a byproduct of those other indicators—of having a managerial position for example. Instead, it suggested that there was something unique about the experience of having others come to one to hear his or her thoughts, opinions and advice—

something that could not be understood simply by considering one's job title, relative salary, or even one's own tendency to engage in status-enhancing behaviors.

   Examining the hypothesized model (Figure 2). Finally, we tested the strength of the hypothesized model. We tested the model using SEM in EQS v6.2 (Bentler, 2006). Latent factors were constructed to estimate distinctive treatment, inclusive treatment, intragroup status and belonging using their respective items as indicators. Organizational identity, perceived control and mental health were also specified as latent factors, using composites of their respective subscales as indicators (centrality/satisfaction, mastery/constraints, anxiety/depressive symptoms). Data were analyzed using robust maximum likelihood estimation (Satorra & Bentler, 1990). [4]

   Overall, results showed that the model fit well, SB χ^2 (199) = 442.5, $p < .001$, CFI = .95, RMSEA = .05 [.045, .058], $R^2_{mental\ health}$ = .80. Path coefficients also supported each prediction. Distinctive treatment was a strong predictor of individuals' perceived status in their work organization (β = .56, $p < .001$) while inclusive treatment was a relatively weak predictor (β = .25, $p < .001$). By comparison, inclusive treatment was a strong predictor of individuals' sense of belonging (β = .65, $p < .001$) while distinctive treatment was a relatively weak predictor (β = .19, $p < .001$). Downstream, individuals' sense of status (β = .31, $p < .001$) and belonging (β = .43, $p < .001$) predicted stronger identification with the organization, which in turn predicted a greater sense of control over life (β = .46, $p < .001$) and ultimately greater mental health (β = .90, $p < .001$). Thus, results indicated that distinctive treatment and inclusive treatment played unique and differentiated roles in explaining individuals' sense of status versus belonging in their work organization. Results further indicated that having a strong sense of status and belonging had

---

[4] There was substantial variance around each factor but with multivariate non-normality.

positive downstream implications for mental health, explained through identity-based processes.

Testing an alternative model with inclusive treatment only. To further assess the importance of recognizing distinctive treatment as a separate form of group-based treatment, we specified an alternative model where distinctive treatment was wholly absent. Only the oft-studied inclusive treatment predicted individuals' sense of status and belonging. This represents what researchers could explain if they effectively ignored distinctive treatment while seeking to understand individuals' sense of status (and belonging) in work organizations. We compared this alternative model to the hypothesized one, specifically examining whether the hypothesized model accounted for more variance on intragroup status. Note that these two models are not nested, precluding tests of relative model fit.

Overall, results showed that the alternative model fit reasonably well, and inclusive treatment predicted both individuals' perceived status ($\beta = .52$, $p < .001$) and belonging ($\beta = .73$, $p < .001$). However, most importantly, this model accounted for relatively little variance on intragroup status, $R^2_{\text{intragroup status}} = .27$. By comparison, the hypothesized model accounted for nearly twice that, $R^2_{\text{intragroup status}} = .51$. Thus, while inclusive treatment predicted both individuals' perceived status and belonging in their work organization, accounting for the role of distinctive treatment enabled us to explain nearly twice as much of the variance surrounding individuals' perceived status. Thus, overall, this suggested that the hypothesized model provided a stronger and more comprehensive basis for explaining individuals' perceived status in their work organization.

Study 1 Discussion

Study 1 found support for the hypothesized model. Results indicated that being called upon by others in an organization to provide guidance or group-relevant skills (distinctive

126

treatment) predicts individuals' sense of intragroup status. Yet these experiences do not do much to predict individuals' sense of belonging in the organization. Instead, when individuals are treated with dignity and care (inclusive treatment) it strongly predicts their sense of belonging, while doing relatively little to explain their intragroup status. Thus, overall, this indicates that distinctive treatment and inclusive treatment represent two separate forms of group-based treatment, each providing differentiated predictive value for explaining how individuals discern their level of status and belonging in groups.

Distinctive treatment, compared to other status indicators. Furthermore, results showed that distinctive treatment was a particularly strong indicator of individuals' perceived status, compared to other status indicators. This included more objective indicators (e.g., holding a managerial/ supervisory position) as well as their own tendency to engage in status-enhancing behaviors (doing things beyond what was expected of them to help improve the group). Moreover, results indicated that experiencing distinctive treatment was not simply a byproduct of these other status indicators. Each independently provided value for understanding individuals' sense of status. And still moreover, distinctive treatment appeared to be the strongest predictor among them. This suggests there is something powerful about the experience of having others come to one to hear his or her thoughts, opinions and advice—something that cannot be understood simply by considering one's job title, relative salary, or even one's own status-enhancing behaviors. Overall, this supports a long-standing but often overlooked theoretical point (e.g., Berger et al., 1972)—one's status in a group is indeed rooted in the actions of *others*, perhaps more so than in one's *own* actions. Thus, to understand one's status in groups it appears key to examine other group members' behaviors toward one, not just one's own behavior.

The explanatory strength of inclusive treatment alone. Tests of an alternative, inclusive

127

treatment-only model further illustrated two key points. First, it showed that inclusive treatment predicted both individuals' sense of belonging and status in the organization. This may help explain why past work on inclusive treatment and 'respect' has found consistent and robust effects despite having potentially confounded conceptions of status and belonging within the notion of 'respect.' While the results of the current *hypothesized* model indicate that those past effects may actually be driven by how inclusive treatment shapes individuals' sense of *belonging*, the results of this alternative model illustrate that inclusive treatment does predict individuals' sense of status at least to some extent (hence the degree of robustness in past findings). At the same time, and what is perhaps the more critical second point, tests of this alternative model revealed that the ability of inclusive treatment to explain variation in individuals' sense of status in a group is quite limited. By comparison, when one also considers the role that distinctive treatment plays there is a noticeable increase in the amount of variance explained. Thus, overall, this indicates that considering the roles of inclusive treatment *and* distinctive treatment yields a much better foundation for explaining who in groups tends to feel that that group helps them satisfy two key social needs—a sense of belonging and a sense of status.

Understanding individuals' mental health. Finally, study 1 results illustrated how being treated in ways that convey uniqueness and individuation (distinctive treatment) and in ways that convey dignity and care (inclusive treatment) can have positive mental health implications. Consistent with predictions derived from past work on intragroup processes along with that on the 'social cure,' these downstream mental health implications occur through the way distinctive- and inclusive treatment embolden individuals' sense of status and belonging in groups, which in turn promote stronger group identification and ultimately a greater sense of control over life.

Thus, the current research illustrates how distinctive treatment alongside inclusive treatment are important for understanding who in groups is likely to experience greater (or worse) mental health (more or less anxiety/depression).

Study 2: Student Communities

In study 2 we again tested the proposed conceptual model, this time in the context of individuals' undergraduate community (i.e., experiences among fellow undergraduate students). Like individuals' experiences in the workplace, this context is one in which individuals often spend a lot of time (i.e., interacting with peers at school) yet differs in that it has less overt hierarchical structure built in. It is possible in this context that individuals do not have very well-defined conceptions of their status, and concomitantly, experiences with distinctive treatment may not be as relevant (e.g., predictive of their group identification or mental health downstream). Therefore, testing the role of distinctive treatment in this context is an opportunity to assess just how broadly applicable and useful distinctive treatment is for understanding individuals' perceived intragroup status, identity and health (even in groups with less salient or formal hierarchical structure).

Method

Participants and Procedure

Participants were 190 undergraduates from a large university (M_{age} = 19.2, 73% female, 92% U.S.-born; 46% Asian/Asian American, 29% Latino/Hispanic, 24% White/Non-Hispanic). The sample was largely comprised of freshmen and sophomores (87%). Participants were recruited through a large student participant pool and completed an online survey described as being about their everyday experiences with other undergraduates at the university.

Measures

Constructs were measured using items nearly identical to those in study 1, modified to reflect the context of one's undergraduate community. Participants completed measures of distinctive treatment ($\alpha = .87$), inclusive treatment ($\alpha = .90$), intragroup status ($\alpha = .94$) and belonging ($\alpha = .93$), group identification ($\alpha = .88$), personal sense of control ($\alpha = .77$) and mental health (anxiety, $\alpha = .81$; depressive symptoms, $\alpha = .82$).

Other Indicators of Status. To better assess the strength of distinctive treatment as a predictor of intragroup status we also measured participants' own status-enhancing behaviors (3 items, $\alpha = .84$; e.g., "How often do you do things over and above what is expected of you to help other undergraduate students?"). In primary hierarchical regression analyses, we examined whether distinctive treatment predicted intragroup status over and above individuals' tendency to engage in this type of behavior (controlling for other status indicators as well; see Results).

Results

Summary statistics and bivariate correlations are in Table 3. Results of hierarchical regression analyses are in Table 4.

Preliminary Analyses

Empirically distinguishing distinctive and inclusive treatment. Using protocols described in study 1, we ran an EFA to assess whether distinctive and inclusive treatment represented empirically distinct constructs. As in study 1, results indicated a two-factor solution. All items loaded onto their appropriate factors, and without substantial cross-loadings (three largest, $\lambda = .23, .06, .05$; distinctive treatment = 18.3% of total variance; inclusive treatment = 57.2% of total variance; $r = .55$; for details and related analyses, Table 7). Overall, this indicated that expressions of dignity and care conveyed by members of the undergraduate community toward a participant were discernably unique from those conveying interest and appreciation for

one's unique qualities. In other words, there was again evidence for two different forms of group-based treatment.

      Examining the frequency of distinctive versus inclusive treatment. To further assess the value of distinctive treatment as a separate form of group-based treatment, we again examined the relative frequency at which individuals experienced distinctive versus inclusive treatment. As in study 1, results showed that experiences of distinctive treatment were less common ($M = 3.28$, $SD = 0.72$) compared to experiences of inclusive treatment ($M = 3.71$, $SD = 0.66$), $t(189) = 8.82$, $p < .001$. Also as in study 1, students reported lower levels of intragroup status ($M = 3.89$, $SD = 1.23$) compared to belonging ($M = 5.40$, $SD = 0.95$) and with seemingly greater variability, $t(189) = 18.48$, $p < .001$. This supported the idea that inclusive treatment represents a more universal 'right'—one that is more widely and evenly distributed across members of a group, concomitantly generating a more widely shared experience of intragroup belonging. By comparison, experiences of distinctive treatment and high intragroup status are less common and more variable (and thus, more individuating).

Primary Analyses

      Testing the predictive strength of distinctive treatment over and above other status indicators (Table 4). As in study 1 we assessed whether distinctive treatment predicted students' perceived status in their undergraduate community over and above other status indicators. To do this we ran a hierarchical regression analysis with a number of other indicators in the first step. This included one's tendency to engage in status-enhancing behaviors and their experiences with inclusive treatment. We also included demographic variables that may predict one's tendency to feel like a valued, high status member in their undergraduate community (e.g., one's gender). Only after controlling for these other status indicators did we add distinctive treatment in a

second step of the model. Overall, results showed that these other indicators predicted individuals' perceived status. Yet when distinctive treatment was added it emerged as a particularly strong indicator of one's status (Table 4; Total $R^2 = .47$, $\Delta R^2 = .08$, $F(1, 175) = 26.52$, $p < .001$; local effect size, Cohen's $f^2 = .15$ = medium effect). Moreover, as in study 1, results revealed that after adding distinctive treatment to the model all of the other predictors *remained* significant. This suggested that experiencing distinctive treatment was not simply a byproduct of these other indicators. Instead, the experience of distinctive treatment appeared to capture something unique and relatively powerful, which could not be detected from assessing other status indicators, including one's own status-enhancing behaviors.

   Examining the hypothesized model (Figure 3). Finally, we tested the hypothesized model using protocols described in study 1. Results again revealed that the model fit well, SB χ^2 (199) = 288.5, $p < .001$, CFI = .96, RMSEA = .05 [.036, .061], $R^2_{mental\ health} = .75$, and path coefficients supported predictions (see Figure 3). Thus, overall, results indicated that distinctive and inclusive treatment played unique and differentiated roles in explaining the extent to which individuals felt a sense of status versus belonging in their undergraduate community. Results further indicated that having a strong sense of status and belonging had positive downstream implications for mental health, explained through identity-based processes.

   The explanatory strength of inclusive treatment alone. As in study 1, we specified an alternative model with distinctive treatment absent. Only inclusive treatment predicted students' sense of status/belonging. Results again showed that the alternative model fit reasonably well, and inclusive treatment predicted both individuals' perceived status ($\beta = .46$, $p < .001$) and belonging ($\beta = .65$, $p < .001$). However, results again showed that it accounted for relatively little variance on intragroup status, $R^2_{intragroup\ status} = .22$. By comparison, the hypothesized model

132

accounted for nearly twice that, $R^2_{\text{intragroup status}} = .40$. Thus, as in study 1, results showed that the hypothesized model provided a stronger basis for understanding students' perceived status among their undergraduate peers.

Study 2 Discussion

As in study 1, study 2 found strong support for the hypothesized model. Results indicated that experiences of distinctive treatment (being called upon by other students to provide advice, guidance or expertise) strongly predicted their sense of status in the community. By comparison, experiences of inclusive treatment (being treated in ways that are dignified and considerate) predicted their sense of belonging. Overall, this indicates that distinctive and inclusive treatment represent distinct forms of group-based treatment, providing differentiated value in explaining how individuals discern the extent to which two fundamental social needs are met in groups. Moreover, results illustrated how expressions of distinctive and inclusive treatment can yield positive health implications (as a function of a stronger group identity and greater sense of personal control over life).

Results also revealed that distinctive treatment was a particularly strong indicator of one's status compared to other status indicators. This notably included one's *own* tendency to engage in status-enhancing behaviors. Additionally, as in study 1, tests of an alternative inclusive treatment-only model illustrated that the capacity of inclusive treatment alone to explain the variation in individuals' sense of status in the group was quite limited. When considering the role that distinctive treatment plays as well, there was a clear increase in the amount of variance explained. Overall, this indicates that accounting for the roles of both inclusive *and* distinctive treatment offers a substantially better base to explain who in groups tends to feel that that group helps satisfy two critical social needs—a sense of belonging and status.

Study 3: Ethnic Minority Groups

In study 3 we again tested the proposed conceptual model, this time in the context of individuals' ethnic minority group (i.e., experiences among ethnic minority ingroup members). Compared to the groups examined in studies 1 and 2, ethnic minority groups represent a far more diffuse and broadly defined type of social group, without much formal or explicit hierarchical structure built in. It is possible that in this context individuals will not hold very meaningful conceptions of their intragroup status, and concomitantly, experiences with distinctive treatment may not be all that relevant (e.g., predictive of group identification or mental health downstream). Therefore, testing the function of distinctive treatment in this context provides a particularly strong way to assess the value and breadth of distinctive treatment as a form of group-based treatment that explains individuals' sense of status in groups, their identity and overall mental health.

Method

Participants and Procedure

Participants were 323 U.S.-born Asian/Asian American and Latino(a)/Hispanic students from a large public university (56% Latino(a)/Hispanic; 73% female, $M_{\text{age}} = 20.7$). [5] Participants were recruited via email (sent from the university to a random set of students fitting study criteria; self-identified with one of the aforementioned pan-ethnic groups, U.S.-born, aged 18+). They completed an online survey described as being about their everyday experiences with other members of their pan-ethnic group (Asian/Asian American or Latino(a)/Hispanic).

Measures

Constructs were measured using items nearly identical to those in study 1, modified to

---

[5] These two ethnic minority groups are the largest at the university and so sufficient sample sizes could be obtained (compared to other minority groups that are not well represented at the university; e.g., Blacks/African Americans).

reflect the context of one's pan-ethnic minority group. Participants completed measures of distinctive treatment ($\alpha = .90$), inclusive treatment ($\alpha = .79$), intragroup status ($\alpha = .94$) and belonging ($\alpha = .90$), group identification ($\alpha = .92$), personal sense of control ($\alpha = .81$) and mental health (anxiety, $\alpha = .86$; depressive symptoms, $\alpha = .83$).

Other Indicators of Status. To better assess the strength of distinctive treatment as a predictor of intragroup status, we also measured minority individuals' tendency to engage in status-enhancing behaviors (3 items, $\alpha = .86$; e.g., "How often do you make a special effort to help other [Asian/Asian American, Latino(a)/Hispanic] individuals who are in need?"). As in studies 1 and 2, we examined whether distinctive treatment predicted minorities' sense of intragroup status over and above the frequency at which they engaged in this type of behavior.

Results

Summary statistics and bivariate correlations are in Table 5. Results of hierarchical regression analyses are in Table 6.

Preliminary Analyses

Empirically distinguishing distinctive and inclusive treatment. As in studies 1 and 2, we ran an EFA to assess whether distinctive and inclusive treatment represented empirically distinct constructs. Results again indicated a two-factor solution. All items loaded onto their appropriate factors, and without substantial cross-loadings (three largest, $\lambda = .10, .05, .04$; distinctive treatment = 21.1% of total variance; inclusive treatment = 48.3% of total variance; $r = .44$; for details and related analyses, Table 7). Overall, this suggested that expressions of dignity and care conveyed by fellow minority ingroup members were discernably unique from those conveying interest and appreciation for one's distinguishing qualities. In other words, there was again evidence for two different forms of group-based treatment.

Examining the frequency of distinctive versus inclusive treatment. We again examined the relative frequency at which individuals experienced distinctive versus inclusive treatment. As in studies 1 and 2, results showed that experiences of distinctive treatment were less common (*M* = 3.54, *SD* = 0.76) compared to experiences of inclusive treatment (*M* = 3.75, *SD* = 0.58), *t*(322) = 5.04, *p* < .001. Also as in studies 1 and 2, minorities reported lower levels of intragroup status overall (*M* = 4.81, *SD* = 1.29) compared to belonging (*M* = 5.60, *SD* = 0.89) and with seemingly greater variability, *t*(322) = 12.56, *p* < .001.

Primary Analyses

Testing the predictive strength of distinctive treatment over and above other status indicators (Table 6). As in studies 1 and 2, we tested whether distinctive treatment predicted minorities' perceived status in their ethnic group over and above other status indicators. We ran a hierarchical regression analysis with one's tendency to engage in status-enhancing behaviors and inclusive treatment in the first step. Distinctive treatment was added to a second step of the model. Results showed that these other indicators predicted minorities' perceived status in their ethnic group, but distinctive treatment was a particularly strong indicator (Table 6; Total R^2 = .41, ΔR^2 = .20, $F(1, 319)$ = 109.04, $p < .001$; local effect size, Cohen's f^2 = .34 = medium to large effect). Moreover, as in studies 1 and 2, results showed when adding distinctive treatment to the model the other predictors remained significant. This again suggested that experiencing distinctive treatment was not simply a byproduct of these other status indicators. Instead, the experience of distinctive treatment appeared to capture something unique.

Examining the hypothesized model (Figure 4). Finally, we tested the hypothesized model using protocols described in study 1. We also initially tested whether the model fit equally well for each ethnic group. Results of multiple groups analyses indicated that it did (e.g., all

136

constrained parameters were statistically invariant, model fit did not substantially change across iterations; e.g., χ^2 diff. tests yielded $ps > .05$, ΔCFI $< .01$). Subsequent analyses were therefore run with data collapsed across groups.

Overall, results showed the hypothesized model fit well, SB χ^2 (199) = 349.6, $p < .001$, CFI = .95, RMSEA = .05 [.040, .057], $R^2_{mental\ health}$ = .90. Path coefficients also supported predictions (see Figure 4). Thus, overall, results indicated that distinctive and inclusive treatment played unique and differentiated roles in explaining the extent to which minorities maintained a sense of status versus belonging in their ethnic group. Results further indicated a strong sense of status and belonging had positive downstream implications for minority mental health, explained through identity-based processes.

The explanatory strength of inclusive treatment alone. As in studies 1 and 2, we specified an alternative model with distinctive treatment absent. Only inclusive treatment predicted minorities' sense of status and belonging. Results again showed that the alternative model fit reasonably well, and inclusive treatment predicted individuals' status ($\beta = .44$, $p < .001$) and belonging ($\beta = .67$, $p < .001$). However, results also showed that this model accounted for relatively little variance on intragroup status, $R^2_{intragroup\ status}$ = .19. By comparison, the hypothesized model accounted for over twice that, $R^2_{intragroup\ status}$ = .45. Thus, consistent with studies 1 and 2, results indicated that the hypothesized model provided a stronger basis for understanding individuals' perceived status among fellow minority group members.

Study 3 Discussion

As in studies 1 and 2, study 3 evinced strong support for the hypothesized model. This included both the differentiated predictive value of distinctive treatment versus inclusive treatment (explaining how individuals discern their sense of ethnic intragroup status versus

137

belonging, respectively) and the particularly strong predictive value of distinctive treatment on status compared to other status indicators, including one's own status-enhancing behaviors. Results also illustrated how expressions of distinctive treatment and inclusive treatment can yield positive mental health implications as a function of a stronger minority group identity and a greater sense of personal control over life.

Furthermore, study 3 results indicated that even in more broadly defined social groups, such as ethnic minority groups, individuals can derive a meaningful sense of their status in the group. This is consistent with past work showing that individuals do often derive a meaningful sense of status in broadly defined social groups and with important downstream implications (e.g., for health; Adler, Epel, Castellazzo & Ickovics, 2000; Begeny & Huo, 2016, 2017). The current research adds to this by evincing where individuals' perceptions of status likely emerge from (i.e., experiences of distinctive treatment). Thus, study 3 alongside studies 1 and 2 indicate that distinctive treatment represents a meaningful form of group-based treatment, evident across a wide variety of groups. On the whole, this suggests that examining individuals' experiences with distinctive treatment may be a fruitful endeavor for researchers in a variety of disciplines— from those examining organizational processes to those examining minority mental health.

General Discussion

The current research set out to explicate and empirically test a new conceptual model that explains how individuals in a variety of different groups come to feel accepted and included in that group (belonging) and to feel admired and looked up to (status). Building from the idea that individuals discern their status and sense of belonging based on how they are treated by other group members in everyday interactions, this conceptual model suggests that a well-studied form of group-based treatment, inclusive treatment, primarily shapes individuals' sense of belonging,

as it conveys messages of dignity and care (that which one deserves as a full-fledged member of that group). By comparison, a second form of group-based treatment identified here, distinctive treatment, primarily shapes individuals' sense of status, conveying messages of recognition and appreciation for one's unique qualities, skills and knowledge as valued by the group. Thus, compared to past work the current research provides a more precise and detailed explanation as to how groups can foster two of individuals' most basic human social needs—to feel a sense of belonging, and a sense of status.

Moreover, the current model explains how these two forms of group-based treatment can have benefits for individuals' health. With a strengthened sense of belonging and status in the group, individuals develop a strong cognitive attachment to the group (i.e., strong group identification). This facilitates their capacity to harness the strength and the support of that group as they work to achieve important goals and overcome stressors. This capacity is reflected in an emboldened sense of personal control over life and ultimately helps to preserve and promote individuals' health.

Together, three studies evinced consistent support for this model. Across these studies, we examined individuals' workplace experiences, students' experiences among undergraduate peers, and ethnic minorities' experiences within their ethnic communities. These groups differ in many ways—from the degree of formal hierarchical structure to the size and diffuseness of the group—but individuals in each group context appeared to have meaningful experiences of distinctive treatment. These experiences were key to explaining individuals' self-concept, their social identities and ultimately their mental health.

It is also important to note that results of all three studies showed that distinctive treatment remained a strong indicator of individuals' perceived status in groups even when

accounting for other relevant status indicators. This included more objective status indicators (e.g., holding a managerial/supervisory position at work), as well as individuals' own tendency to engage in status-enhancing behaviors (see pg. 141 for more discussion on this point). Thus, overall, individuals' experiences with distinctive treatment may be an indispensable piece to understanding status dynamics in groups.

Theoretical Contributions

Identifying a distinct form of group-based treatment and clarifying the role of inclusive treatment. A reliable finding to emerge from past research is that when individuals are treated by others in a group with dignity and care (inclusive treatment) it fosters their sense of being *respected* in that group. Yet since this phenomenon was first evinced our understanding of what 'respect' is has grown. Several lines of work now indicate that embedded in this construct are two distinct elements. It includes individuals' sense of belonging in groups, but also their sense of status. Building from this insight the current research carefully examines what, specifically, an individuals' experiences of inclusive treatment might foster—a sense of belonging *or* a sense of status (or both equally). Across all three studies, results suggested that experiences of inclusive treatment primarily serve to promote individuals' sense of belonging in groups. This supports the idea that because inclusive treatment can and should be distributed to all who are recognized as full-fledged members of a group—irrespective of their particular status in the group— individuals' cannot reliably (or solely) use expressions of inclusive treatment to discern their relative intragroup status.

Nevertheless, the current research shows that inclusive treatment does still *to some extent* promote a sense of status. This is a key point because it explains how amidst degrees of conceptual/operational ambiguity in past work on 'respect,' that work could still evince a reliable

140

and robust effect. Nevertheless, by identifying a second form of group-based treatment here—distinctive treatment—we can ultimately advance that foundational work by placing it in a more refined and comprehensive framework. The overall value of this new framework is evinced empirically in part by the increase in variance we can account for in individuals' sense of status in groups. In all three studies, when we simultaneously considered both the roles of inclusive and distinctive treatment, there was a near doubling of variance accounted for. Thus, the current research offers an important step in explaining how individuals discern two distinct and critical facets of group life (their senses of belonging and status).

E*xplaining how individuals develop strong social identities*. There has been a growing body of research on what is dubbed the 'social cure' (e.g., Greenaway et al., 2015; Haslam et al., 2009; Jetten, Haslam, Haslam & Branscombe, 2009). In short, that work indicates that strong social identities are good for individuals' health. They not only promote it but protect it from adverse social stressors and unhealthy mental states. The current research offers a critical extension of that work by explaining who in groups tends to *develop* strong identities—those that are led to feel accepted and admired in the group, via expressions of inclusive and distinctive treatment. Ultimately, this may be informative in developing identity-based interventions that aim to promote individuals' health (e.g., identifying ways that group members may seek to treat other members of a group in efforts to promote their sense of belonging or status in groups).

Explaining how groups can be both a source of belonging and differentiation. Those in the social identity tradition (i.e., rooted in social identity and self-categorization theories; Tajfel & Turner, 1979; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987) have often focused on the importance of groups for fostering individuals' sense of belonging and cohesion with the group. Much less attention has been paid to the idea that groups can also serve to differentiate people

(*within* the group; in fact, some suggest that because a sense of belonging serves to *de*individuate group members, intragroup individuation may be an antithetical process; for a discussion, see Hornsey & Jetten, 2004). However, recent theorizing in this tradition has suggested groups can in fact be a source of both belonging *and* (ingroup) differentiation (Hornsey & Jetten, 2004). One of the ways this can occur is through 'role differentiation,' which allows individuals to feel individuated from others in the group while maintaining a sense of belonging and cohesion because their distinctiveness/individuation is ultimately rooted in serving group interests/efforts (i.e., one plays a unique and distinguishing role that ultimately serves to advance group goals).

The current research helps explain how this type of 'group-serving differentiation' actually occurs. That is, an individual's sense of differentiation emerges when others in the group express distinctive treatment toward them—treating them in ways that highlight their distinct qualities. And because such expressions of value and appreciation are for qualities that ultimately serve the group, individuals maintain (if not embolden) their sense of belonging and connection to the group. Thus, overall, the current research adds to emerging advances in the social identity tradition by explicating the ways in which groups can complementarily provide a source of belonging and (ingroup) differentiation for its members.

Understanding individuals' status in a group, and the role of their own behavior versus other group members' behavior toward them. In previous work examining the antecedents of intragroup status (e.g., Anderson et al., 2001; Anderson & Kilduff, 2009; Anderson & Cowan, 2014; Hardy & Van Vugt, 2006) researchers have largely focused on how individuals' *own actions* shape their intragroup status (e.g., making self-sacrifices in order to help the group). In the current research, we posited that while individuals' own actions might play some role in shaping their perceived status, it would ultimately be determined by *other group members'*

142

actions toward them. In all three studies, results supported this idea. In analyses that accounted

for individuals' own status-enhancing behaviors (doing things beyond what was expected of

them to help the group) along with other relevant status indicators, results showed that

experiences of distinctive treatment held as a particularly strong predictor of their perceived

intragroup status. This ultimately suggests there is something powerful about the experience of

having others come to one to hear one's thoughts, opinions or to receive one's guidance—

something that cannot be understood simply by considering one's job title, relative salary, or

even one's own group-serving behaviors. Overall, this supports a long-standing but often

empirically overlooked theoretical point (e.g., Berger et al., 1972)—one's status in a group is

indeed rooted in the actions of *others*, perhaps even more so than in one's *own* actions. Thus, to

understand one's status in groups it is critical to examine other group members' behaviors

toward one, not just one's own behavior.

Limitations and Future Directions

   Assessing causality. The current research set out to establish new theoretical groundwork

and provide three initial tests of it. The results of these tests consistently supported the new

theorizing. Moreover, these three studies utilized data that tapped into individuals' real-life

experiences across a variety of important social groups (work organizations, student

communities, ethnic minority groups) and with the capacity to test a conceptual model that could

integrate and empirically assess multiple theoretical perspectives. Yet while these datasets are

rich and psychologically meaningful, their cross-sectional nature precludes any causal claims.

And while the proposed causal direction of paths in the conceptual model are supported by

previous experimental and longitudinal data (e.g., Begeny & Huo, 2017, Greenaway et al., 2015,

Simon & Sturmer, 2003; Smith et al, 2003), it will be important to more rigorously test the

directionality of these pathways in future research (altogether via longitudinal studies, and in piecemeal form via experimental studies). This future work will also better enable tests of alternative (causal) models (e.g., whether greater mental health leads to a greater sense of personal control over life, whether greater mental health leads to more opportunities to engage with a group and ultimately experience more distinctive and inclusive treatment from others in that group; see, e.g., Begeny & Huo, 2017, study 1).

Utilizing self-reports. The current research also relied on participants' self-reports of perceived status in groups. Going forward, it will be key to assess participants' intragroup status using other approaches that help validate the veracity of self-reports, such as through peer nominations. Notably however, past research does indicate individuals' own self-reports of their status in groups are quite accurate compared to other group members' perceptions/reports of their status (e.g., Anderson, Srivastava, Beer, Spataro & Chatman, 2006). Relatedly, the current work relied on self-reports of how often others in a group conveyed distinctive and inclusive treatment toward one, as opposed to directly assessing other group members' behaviors toward the participant. Future experimental work (some currently underway) will allow for more direct tests of how other group members' behaviors shape individuals' perceived status in groups.

Considering individuals' experiences in more broadly or narrowly defined groups. Individuals can be a part of social groups that are nested within other more broadly defined groups, for which they are also part of. For example, undergraduate students are a part of a university's undergraduate community but they are also part of the broader university community (e.g., one that includes staff, faculty, graduate students). They are also often part of more narrowly defined, nested groups (e.g., members of particular schools or departments within the university). So when considering individuals' experiences with distinctive and inclusive

144

treatment in a group, and their perceptions of status and belonging, it is important to consider

precisely which group referent they are relying on when considering their experiences (e.g., with

distinctive and inclusive treatment). Building from the idea that at any given time there will be

one social identity that is most salient and thus the prevailing 'lens' through which individuals'

view and understand their experiences (Turner et al., 1987), in each of the current studies we

sought to maintain consistency across participants in terms of the 'lens' they were using (i.e., the

social group referent being used). For example, in study 2 we made it clear through survey

prompts preceding relevant questions that those questions were about their experiences with

other *undergraduates* at the university and not about their experiences with faculty, graduate

students or university staff. Additionally, to limit the possibility that participants would rely on

their experiences within a narrower or more specific subgroup of undergraduates (e.g., those

within the same school, department or major) we also prompted individuals to think about their

experiences across a variety of different contexts (e.g., not just in the classroom but also at

nearby or on-campus cafes/restaurants, in the dorms, at sporting events). Thus, while it is

impossible to discern exactly which group referent was being used by each participant,

reasonable efforts were made to keep this referent relatively consistent across participants.

Nevertheless, future studies may employ other strategies for more precisely managing the group

referent participants utilize (e.g., experimental studies using minimal group-type paradigms).

Still other studies might explore which group referent, among multiple nested groups, is the *most*

meaningful for understanding individuals' mental health (e.g., one's undergraduate community

vs. a broader community with faculty/graduate students vs. a narrower group that includes only a

subset of undergraduates perhaps within one's major). This will be an important direction for

future research, aiming to better understand precisely which group referent or group 'boundaries'

are most relevant to understanding how individuals' everyday experiences impact their mental health. At the same time, it is important to highlight that the group referents used in the current studies appear quite meaningful, as they helped explain individuals' overall mental health.

Considering different ways to express distinctive treatment. The current studies focused on a manifestation of distinctive treatment that centers on others in a group soliciting one's guidance, knowledge or skills. There are likely other ways to express distinctive treatment as well. This may include more explicit verbal expressions (e.g., others in a work organization stating, "we really look up to you, and really admire the skills you bring to this organization...") as well as more subtle, nonverbal expressions (e.g., others making facial expressions that suggest they are sincerely interested and impressed with one's insights, knowledge or ideas; e.g.., raised eyebrows and enthusiastic head nods conveying excitement). These other potential means of expressing distinctive treatment will be important to assess in the future. In part, this will help flesh out the multiple ways this construct functionally gets expressed in everyday interactions.

In examining the different manifestations of distinctive treatment it will also be important to consider whether certain manifestations are culturally bounded. For instance, it is possible that the form focused on in the current studies (seeking out one's guidance, skills, knowledge) is most relevant in individualistic-oriented groups/cultures (where individual agency is praised; praise that is expressed in part by seeking out a particular individual's ideas, skills, etc.). At the same time, it is possible this manifestation will also be seen in more collectivistic-oriented groups/cultures because such expressions are still rooted in a recognition and appreciation for one's capacity to help the *collective* (i.e., the group). Future studies will ultimately help assess the cultural specify or universality of various manifestations of distinctive treatment.

Considering how distinctive and inclusive treatment shape group behavior. The current

research examined how distinctive and inclusive treatment, by way of shaping individuals' sense of status and belonging in groups, yields downstream consequences for health. Yet it is important to consider how these two forms of group-based treatment might also shape the health of the *group*—that is, to consider how they shape individuals' tendency to engage in group-oriented behaviors that ultimately sustain the functioning and health of the group. Past work shows how individuals are treated in groups indeed affects their tendency to engage in group-oriented behaviors (e.g., Tyler & Blader, 2000, 2001; Tyler et al, 1996). Going forward, it will be important to integrate these insights into the current conceptual model. In particular, it will be important to consider whether distinctive and inclusive treatment may promote different types of group-oriented behavior. While a strong sense of status might promote behaviors that center on developing new and creative ideas for strengthening the group (extra-role behaviors) a strong sense of acceptance might promote behaviors that sustain the group's general functioning (supportive behaviors; see Smith & Tyler, 1997; Tyler & Blader, 2003). Thus, an important future direction for this work is to consider how different forms of group-oriented behavior are shaped by individuals experience with inclusive and distinctive treatment.

　　　　Considering experiences of distinctly negative treatment. In our current theorizing on distinctive treatment, the focus is on individuals' experiences with *positive* distinctive treatment. In the future, it will be important to also consider the implications of being treated in a *negatively* distinctive way. This might include instances when others in a group make efforts to avoid a particular individual when seeking guidance on an issue (despite knowing that individual has some insight or expertise to offer), or when others in a group clearly disregard an individual's ideas or perspectives as though they are not valuable or useful. One possibility is that this type of treatment represents the flip-side of same distinctive treatment coin. It simply has negative

effects on individuals' sense of status in the group. But another possibility is that this type of treatment represents a meaningfully different type of experience. Specifically, it might represent a more ambiguous type of treatment compared to (positively) distinctive treatment. One could imagine that while individuals might receive this type of treatment because they are not viewed as having any unique or valuable qualities (communicating low intragroup status), it is also possible that they *are* seen as having valuable qualities but still receive this treatment because others simply do not like them (and so choose not to come to them for guidance; communicating a low sense of belonging). Thus, there may be more attributional ambiguity surrounding experiences of distinctly negative treatment. In some initial studies, we have found support for this idea. Compared to (positively) distinctive treatment, negative distinctive treatment predicts individuals' sense of status and belonging to roughly equal degrees. This suggests the message communicated by this type of negative treatment may be different from that which is communicated by (positive) distinctive treatment.

Conclusion

Individuals appear to have two fundamental social needs—to feel a sense of belonging, and to feel a sense of status—and social groups can be a vital resource for satisfying those needs. The current research helps explain how individuals effectively discern whether certain key social groups in their life can be a fruitful resource to tap. When individuals engage with others in those groups during everyday interactions they seem to not only be attuned to whether others convey dignity and care for them (cues that elicit a sense of belonging) but are also attuned to whether others convey interest and appreciation for their particular perspectives, skills or knowledge (cues that elicit a sense of status). As the current research illustrates, being attuned to these messages reflect individuals' attention to two distinct forms of group-based treatment, each

148

differentially serving to promote individuals' two fundamental social needs (belonging and

status, respectively). Moreover, the current research illustrates that when groups help satisfy

these needs it has important downstream implications for individuals' sense of control over life

and ultimately their health.

Items used to measure main variables in each study

Distinctive Treatment

Study 1

When you interact with other employees in this organization, how often do they...

...ask you for advice?

...look to you for guidance when they have a question or problem?

...ask you for help because of certain knowledge, skills or perspectives you have?

...ask you to share your opinions and ideas about things?

Study 2

When you interact with other [name of university; omitted for privacy] undergraduate students, how often do they...

...ask you for advice?

...look to you for guidance when they have a question or problem?

...ask you for help because of certain knowledge, skills or perspectives you have?

...ask you to share your opinions and ideas about things?

Study 3

How often do people in your racial/ethnic group...

...ask you for advice?

...look to you for support or guidance when they have a problem?

...rely on you for help because of certain talents, skills or knowledge you have?

...ask you to share your opinions and ideas about things?

Inclusive Treatment

Study 1

When you interact with other employees in this organization, how often do they…...

...treat you fairly?

...show care for your well-being?

...treat you with openness and honesty?

...take your needs into consideration?

Study 2

When you interact with other [name of university; omitted for privacy] undergraduate students, how often do they...

...treat you fairly?

...show care for your well-being?

...treat you with openness and honesty?

...take your needs into consideration.

Study 3

When you interact with people in your racial/ethnic group, how often do you feel that...

...they treat you fairly?

…they care about your well-being?

...they are honest with you?

...they are considerate or sensitive to your needs?

Intragroup Status

Study 1

Within this organization (among employees), I feel that I am...

...looked up to.

...seen as a leader within this organization.

...seen as a role model for others in the organization.

...held in high regard.

Study 2

Among [name of university; omitted for privacy] undergraduate students, I feel that I am...

...looked up to.

...seen as a leader among [name of university] undergraduates.

...seen as a role model for other [name of university] students.

...held in high regard.

Study 3

Most of the time, I feel that people in my racial/ethnic group...

...look up to me.

...see me as a leader in my racial/ethnic group.

...see me as a role model for others in my racial/ethnic group.

...hold me in high regard.

Intragroup Belonging

Study 1

Within this organization (among employees), I feel that I am...

...well-liked as a person.

...considered a nice person to have around.

...accepted for who I am.

...enjoyed for my company.

Study 2

When I am around other [name of university; omitted for privacy] undergraduate students, I generally feel that I am...

...enjoyed for my company.

...accepted for who I am.

...considered a nice person to have around.

...well-liked as a person.

Study 3

Most of the time, I feel that people in my racial/ethnic group...

...like me as a person.

...consider me to be a nice person to have around.

...accept me for who I am.

...enjoy my company.

Group Identity

Study 1

(Centrality)

The fact that I am part of this organization is an important part of my identity.

Being a part of this organization is an important part of how I see myself.

(Satisfaction)

I am glad to be a part of this organization.

I think my organization has a lot to be proud of.

Study 2

(Centrality)

The fact that I am a [name of university] student is an important part of my identity.

Being a part of the [name of university] undergraduate student body is an important part of how I see myself.

(Satisfaction)

I am glad to be a [name of university] student.

I think [name of university] undergraduate students have a lot to be proud of.

Study 3

(Centrality)

The fact that I am [Asian/Asian American, Latino(a)/Hispanic] is an important part of my identity.

Being [Asian/Asian American, Latino(a)/Hispanic] is an important part of how I see myself.

(Satisfaction)

I am glad to be [Asian/Asian American, Latino(a)/Hispanic].

I think that [Asian/Asian American, Latino(a)/Hispanic]s have a lot to be proud of.

Personal Control

Study 1, 2 & 3

(Mastery)

I can do just about anything I set my mind to.

When I really want to do something, I usually find a way to succeed at it.

Whether or not I am able to get what I want is in my own hands.

(Constraints)

I often feel helpless in dealing with the problems of life.

I have little control over the things that happen to me.

There are many things that interfere with what I want to do.

Mental Health

Study 1, 2 & 3

(Trait-Anxiety)

In general, how often do these statements apply to you...

I am happy.

I feel satisfied with myself.

I feel pleasant.

I worry about things that really don't matter.

I lack self-confidence.

I feel inadequate.

(Depressive Symptoms)

In the past week...

I enjoyed life.

I felt everything I did was an effort.

I felt sad.

I was happy.

I felt lonely.

People were unfriendly.

I felt depressed.

My sleep was restless.

I felt that people disliked me.

I could not "get going."

Table 1

Study 1(work organization) means, standard deviations and bivariate correlations

Variable	Mean	SD	1	2	3	4	5	6	7
1. Distinctive Treatment	3.58 [a]	0.82 [d]	-----						
2. Inclusive Treatment	3.76 [a]	0.76 [d]	.46	-----					
3. Intragroup Status	4.75 [b]	1.29 [e]	.63	.48	-----				
4. Intragroup Acceptance	5.56 [b]	1.03 [e]	.46	.67	.58	-----			
5. Group Identity	4.61 [b]	1.32	.36	.52	.50	.45	-----		
6. Personal Control	4.99 [b]	1.16	.32	.46	.39	.47	.24	-----	
7. Anxiety	2.35 [a]	0.81	-.30	-.48	-.42	-.52	-.28	-.72	-----
8. Depressive Symptoms	0.72 [c]	0.60	-.19	-.41	-.29	-.43	-.20	-.67	.79

Note.
[a] 1-5 scale, [b] 1-7 scale, [c] 0-3 scale; all correlations significant at $p \leq .001$.
[d] Means for Distinctive- and Inclusive treatment are significantly different, $t(468) = 4.80$, $p < .001$.
[e] Means for Intragroup Status and Acceptance are significantly different, $t(471) = 16.21$, $p < .001$.

Table 2

Study 1 (work organization) regression analyses, with distinctive treatment predicting intragroup status over and above several control variables

	Model 1	Model 2
Group-enhancing Behavior	.35***	.22***
Inclusive Treatment	.28***	.20***
Managerial / supervisory position	.15***	.12***
Salary (relative to others in org.)	.14***	.11**
Years employed at org.	.09**	.08*
Time spent with others of lower standing in org.	.12**	.07*
Distinctive Treatment	---	**.32*** **

Note.
Total R^2 = .54, ΔR^2 = .06, $F(1, 452)$ = 57.86, p < .001.
Local effect size, Cohen's f^2 = .13 (small to medium effect).
Standardized coefficients displayed; * $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$.
Results virtually identical to analyses run with additional controls (all non-significant): gender, ethnicity, education, household income, salary (non-relative), number of employees directly under one's supervision, salience of hierarchy within organization.

Table 3

Study 2 (student community) means, standard deviations and bivariate correlations

Variable	Mean	SD	1	2	3	4	5	6	7
1. Distinctive Treatment	3.28 [a]	0.72 [d]	-----						
2. Inclusive Treatment	3.71 [a]	0.66 [d]	.52	-----					
3. Intragroup Status	3.89 [b]	1.23 [e]	.56	.42	-----				
4. Intragroup Acceptance	5.40 [b]	0.95 [e]	.45	.61	.49	-----			
5. Group Identity	5.43 [b]	1.04	.33	.42	.37	.45	-----		
6. Personal Control	4.74 [b]	0.87	.27	.29	.34	.31	.25	-----	
7. Anxiety	2.77 [a]	0.61	-.24	-.40	-.43	-.46	-.30	-.48	-----
8. Depressive Symptoms	0.91 [c]	0.49	-.23	-.38	-.33	-.43	-.31	-.47	.67

Note.
[a] 1-5 scale, [b] 1-7 scale, [c] 0-3 scale; all correlations significant at $p \leq .001$.
[d] Means for Distinctive- and Inclusive treatment are significantly different, $t(189) = 8.82, p < .001$.
[e] Means for Intragroup Status and Acceptance are significantly different, $t(189) = 18.48, p < .001$.

Table 4

Study 2 (student community) regression analyses, distinctive treatment predicting intragroup status over and above control variables

	Model 1	Model 2
Group-enhancing Behavior	.38***	.29***
Inclusive Treatment	.37***	.20**
Gender [a]	.15**	.18**
International Student	-.19**	-.17**
Distinctive Treatment	---	**.35***

Note.

Total R^2 = .47, ΔR^2 = .08, $F(1, 175)$ = 26.52, $p < .001$

Local effect size, Cohen's f^2 = .15 (medium effect).

Standardized coefficients displayed; ** $p \leq .01$; *** $p \leq .001$.

[a] 0 = *Woman*, 1 = *Man*.

Results virtually identical to analyses run with additional controls (all non-significant): race/ethnicity, year in school, being a transfer student, household income.

Table 5

Study 3 (ethnic minority group) means, standard deviations and bivariate correlations

Variable	*Mean*	*SD*	1	2	3	4	5	6	7
1. Distinctive Treatment	3.54 [a]	0.76 [d]	-----						
2. Inclusive Treatment	3.75 [a]	0.58 [d]	.38	-----					
3. Intragroup Status	4.81 [b]	1.29 [e]	.61	.37	-----				
4. Intragroup Acceptance	5.60 [b]	0.89 [e]	.45	.59	.51	-----			
5. Group Identity	5.72 [b]	1.11	.28	.35	.33	.36	-----		
6. Personal Control	4.93 [b]	0.93	.24	.28	.30	.34	.13 [g]	-----	
7. Anxiety	2.63 [a]	0.66	-.22	-.23	-.35	-.37	-.11 [g]	-.68	-----
8. Depressive Symptoms	0.62 [c]	0.49	-.06 [h]	-.16 [f]	-.14 [f]	-.30	-.02 [h]	-.56	.63

Note.
[a] 1-5 scale, [b] 1-7 scale, [c] 0-3 scale; all correlations significant at $p \leq .001$ except as noted: [f] $p \leq .01$; [g] $p \leq .05$; [h] *ns.*
[d] Means for Distinctive- and Inclusive treatment are significantly different, $t(322) = 5.04$, $p < .001$.
[e] Means for Intragroup Status and Acceptance are significantly different, $t(322) = 12.56$, $p < .001$.

Table 6

Study 3 (ethnic minority group) regression analyses, distinctive treatment predicting intragroup status over and above several control variables

	Model 1	Model 2
Group-enhancing Behavior	.29***	.15**
Inclusive Treatment	.29***	.14**
Distinctive Treatment	---	**.51*****

Note.
Total $R^2 = .41$, $\Delta R^2 = .20$, $F(1, 319) = 109.04$, $p < .001$.
Local effect size, Cohen's $f^2 = .34$ (medium to large effect).
Standardized coefficients displayed; *** $p \leq .001$; ** $p \leq .01$
Results virtually identical to analyses run with additional controls (all non-significant): age, gender, household income, average amount of time spent around ingroup members in everyday life.

Table 7

Study 1, 2 and 3 exploratory factory analyses, lambdas from rotated factor solutions

Items in EFA	Study 1		Study 2		Study 3	
DT1	**.85**	-.02	-.06	**.91**	**.93**	-.05
DT2	**.88**	-.05	-.02	**.86**	**.87**	-.03
DT3	**.85**	-.03	-.01	**.82**	**.69**	.04
DT4	**.68**	.16	.23	**.53**	**.82**	.04
IT1	-.03	**.78**	**.75**	-.00	-.04	**.78**
IT2	.02	**.83**	**.93**	-.05	.00	**.78**
IT3	.04	**.77**	**.79**	.04	-.04	**.72**
IT4	-.02	**.84**	**.87**	.03	.10	**.52**

Items in EFA	Study 1		Study 2		Study 3	
DT1	-.06	**.89**	-.06	**.91**	-.03	**.93**
DT2	.03	**.83**	-.00	**.85**	.00	**.86**
DT3	.02	**.82**	.08	**.77**	.15	**.62**
DT4	.03	**.73**	.00	**.64**	-.05	**.86**
STAT1	**.96**	-.04	**.89**	.04	**.91**	.03
STAT2	**.81**	.03	**.80**	.00	**.83**	.03
STAT3	**.88**	-.02	**.92**	.01	**.94**	-.05
STAT4	**.80**	.04	**.93**	-.04	**.87**	.01

Note. EFAs run using principal axis factoring and direct oblimin rotation; Numbering of items corresponds to their ordering as listed in Appendix A; DT = Distinctive Treatment; IT = Inclusive Treatment; STAT = Intragroup Status.

Table 8
Study 1, 2 and 3 parameters for the measurement portion of the hypothesized model

Latent Factor	Study	Measurement Parameters
Distinctive Treatment	1	.84 (1.00, .00) .86 (1.04, .05) .83 (0.99, .04) .76 (0.85, .04)
	2	.86 (1.00, .00) .85 (1.03, .07) .82 (1.02, .07) .67 (0.74, .07)
	3	.90 (1.00, .00) .87 (0.95, .04) .73 (0.83, .05) .83 (0.88, .05)
Inclusive Treatment	1	.76 (1.00, .00) .85 (1.18, .06) .78 (1.00, .06) .82 (1.09, .06)
	2	.72 (1.00, .00) .90 (1.51, .17) .82 (1.21, .14) .89 (1.50, .17)
	3	.76 (1.00, .00) .78 (1.11, .08) .69 (0.98, .10) .58 (0.88, .09)
Intragroup Status	1	.92 (1.00, .00) .83 (1.06, .04) .86 (0.96, .03) .83 (0.88, .03)
	2	.92 (1.00, .00) .81 (0.86, .06) .91 (0.97, .05) .92 (1.03, .05)
	3	.93 (1.00, .00) .84 (0.95, .04) .89 (0.96, .03) .89 (0.93, .04)
Intragroup Belonging	1	.89 (1.00, .00) .88 (0.96, .04) .90 (1.01, .05) .90 (1.04, .04)
	2	.94 (1.00, .00) .89 (0.83, .04) .83 (0.92, .06) .89 (0.91, .05)
	3	.90 (1.00, .00) .90 (0.98, .05) .70 (1.05, .09) .91 (1.07, .05)
Group Identity	1	.67 (1.00, .00) .94 (1.25, .10)
	2	.88 (1.00, .00) .69 (1.07, .14)
	3	.75 (1.00, .00) .94 (0.96, .12)
Personal Control	1	.76 (1.00, .00) .82 (1.42, .10)
	2	.59 (1.00, .00) .61 (1.20, .24)
	3	.59 (1.00, .00) .78 (1.66, .20)
Mental Health	1	.84 (1.00, .00) .94 (1.51, .08)
	2	.81 (1.00, .00) .81 (1.25, .17)
	3	.73 (1.00, .00) .88 (1.59, .14)

Note. Standardized parameter coefficients (unstandardized coefficients, robust standard errors) for each manifest indicator, as predicted by its respective latent factor. All parameters significant at $p < .001$. Ordering of lambda values correspond to the ordering of items as listed in Appendix A.
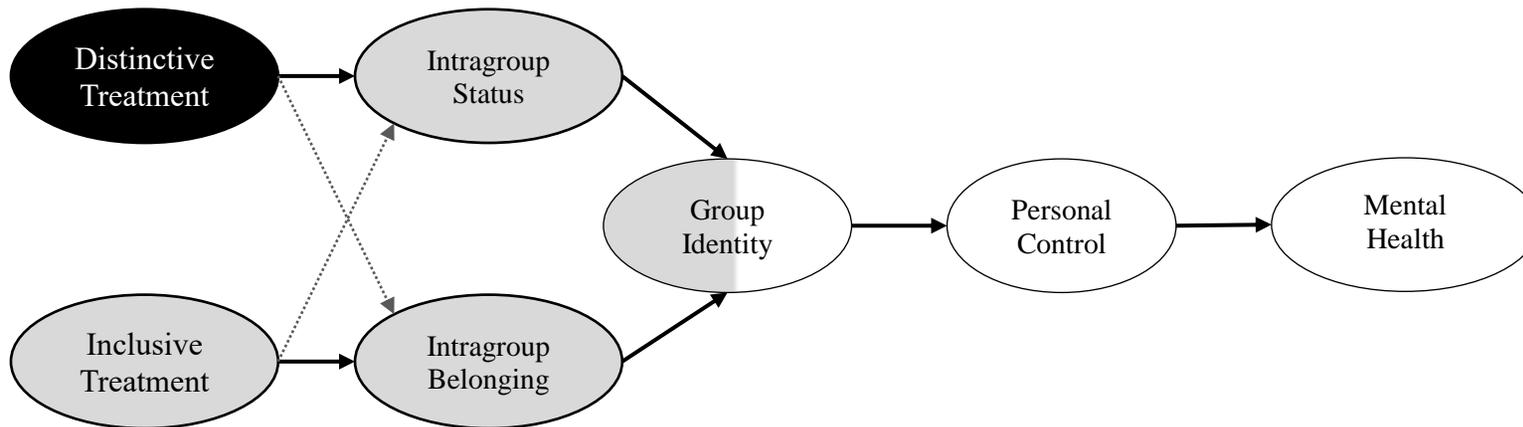
Figure 1. The hypothesized model. It explains how two forms of group-based treatment—the oft-studied form, inclusive treatment, and a second form proposed here, *distinctive treatment*—differentially shape individuals' sense of status and belonging in groups respectively. The model further predicts individuals' sense of status and belonging contribute to the development of a strong group identity. This in turn emboldens individuals' sense of personal control over life, with positive downstream implications for mental health. Portions of the model are shaded to illustrate how processes examined in distinct literatures are brought together in this model. The portion in grey reflects processes evinced in the intragroup processes/procedural justice literature. The portion in white reflects processes evinced in the social cure literature. The portion in black reflects the most novel part of the model.
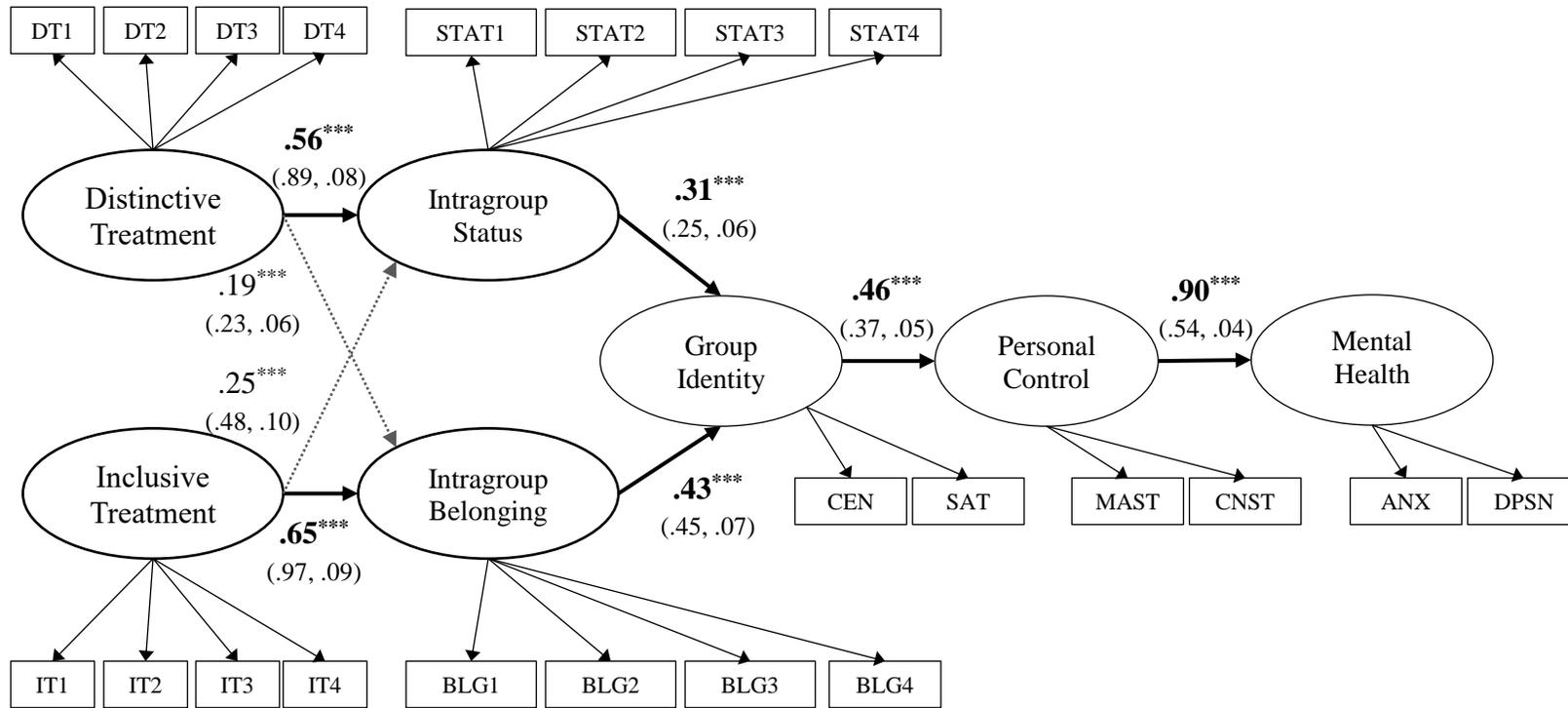
Figure 2. Study 1 (work organization). The hypothesized model with standardized path coefficients (unstandardized coefficients, standard errors). Factor loadings are omitted here for simplicity, but provided in Table 8; all were predicted by their respective latent factors at $p < .001$. Distinctive treatment and Inclusive treatment were correlated ($r = .47$, $p \leq .001$) as were intragroup status and belonging ($r = .36$, $p < .001$). DT = Distinctive Treatment; IT = Inclusive Treatment; STAT = Intragroup Status; BLG = Intragroup Belonging; CEN, SAT = Group Identity-Centrality, -Satisfaction; MAST, CNST = Mastery, Constraints; ANX, DPSN = Anxiety, Depressive Symptoms. *** $p \leq .001$
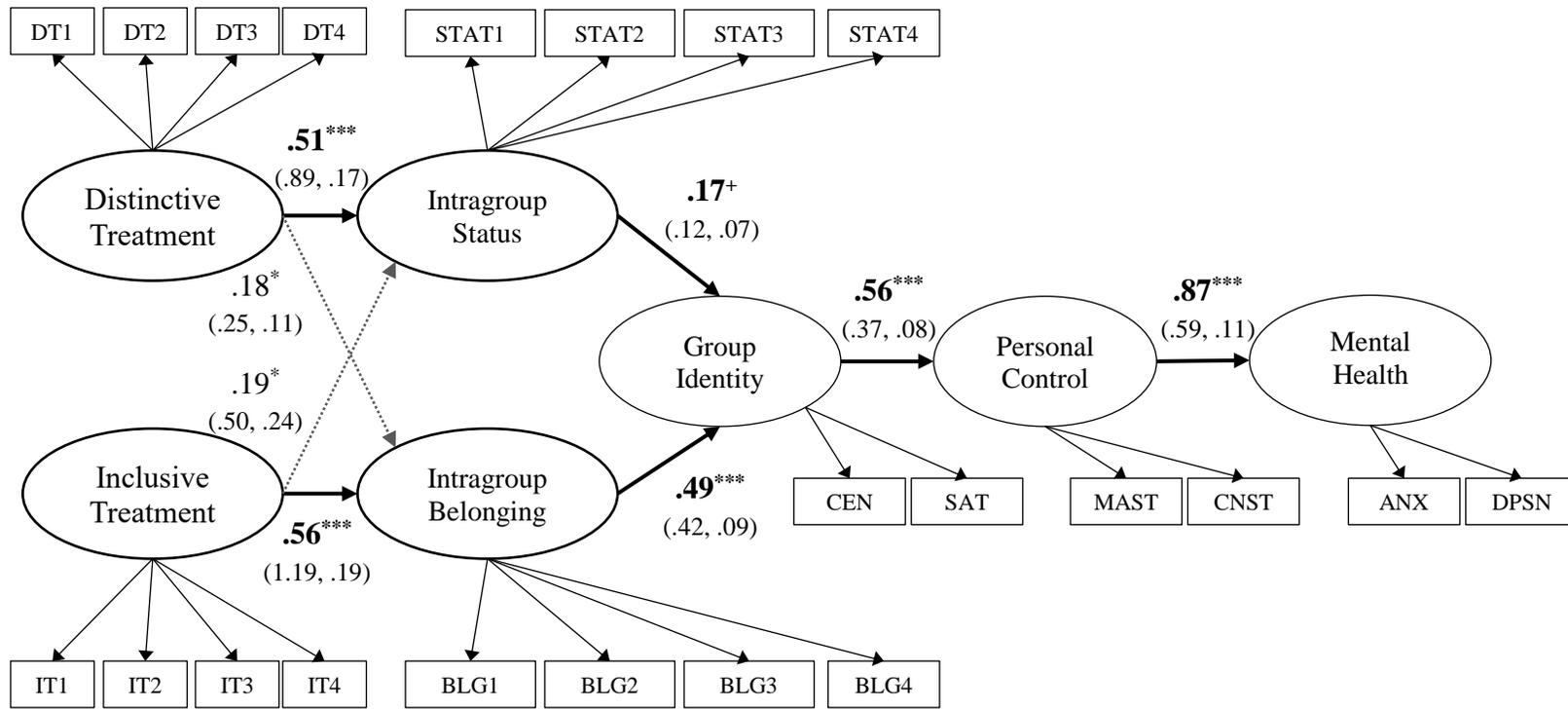
Figure 3. Study 2 (student community). The hypothesized model with standardized path coefficients (unstandardized coefficients,

standard errors). Factor loadings are omitted here for simplicity, but provided in Table 8; all were predicted by their respective latent

factors at *p* < .001. Distinctive treatment and Inclusive treatment were correlated (*r* = .53, *p* ≤ .001) as were intragroup status and

belonging (*r* = .27, *p* = .002). DT = Distinctive Treatment; IT = Inclusive Treatment; STAT = Intragroup Status; BLG = Intragroup

Belonging; CEN, SAT = Group Identity-Centrality, -Satisfaction; MAST, CNST = Mastery, Constraints; ANX, DPSN = Anxiety,

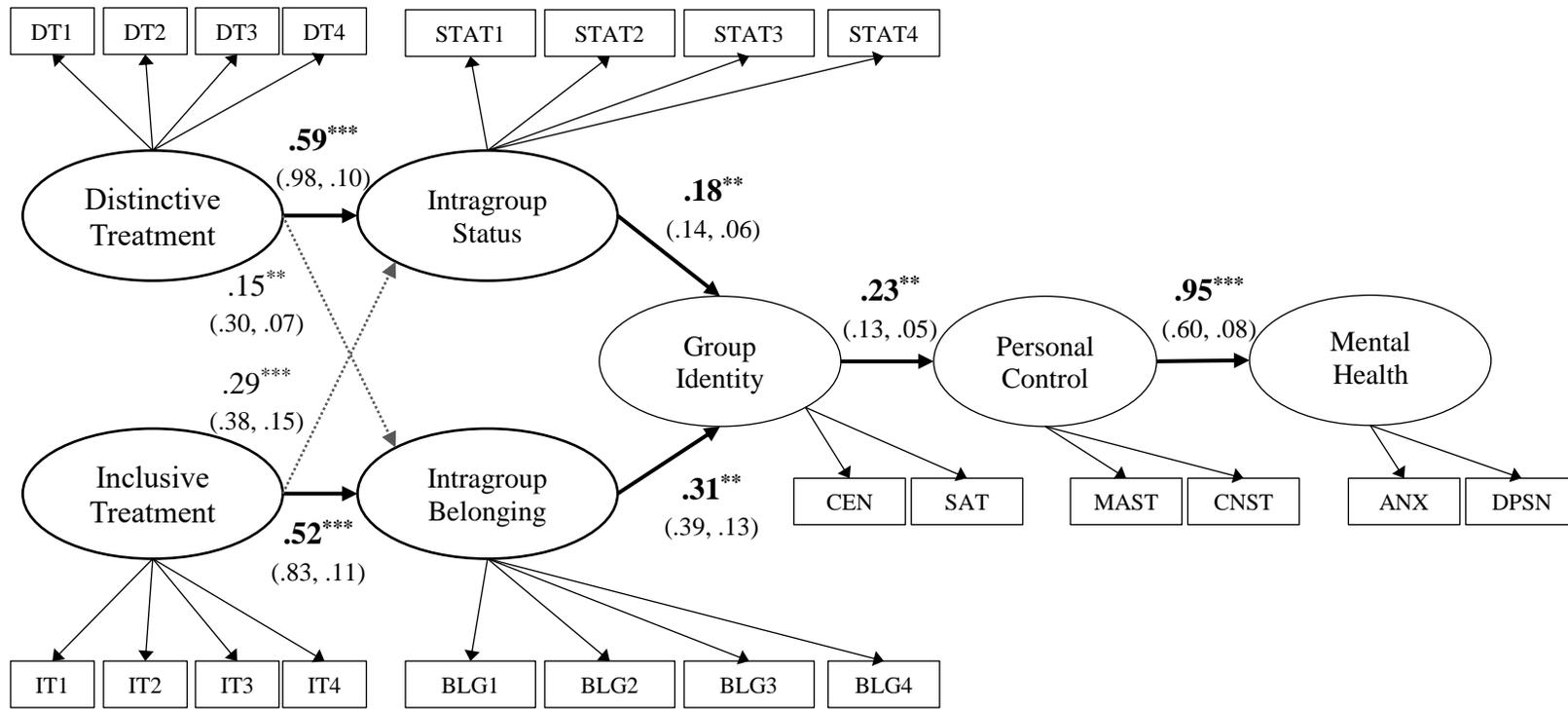Depressive Symptoms. *** *p* ≤ .001; * *p* ≤ .05, +*p* = .07

Figure 4. Study 3 (ethnic minority groups). The hypothesized model with standardized path coefficients (unstandardized coefficients, standard errors). Factor loadings are omitted here for simplicity, but provided in Table 8; all were predicted by their respective latent factors at *p* < .001. Distinctive treatment and Inclusive treatment were correlated (*r* = .43, *p* ≤ .001) as were intragroup status and belonging (*r* = .30, *p* ≤ .001). DT = Distinctive Treatment; IT = Inclusive Treatment; STAT = Intragroup Status; BLG = Intragroup Belonging; CEN, SAT = Group Identity-Centrality, -Satisfaction; MAST, CNST = Mastery, Constraints; ANX, DPSN = Anxiety, Depressive Symptoms. *** *p* ≤ .001; ** *p* ≤ .01

References

Adler, N. E., Epel, E., Castellazzo, G., & Ickovics, J. (2000). Relationship of subjective and

objective social status with psychological and physiological functioning: Preliminary data

in healthy White women. *Health Psychology, 19*(6)*,* 586-592. doi:10.1037/0278-

6133.19.6.586

Anderson, C., & Cowan, J. (2014). Personality and status attainment: A micropolitics perspective. In J.

Cheng, J. Tracy, & C. Anderson (Eds.), *The psychology of social status* (pp 99-117). New York:

Springer.

Anderson, C., Hildreth, J. A. D., & Howland, L. (2015). Is the desire for status a fundamental

human motive? A review of the empirical literature. *Psychological Bulletin, 141*(3), 574–

601. doi:10.1037/a0038781

Anderson, C., & Kilduff, G. J. (2009). The pursuit of status in social groups. *Current Directions

in Psychological Science, 18*(5), 295–298. doi:10.1111/j.1467-8721.2009.01655.x

Anderson, C., Kraus, M. W., Galinsky, A. D., & Keltner, D. (2012). The local ladder effect:

Social status and subjective well-being. *Psychological Science, 23*(7), 764-771.

doi:10.1177/0956797611434537

Anderson, C., Srivastava, S., Beer, J. S., Spataro, S. E., & Chatman, J. A. (2006). Knowing your

place: Self-perceptions of status in face-to-face groups. *Journal of Personality and Social

Psychology, 91*(6), 1094–1110. doi:10.1037/0022-3514.91.6.1094

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal

attachments as a fundamental human motivation. *Psychological Bulletin, 117*(3), 497–

529. doi:10.1037/0033-2909.117.3.497

Begeny, C. T., & Huo, Y. J. (2016). Is it always good to feel valued? The psychological benefits

and costs of higher perceived status in one's ethnic minority group. *Group Processes &*

166

Intergroup Relations. Advance online publication. doi:10.1177/1368430216656922

Begeny, C. T. & Huo, Y. J. (in press). When identity hurts: How positive intragroup experiences

    can yield negative mental health implications for ethnic and sexual minorities. *European*

    Journal of Social Psychology.

Begeny, C. T., & Huo, Y. J. (2017b). *Shifts in the strength of one's ethnic identity: the role of*

    intragroup relations, feeling valued and changes in perceived prototypicality. Manuscript

    in preparation.

Berger, J., Cohen, B. P., & Zelditch, M. (1972). Status characteristics and social interaction.

    American Sociological Review, 37(3), 241. doi:10.2307/2093465

Binning, K. R., & Huo, Y. J. (2012). Understanding status as a social resource. In K. Y.

    Törnblom and A. Kazemi (Eds.), *Handbook of social resource theory*, (pp. 133-147).

    New York: Springer.

Bentler, P. M. (2006). *EQS 6 structural equations program manual*. Encino, CA: Multivariate

    Software.

Blader, S. L., & Chen, Y.-R. (2014). What's in a name? Status, power, and other forms of social

    hierarchy. In J. Cheng, J. Tracy, & C. Anderson (Eds.), *The psychology of social status* (pp 71-

    95). New York: Springer.

Blader, S. L., & Tyler, T. R. (2003). A four-component model of procedural justice: Defining the

    meaning of a "fair" process. *Personality and Social Psychology Bulletin, 29*(6), 747–758.

    doi:10.1177/0146167203029006007

Cheng, J. T., Tracy, J. L., & Henrich, J. (2010). Pride, personality, and the evolutionary

    foundations of human social status. *Evolution and Human Behavior, 31(5)*, 334–347.

    doi:10.1016/j.evolhumbehav.2010.02.004

Cohen, J. E. (1988). *Statistical power analysis for the behavioral sciences*. Hillsdale, NJ:

Lawrence Erlbaum Associates, Inc.

de Cremer, D. (2003). Noneconomic motives predicting cooperation in public good dilemmas: The effect of received respect on contributions. *Social Justice Research*, *16 (4)*, 367–377.

de Cremer, D., & Tyler, T. R. (2005). Am I respected or not?: Inclusion and reputation as issues in group membership. *Social Justice Research, 18*(2), 121–153. doi:10.1007/s11211-005-7366-3

Ellemers, N., Sleebos, E., Stam, D., & de Gilder, D. (2011). Feeling included and valued: How perceived respect affects positive team identity and willingness to invest in the team. *British Journal of Management, 24*(1), 21–37. doi:10.1111/j.1467-8551.2011.00784.x

Ellemers, N., Doosje, B., & Spears, R. (2004). Sources of respect: The effects of being liked by ingroups and outgroups. *European Journal of Social Psychology*, *34*(2), 155-172. doi:10.1002/ejsp.196

Emler, N., & Hopkins, N. (1990). Reputation, social identity and the self. In D. Abrams & M. A. Hogg (Eds.), *Social Identity Theory: Constructive and Critical Advances* (pp. 113–130). New York, NY: Springer-Verlag.

Flynn, F. J., Reagans, R. E., Amanatullah, E. T., & Ames, D. R. (2006). Helping one's way to the top: Self-monitors achieve status by helping others and knowing who helps whom. *Journal of Personality and Social Psychology, 91*(6), 1123-1137. doi:10.1037/0022-3514.91.6.1123

Greenaway, K. H., Cruwys, T., Haslam, S. A., & Jetten, J. (2016). Social identities promote well-being because they satisfy global psychological needs. *European Journal of Social Psychology, 46*(3), 294–307. doi:10.1002/ejsp.2169

Greenaway, K. H., Haslam, S. A., Cruwys, T., Branscombe, N. R., Ysseldyk, R., & Heldreth, C.

(2015). From "we" to "me": Group identification enhances perceived personal control with consequences for health and well-being. *Journal of Personality and Social Psychology, 109*(1), 53–74. doi:10.1037/pspi0000019

Greenberg, J. (2006). Losing sleep over organizational injustice: Attenuating insomniac reactions to underpayment inequity with supervisory training in interactional justice. *Journal of Applied Psychology, 91*(1), 58–69. doi:10.1037/0021-9010.91.1.58

Hardy, C. L., Van Vugt, M. (2006). Nice guys finish first: The competitive altruism hypothesis. *Personality and Social Psychology Bulletin, 32(10)*, 1402–1413. doi:10.1177/0146167206291006

Haslam, S. A., Jetten, J., Postmes, T., & Haslam, C. (2009). Social identity, health, and well-being: An emerging agenda for applied psychology. *Applied Psychology, 58,* 1–23. http://dx.doi.org/10.1111/j.1464-0597.2008.00379.x

Hornsey, M. J., & Jetten, J. (2004). The individual within the group: Balancing the need to belong with the need to be different. *Personality and Social Psychology Review, 8*(3), 248–264. doi:10.1207/s15327957pspr0803_2

Huo, Y. J. (2002). Justice and the regulation of social relations: When and why do group members deny claims to social goods? *British Journal of Social Psychology, 41*(4), 535–562. doi:10.1348/014466602321149876

Huo, Y. J., & Binning, K. R. (2008). Why the psychological experience of respect matters in group life: An integrative account. *Social and Personality Psychology Compass, 2*(4), 1570–1585. doi:10.1111/j.1751-9004.2008.00129.x

Huo, Y. J., Binning, K. R., & Molina, L. E. (2010). Testing an integrative model of respect: Implications for social engagement and well-being. *Personality and Social Psychology*

Bulletin, 36(2)*,* 200-212. doi:10.1177/0146167209356787

Jetten, J., Haslam, C., Haslam, S. A., & Branscombe, N. R. (2009). The social cure. *Scientific*

 American Mind, 20(5), 26–33. doi:10.1038/scientificamericanmind0909-26

Kohout, F. J., Berkman, L. F., Evans, D. A., & Cornoni-Huntley, J. (1993). Two shorter forms of

 the CES-D depression symptoms index. *Journal of Aging and Health*, *5*(2), 179-193.

 doi:10.1177/089826439300500202

Lachman, M. E., & Weaver, S. L. (1998). The sense of control as a moderator of social class

 differences in health and well-being. *Journal of Personality and Social Psychology,*

 74(3), 763–773. doi:10.1037/0022-3514.74.3.763.

Lind, E. A., & Tyler, T. R. (1988). *The social psychology of procedural justice*. New York:

 Plenum.

Mead, G. H. (1913). The social self. T*he Journal of Philosophy, Psychology and Scientific*

 Methods, 10(14), 374. doi:10.2307/2012910

Prenda, K. M., & Lachman, M. E. (2001). Planning for the future: A life management strategy

 for increasing control and life satisfaction in adulthood. *Psychology and Aging, 16*(2),

 206–216. doi:10.1037/0882-7974.16.2.206

Rogers, K. M., & Ashforth, B. E. (2014). Respect in Organizations: Feeling valued as "we" and

 "me." *Journal of Management, 43*(5), 1578–1608. doi:10.1177/0149206314557159

Satorra, A., & Bentler, P. M. (1990). Model conditions for asymptotic robustness in the analysis

 of linear relations. *Computational Statistics & Data Analysis, 10*(3), 235-249.

 doi:10.1016/0167-9473(90)90004-2

Simon, B., & Stürmer, S. (2003). Respect for group members: Intragroup determinants of

 collective identification and group-serving behavior. *Personality and Social Psychology*

Bulletin, 29(2), 183–193. doi:10.1177/0146167202239043

Smith, H. J., & Tyler, T. R. (1997). Choosing the right pond: The impact of group membership on self-esteem and group-oriented behavior. *Journal of Experimental Social Psychology, 33*(2), 146–170. doi:10.1006/jesp.1996.1318

Smith, H. J., Tyler, T. R., & Huo, Y. J. (2003). Interpersonal treatment, social identity and organizational behavior. In S. A. Haslam, D. van Knippenberg, M. J. Platow, & N. Ellemers (Eds.), *Social identity at work: Developing theory for organizational practice* (pp. 155-171). Philadelphia, PA: Psychology Press.

Spears, R., Ellemers, N. and Doosje, B. (2005). Let me count the ways in which I respect thee: Does competence compensate or compromise lack of liking from the group? *European Journal of Social Psychology, 35*(2)*,* 263–279. doi: 10.1002/ejsp.248

Spielberger, C. D. (1983). *Manual for the State treatmentrait Anxiety Inventory STAI (Form Y).* Palo Alto, CA: Mind Garden.

Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33-47). Monterey, CA: Brooks/Cole.

Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D. & Wetherell, M. (1987). *Rediscovering the social group: A self-categorization theory*. Oxford, New York Blackwell.

Tyler, T. R., & Blader, S. L. (2002). Autonomous vs. comparative status: Must we be better than others to feel good about ourselves? *Organizational Behavior and Human Decision Processes*, *89*(1), 813-838. doi:10.1016/s0749-5978(02)00031-6

Tyler, T. R. & Blader, S. L. (2003). The group engagement model: Procedural justice, social identity, and cooperative behavior. *Personality and Social Psychology Review, 7*(4)*,* 349-

361. doi:10.1207/s15327957pspr0704_07

Tyler, T. R., Degoey, P., & Smith, H. J. (1996). Understanding why the justice of group

procedures matters. *Journal of Personality and Social Psychology*, *70*(5), 913-930. doi:

10.1037/0022-3514.70.5.913

Tyler, T. R., & Lind, E. A. (1992). A relational model of authority in groups. In M. P. Zanna

(Ed.), *Advances in experimental social psychology* (Vol. 25, pp. 115–191). San Diego,

CA: Academic Press. http://dx.doi.org/10.1016/S0065-2601(08)60283-X

van Prooijen, J., van den Bos, K., & Wilke, H. A. M. (2004). The role of standing in the

psychology of procedural justice: Towards theoretical integration. *European Review of*

Social Psychology, 15(1), 33–58. doi:10.1080/10463280340000108