

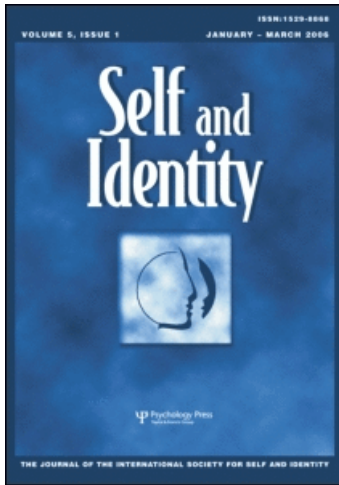
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Implicit Measures Reveal Evidence of Personal Discrimination

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A well-known result, the person–group discrimination discrepancy (PGDD), shows that members of disadvantaged groups believe that other members of their social groups are discriminated against, but that they themselves are not. In this paper, we test whether this explicit self-protective strategy is also obtained on indirect measures of personal discrimination. Three experiments, using both explicit (self-report) and implicit (IAT) measures of discrimination showed that although members of disadvantaged groups do not explicitly report self-discrimination (replicating previous research), they do reveal self-discrimination on the implicit measure. That the PGDD effect is bound to explicit measurement should be recognized both when implementing research protocols and when understanding the effects of discrimination whether it is consciously recognized or not.

Keywords: Prejudice; Discrimination; PGDD; Implicit.

We begin with a well-known result about self- and group-perception. Members of historically disadvantaged groups report that other members of their group, but not they themselves, have been affected by discrimination—an effect named the person–group discrimination discrepancy, or PGDD, by Taylor, Wright, Moghaddam, and Lalonde (1990) and first observed by Crosby (1982).

The PGDD effect appears to be consistent across a range of social groups including Black-American males (Taylor, Wright, & Porter, 1994), South Asian and Haitian Canadians (Taylor et al., 1990), working women (Crosby, 1982, 1984; Quinn, Roese, Pennington, & Olson, 1999), and single mothers (Olson, Roese, Meen, & Robertson, 1995). For example, Taylor et al. (1990) tested inner-city African-American men from Miami, Florida and found clear evidence in self-report for the recognition of discrimination against their group, but much weaker evidence that they personally had suffered discrimination. This difference was found for reports of perceived discrimination in employment contexts (about a 2-point difference on a 10-point scale) and housing contexts (about a 5-point difference on a 10-point scale).

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If discrimination is viewed to be a property of the group but each individual member believes that their experience of it is below average, an interesting bias in social perception needs to be explained. First intuitions trying to explain this discrepancy cited the need for stigmatized individuals to not perceive themselves as victims of discrimination because of the psychological costs endured when one relinquishes control over outcomes and submits to victimization (Crosby, 1982, 1984). Essentially, Crosby's thesis was one in which the mind of a stigmatized individual suppressed the painful truth from bubbling up to consciousness. Since Crosby's early work on this question, new measurement techniques have emerged allowing psychological scientists to measure the less conscious and automatic aspects of social cognition, including self-perception (see Greenwald & Banaji, 1995). Now, we can test whether there is evidence for these early intuitions about the source of the PGDD effect.

After Crosby (1984), later research investigating the mechanism underlying this effect suggested that distancing oneself from the negative attribute of discrimination may arise from an automatic protective mechanism (Hodson & Esses, 2002). They suggested that the PGDD effect can be viewed as a byproduct of a larger psychological tendency to view and present oneself positively, even when such denial may not be in one's ultimate self-interest. This theorizing can also be seen in the work of Taylor and Brown (1988) and Weinstein (1980). Most recently this basic explanation for the observed PGDD has been referred to as the *personally motivated* explanation (Postmes, Branscombe, Spears, & Young, 1999).

Self-protective strategies such as this *personally motivated* explanation of the PGDD effect, when observed on self-report measures of self-esteem, identity, attitudes, and stereotypes raise the question of the degree to which such strategies "fit" with parallel cognition, which resides at other levels of awareness. Mental systems characterized as relatively more conscious or unconscious can be tapped with somewhat different measures. Some of the more useful accounts of the complexity of self and group perception have come from looking at the consistency between these two systems. When both measures tell the same story, for example, if both measures were to show the PGDD, an underlying mental coherence is revealed. On the other hand, if the result obtained on self-report measures is inconsistent with those obtained on more implicit measures, then the lack of mental coherence is instructive.

To date, the PGDD effect has only been measured with self-report. Given the seemingly self-protective function of asserting and believing in a view of oneself as under-discriminated, it is important to conduct such a test of the consistency between a consciously deliberated opinion about self-discrimination and an implicit association between "self" and "target of discrimination."

For example, to tap into unconscious mental operations, Fazio, Jackson, Dunton, and Williams (1995) used a sequential evaluative priming task to measure negative attitudes toward Blacks. This paper was among the first to show that people, on average, may not self-report negative attitudes toward Blacks, but they are quicker to respond to negative words following a Black face relative to other faces including White, Asian, and Hispanic faces (see also Dovidio, Kawakami, Johnson, Johnson, & Howard, 1997). This demonstration and others like it show that while the conscious system (measured with self-report) believes that it is non-biased, parts of the mind less accessible through introspective access (as measured by a cognitive reaction-time task) shows that bias is present.

In the domain of self-perception, Yamaguchi et al. (2007) reported a result to show the importance of measuring self-esteem with multiple measures. They found that the well-documented result of variation in explicit self-esteem by culture

(East Asians report lower self-esteem than Americans), was not seen on implicit measures of self-esteem. In other words, all human beings regardless of culture may have the same automatic association of self with good, but self reports of that to others and even to oneself may vary as a function of culture.

Because explicit and implicit instruments show the most dissociation when measuring sensitive topics such as racial prejudice and discrimination (Greenwald, Poehlman, Uhlmann, & Banaji, in press), and because the PGDD effect has only been measured with explicit instruments, we investigated whether the PGDD effect is bound to a particular mode of measurement. If it is observed consistently, we will conclude that the PGDD is a robust phenomenon at all levels of mental representation. If it is not consistently obtained, we will need to shift our thinking about the nature and consequences of presenting a view of self as un-discriminated while simultaneously associating the self with discrimination.

To investigate the PGDD with an implicit instrument, a measure such as the IAT could be used to measure the time it took participants to match representatives of their race group (e.g., “Black Americans”) with particular attributes associated with being the victim of discrimination (e.g., “victim of discrimination”). The operationalization of higher implicit perception of group discrimination would be that participants will match a group representative (e.g., “Black Americans”) to an attribute (e.g., “victim of discrimination”) more quickly if they connect these factors in their minds, regardless of their awareness of this connection. The computerized IAT measures the aggregate time required for these matching tasks under two conditions (pairings). A difference in average matching speed for opposite pairings (e.g., Black + victim and White + bigot vs. White + victim and Black + bigot) determines the IAT score (see Greenwald, Nosek, & Banaji, 2003, for a thorough discussion of IAT procedure and methodology). Participants are typically aware that they are making these connections but unable to control them given the rapid response times and structure of the computerized test. More than 500 studies have now employed the IAT (see Fazio & Olson, 2003; Greenwald et al., in press, for reviews) and data from over 6 million tests have accumulated from implicit.harvard.edu, which indicate the nature and probability of conscious–automatic discrepancies and their possible meaning. A meta-analysis of the predictive validity of the measure is now available suggesting that the IAT is not always a useful measure; rather it is precisely in situations that are subject to self-presentational concern (e.g., reports of discrimination) that this indirect measure may provide a unique account of the phenomenon, and may even be superior to self-report measures in predicting behavior (Greenwald et al., in press).

The importance of addressing potential discrepancies between explicit and implicit measures of discrimination is illustrated by the small but rapidly growing body of work addressing the impact of racial discrimination on important outcome measures of somatic and mental health (Clark, Anderson, Clark, & Williams, 1999; Gee, Spencer, Chen, & Takeuchi, 2007; Kressin, Raymond, & Manze, 2008; Krieger, 1999; Mays, Cochran, & Barnes, 2007; Paradies, 2006; Williams & Mohammed, 2009; Williams, Neighbors, & Jackson, 2003). Notably, one of the authors (Krieger) on a prior but retracted paper¹ comparing implicit versus explicit measures of discrimination, conducted the largest study to date on racial discrimination and blood pressure, including 1974 African-Americans participants, and found that among both working class and professional African Americans, blood pressure was highest among participants who reported the greatest exposure to racial discrimination, but also that among the working class, but not professional, African

Americans, that blood pressure was also higher among those reporting “no” compared to “moderate” discrimination (Krieger & Sidney, 1996). These results emphasize the importance of discerning whether explicit measures are alone sufficient to study the impact of discrimination on well-being and the need for more methodological research on how best to measure experiences of discrimination (National Research Council, 2004).

The current paper accordingly sought to harvest the PGDD from explicit measures as has been done many times before, and include new implicit measures of group- and self-discrimination. We predicted that women (Study 1) and Black Americans (Studies 2 and 3) would show the typical explicit PGDD effect in which perceived discrimination against one’s group but not one’s self is reported. We tested whether implicit measures of perceived discrimination would reveal a similar PGDD effect. When making a prediction about whether implicit measures would reveal the PGDD effect, we looked to Hodson and Esses (2002), who explained the PGDD effect by showing that a lack of personal discrimination on explicit measures is the result of one truly and deeply distancing one’s self concept from negative attributes. If this hypothesis accounts for the PGDD result, then we should expect to see a PGDD effect across both explicit and implicit measures. If, on the other hand, the explicit measure tapped a conscious, subjectively legitimate need to distance oneself from victimization as Crosby (1982, 1984) suggested so long ago, then perhaps evidence of self-discrimination will emerge on an implicit measure.

Study 1

Study 1 tested the explicit versus implicit PGDD hypothesis by focusing on gender discrimination. If the original PGDD result is a function of an internalized rejection of the self from the attribute of discrimination as Hodson and Esses (2002) suggested, then both explicit and implicit measures should reveal such a dissociation of negative attributes from self. In contrast, if the lack of explicit self-discrimination is personally motivated, then the PGDD effect should be bound to self-report while both self and group discrimination are present on the implicit measure.

Method

Participants. Twenty-four female and 22 male participants from Harvard University participated. The sample varied in race/ethnicity (40% White, 28% Asian, 8.5% each Black, Hispanic, and multiracial, 4.3% American Indian, and 2% other) and in age (from 17 to 56 years with a mean of 23). Because race/ethnicity and age are likely to influence experiences with discrimination, we tested the reported PGDD effects controlling for these factors—using a repeated-measures ANOVA with the critical PPD and GPD factors as repeated-measures factors (separate analyses for implicit and explicit) and the race/ethnicity and age as covariates. Results did not change; thus the simpler *t*-test analyses are reported.

Procedure. Participants were told the study was about their experiences with gender discrimination. Participants completed explicit and implicit measures of gender discrimination in counterbalanced order. The explicit measure was adapted from Krieger (1990) and Krieger, Smith, Naishadham, Hartman, and Barbeau (2005). The implicit measure was adapted from Greenwald, McGhee, and Schwartz (1998) and Greenwald et al. (2003). Explicit group gender discrimination was

measured by asking, “How often do you feel that women are discriminated against because of their gender/sex?” and personal gender discrimination by the question, “How often do you feel that you, personally, have been discriminated against because of your gender/sex?” Responses to the explicit questions were made on 4-point scales: *never*, *rarely*, *sometimes*, or *often*. The categories and items used for the personal gender discrimination and group gender discrimination IATs are listed in Table 1. Because participants were taking two IATs, to avoid fatigue we configured the IATs to be in their original 5-block structure (Greenwald et al., 1998), which takes less time to complete as opposed to the more recently developed 7-block structure (Greenwald et al., 2003). The IATs were scored with the most current scoring algorithm (Greenwald et al., 2003). To measure association between self- and gender-discrimination, the self-discrimination IAT asked participants to associate (first category pairing) ME + TARGET and THEM + PERPETRATOR vs. (second category pairing) THEM + TARGET and ME + PERPETRATOR.

Faster reaction times to the first category pairing (e.g., ME + TARGET) relative to the second category pairing (e.g., ME + PERPETRATOR) suggests an implicit association between the self and having been personally targeted by discrimination. To measure association between group- and gender-discrimination, the group-discrimination IAT asked participants to associate (first category pairing) FEMALES + TARGET and MALES + PERPETRATOR vs. (second category pairing) MALES + TARGET and FEMALES + PERPETRATOR. Faster reaction times to the first category pairing relative to the second category pairing suggests an implicit association between the social group “females” and that group having been targeted by discrimination. Order of category pairing presented first was always counterbalanced across participants; category labels and items used in IATs are in Table 1.

Results and Discussion

Participants showed the predicted PGDD pattern on the explicit measure and women evidenced more gender discrimination than men, as measured by both the explicit and implicit measures. In other words, regardless of gender, participants showed on the explicit measures feeling that their group had been targeted by gender discrimination but that they themselves had been less targeted. With a paired-sample *t*-test comparing explicit PPD scores with explicit GPD scores, the classic PGDD effect emerged ($p < .001$; see Table 2). In contrast, the PGDD effect on the implicit measure was much weaker. Effect size *rs* for each the explicit and implicit PGDD discrepancy were calculated and compared with a *z*-test. Consistent with our hypothesis, the PGDD, for both genders, was statistically significantly stronger on the explicit versus the implicit measure (female $z = -2.13$, $p < .03$; male $z = -1.93$, $p < .06$). No other comparisons were statistically significant.

TABLE 1 IAT Categories and Word Items Used in the Gender PGDD IATs

Categories	ME	THEM	FEMALES	MALES	TARGET	PERPETRATOR
Items	Me	Them	Girls	Boys	Target	Perpetrator
	My	Their	Women	Men	Victim	Chauvinist
	Mine	Theirs	Females	Males	Oppressed	Sexist

TABLE 2 Gender IAT and EOD Results for Female and Male Participants

	Explicit (1–4 scale; one-sample <i>t</i>)		PGDD discrepancy		Implicit (one-sample <i>t</i>)		PGDD discrepancy	
	Personal <i>M</i> (<i>SD</i>)	Group <i>M</i> (<i>SD</i>)	<i>t</i> (paired-sample)		Personal <i>M</i> (<i>SD</i>)	Group <i>M</i> (<i>SD</i>)	<i>t</i> (paired-sample)	
Female (<i>n</i> = 24)	2.42 (0.58)**	3.13 (0.54)**	6.31***		0.18 (0.23)**	0.37 (0.32)**	2.16*	
Male (<i>n</i> = 22)	1.77 (0.75)**	3.05 (0.58)**	6.76***		0.10 (0.22)*	0.29 (0.28)**	2.74*	

Note: **p* < .05; ***p* < .01; ****p* < .001 (two-tailed).

These results provide evidence that when measured with an implicit measure of cognition, the PGDD effect is significantly reduced. This means that when asked, a person is willing and able to express knowledge that one’s group has been discriminated against and also that, for whatever reason, they are likely to report that they themselves have not been. However, when these beliefs are measured with an index able to circumvent social desirability and/or ego-defensive protections, belief that both one’s group and oneself has been discriminated against is revealed.

Study 2

In Study 2 we tested the dissociation between explicit and implicit measurement of the PGDD again; however, in this study we examined PGDD effects in Black-American participants. With the results of Study 1 in hand, we predicted a similar detection of both personal- and group-level perceived discrimination with the implicit measure.

Method

Participants. Eighteen Black and 13 White participants ($M_{age}=46$ years) in a study of a random sample of 250 Blacks and Whites (125 each) were selected from the patient population of two community health centers in Boston. The Black and White participants spanned from economically impoverished to economically stable, with a relatively similar distribution in relation to the US poverty line. Thus, 44% of the Black and 31% of the White participants were below the poverty line; 28% and 31% were at 100–199% of the poverty line, and 28% and 38% were at >200% of the poverty line.

Procedure. Participants completed explicit (Krieger’s Experiences of Discrimination; Krieger et al., 2005) and implicit (the IAT) measures of group-perceived discrimination and personal-perceived discrimination. The explicit race group discrimination question was, “How often do you feel that racial/ethnic groups who are not White, such as African Americans and Latinos, are discriminated against?” The explicit personal race discrimination question was, “How often do you feel that you, personally, have been discriminated against because of your race, ethnicity, or color?” Responses to the explicit questions were made on 4-point scales: *never, rarely, sometimes, or often.*

The race PGDD IAT categories and items are summarized in Table 3. Because participants were taking multiple IATs, to avoid fatigue we configured the IATs to be in their original 5-block structure (Greenwald et al., 1998), which takes less time to complete as opposed to the more recently developed 7-block structure. The IATs

TABLE 3 IAT Categories and Word Items Used in the Race PGDD IATs

Categories	ME	THEM	BLACK AMERICANS	WHITE AMERICANS	VICTIM	BIGOT
Items	Me	Them	Pictures of black people	Pictures of white people	Victim Target	Bigot Racist Abuser
	My	Their			Oppressed	
	Mine	Theirs				

were scored with the most current scoring algorithm (Greenwald et al., 2003). To measure association between self- and racial-discrimination, the self-discrimination IAT asked participants to associate (first category pairing) ME + VICTIM and THEM + BIGOT vs. (second category pairing) THEM + VICTIM and ME + BIGOT. Faster reaction times to the first category pairing (e.g., ME + VICTIM) relative to the second category pairing (e.g., ME + BIGOT) suggests an implicit association between the self and having been personally targeted by discrimination.

To measure association between group- and racial-discrimination, the group-discrimination IAT asked participants to associate (first category pairing) BLACKS + VICTIM and WHITES + BIGOT vs. (second category pairing) WHITES + VICTIM and BLACKS + BIGOT. Faster reaction times to the first category pairing relative to the second category pairing suggests an implicit association between the social group “blacks” and that group having been targeted by discrimination. Order of category pairing presented first was always counter-balanced across participants.

Results and Discussion

The implicit and explicit measures of experiences with racial discrimination capture different aspects of one’s self as a member of a social group. As shown in Table 4, among the Black participants, we found that: (a) using the explicit measure, we detected the usual person–group discrimination discrepancy phenomenon, whereby individuals report more discrimination experienced by their group than by themselves personally, whereas (b) using the implicit measure, no such discrepancy was observed—instead, both the personal and group discrimination measures were equally high.

By contrast, among the White participants (who, as expected, reported less personal discrimination than the Black participants), the person–group discrepancy phenomenon was evident with both the explicit and implicit measures. This result may suggest Whites’ mental accounting of discrimination is stable enough to unfold consistently across measurement method. However, for Black participants, knowledge of one’s membership in a disadvantaged group and the conscious experience that one may not be discriminated against nearly to the same extent as others produces an inconsistency in the data on the two measures: the explicit measure showed the previously reported distancing of one’s self from the negative experiences of the social group; on the implicit measure, evidence of personal discrimination was revealed. It is important to note that this does not mean that a “truer” perception of one’s own discrimination is unmasked by the implicit measure that is being suppressed on the explicit measure. Rather, both views may be true renditions of two different aspects of one’s self-view. Being a member of a disadvantaged group does produce a fundamental association of self with the group and thereby to attributes of the group. Higher-order conscious thought can override this based on knowledge of the state of the world, and one’s unique place in it.

Study 3

In Study 3 we replicated Study 2 on a much larger sample of Black Americans with much more diverse educational backgrounds. Study 3 was also conducted to strengthen a shortcoming of both Studies 1 and 2. Namely, that Studies 1 and 2 used

TABLE 4 Race IAT and EOD Results for Black and White Participants

	Explicit (1–4 scale; one-sample <i>t</i>)		PGDD discrepancy		Implicit (IAT D-score; one-sample <i>t</i>)		PGDD discrepancy <i>t</i> (paired-sample)
	Personal <i>M (SD)</i>	Group <i>M (SD)</i>	<i>t</i> (paired-sample)	Personal <i>M (SD)</i>	Group <i>M (SD)</i>		
Black (<i>n</i> = 18)	2.61 (1.04)**	3.11 (0.96)**	3.43**	0.18 (0.33)*	0.29 (0.26)**	1.34	
White (<i>n</i> = 13)	2.08 (0.86)**	3.17 (0.58)**	3.03*	0.16 (0.34)	0.29 (0.36)*	2.78*	

Note: **p* < .05; ***p* < .01; ****p* < .001 (two-tailed).

a relative implicit measure but an absolute explicit measure. Study 3 employed relative measures of both the IAT and the explicit measure. Using relative measures for both allows for a stricter test of the hypothesis: that the PGDD effect is bound to the explicit method of measurement.

Method

Participants. Nine hundred forty-one self-identified Black Americans (67% female and 33% male) between the ages 18–74 ($M=33.11$ years) comprised the sample. Participants varied in education-level. A small percentage, 8.5%, had only a high-school education (or equivalent), 32% has some college (but no degree), 7% had achieved an associate's degree, 28% had achieved a bachelor's degree, 12% had a master's level degree, 3.5% had a professional degree (e.g., JD or MD), and 2.1% had a doctoral degree (PhD or EdD). The remaining 6.9% had less than a high-school education, or did not answer the question. Eighty-six percent of the sample had lived in the USA their entire lives and the remaining 14% had lived in the USA between 10 and 40 years (on average). Of these 941 participants, 761 completed the IATs and 849 completed the explicit measures (671 completed all measures).

Procedure. Participants self-directed to the research porthole of a website (<https://implicit.harvard.edu/implicit/>). After arrival, participants completed demographic questions such as race and gender and were randomly assigned to one of many research studies housed on the research website (one of which was ours and is the current study). Participants randomly assigned to participate in our study began by completing explicit measures of personal- and group-perceived discrimination. Each explicit measure was a relative measure on a 7-point scale. The PPD explicit measure was anchored by 1 (*I strongly feel as if I, myself, am the bigot in racial discrimination, not the victim*) and 7 (*I strongly feel as if I, myself, am the victim in racial discrimination, not the bigot*) with a midpoint of 4 (*I feel as if I, myself, am equally the victim and bigot in racial discrimination*). Likewise, the GPD explicit measure was anchored by 1 (*I strongly feel that Whites are the victims in racial discrimination and Blacks are the bigots in racial discrimination*) and 7 (*I strongly feel that Blacks are the victims in racial discrimination and Whites are the bigots in racial discrimination*) with a midpoint of 4 (*I feel that Blacks and Whites are equally victims and bigots in racial discrimination*). The IAT, as is typical, was a relative measure of implicit PPD and GPD. The same IAT used in Study 2 was used in Study 3 (see Table 3).

Results and Discussion

As in previous research and Studies 1 and 2, the expected explicit PGDD effect emerged—even on the relative measure of personal and group discrimination. Using a paired-sample *t*-test, participants were significantly more likely to indicate that their group, Black Americans ($M=5.64$; $SD=1.15$) had experienced more discrimination than they themselves had ($M=5.33$; $SD=1.12$), $t(848)=6.98$, $p < .001$. Consistent with Studies 1 and 2, the PGDD effect disappeared on the IAT—despite the enormous and diverse sample. Both the PPD IAT ($M=0.33$; $SD=0.37$) and the GPD IAT ($M=0.36$; $SD=0.41$) were statistically significantly different from the scale midpoint of zero ($ps < .001$; using one-sample *t*-tests) but were not significantly different from each other, $t(760)=1.13$, $p > .25$ (using a paired-sample *t*-test).

General Discussion

With three samples of historically disadvantaged social groups, women and Black Americans, the person–group perceived discrimination discrepancy was not evident on a measure of implicit identity but present on a measure of explicit identity. Specifically, self-discrimination, or the belief that oneself has been target by discrimination, emerged much more strongly on implicit measures of perceived discrimination.

Our data suggest that women and Black Americans have internalized and/or suppressed their personal experiences with discrimination. As such, personal discrimination is not explicitly reported but can be harvested from measures that circumvent self-protective and/or self-presentation strategies. Our main result highlights the discrepancy between explicit and implicit beliefs about self-discrimination and suggests that the PGDD effect is not a robust phenomenon but one that is sensitive to introspective access and possibly self-presentational concern.

Specifically, in the case of racial discrimination, our results indicate that: (1) among Black participants, the implicit measure picked up experiences of self-discrimination that they did not report using the explicit measure, which may reflect an inability or conscious unwillingness to report self-discrimination, and (2) among the White participants (who, as expected, reported less personal discrimination than the Black participants), the PGDD was evident on both explicit and implicit measures. This pattern is interesting as it suggests that whites' mental accounting—conscious and less conscious—of discrimination experience is consistent. However, for our Black participants only on the implicit measure showed evidence of personal discrimination, which speaks, again, to the fact that Black Americans are somehow mentally distancing themselves from being targets of racial discrimination. Similar findings for woman were evident for the gender-discrimination measures.

The results speak to both theory and method with regard to measuring people's experiences of discrimination. In a theoretical account of the mechanism underlying the PGDD, Hodson and Esses (2002) showed that self-concepts are generally distanced from negative attributes thereby resulting in a PGDD effect. Hodson and Esses used self-reported trait terms in their study. If this cognitive account is true, it should have held up on implicit measures of personal discrimination used in the current studies. Instead, our pattern of results suggests an alternative explanation: that personal discrimination is sufficiently consciously undesirable to produce a conscious denial or weak report of it. Thus, on explicit measures the PGDD emerges whereas on implicit measures, both the self and the group are associated with being the victim of discrimination.

Viewing oneself as a victim of discrimination may be sufficiently harmful that such information is unavailable to conscious awareness and in such circumstances can only be detected on a measure of implicit cognition. A reverse and symmetric result was recently reported by Yamaguchi et al. (2007). From many studies the result that Asians and Asian Americans report lower self-esteem on explicit measures has been taken to mean a modest view such groups have of themselves. However, use of an implicit measure of self-esteem has revealed no such cultural difference: samples from Japan, China, and the United States all show equally high implicit self-esteem.

The basic result reported here—that reports of experienced discrimination vary across method of measurement—has substantive applied implications for conducting and interpreting research on the measurement of discrimination and its consequences, including but not limited to its health impact. First, the results indicate that it

potentially is misleading to interpret an explicit response of “no” discrimination as meaning the person is unaware of having ever been a target of discrimination. A corollary is that the term “perceived discrimination,” increasingly used in the public health literature on self-reported experiences of discrimination and health (Clark et al., 1999; Kressin et al., 2008; Mays et al., 2007; Paradies, 2006; Williams & Mohammed, 2009; Williams et al., 2003) should either be modified to refer to “consciously perceived discrimination” or else should be eschewed, and the more accurate phrase “self-reported experiences of discrimination” should be employed.

This is because our findings clarify that self-report measures of discrimination are strictly that: explicit measures that capture what people are able and willing to report and which do not necessarily tap into the phenomena measured by implicit measures of discrimination (Krieger, 1999; Krieger et al., 2005). Second, the results demonstrate that it is feasible to use both types of measures in research, such that their independent and joint contribution to explaining outcome variables such as psychological distress and health status can be investigated.

Limitations and Strengths

One limitation of the current work concerns identifying the most appropriate categories and items to use with the PGDD IATs. Although the response latencies and associated distributional qualities and error rates were well within the expected and typical ranges, it is possible that the category label “Perpetrator” used in the gender study (Study 1) and some of the items associated with both the category labels (“Target” and “Perpetrator”) lacked specificity and could be further improved.

Concerning strengths, both gender and race domains were included for tests of evidence of PGDD across explicit and implicit measures and the symmetry of the obtained results adds to the strength of the observed implicit–explicit PGDD dissociation. The first race study used a random sample of community participants for the racial-discrimination analyses making the results directly applicable to the samples most relevant to public health and medical research. Third, the current studies utilized a validated explicit measure of PGDD (Studies 1 and 2) in conjunction with a newly developed implicit measure (Studies 1–3).

Concluding Comments

In conclusion, our results suggest a mental incoherence in how historically marginalized people view their experiences with discrimination. On one hand, people appear to be consistent across mental systems in beliefs about how discrimination affects social groups. On the other hand, people are inconsistent across mental systems in belief about whether they, themselves, have been targeted by discrimination: on a conscious level, they believe they have not been targeted. However, on a less-conscious level, below the reaches of introspective access and possibly born from conscious self-presentational concern, they believe they have been.

Further, results suggest stigmatized individuals’ self-concepts about having been targeted by discrimination are more complex than previously thought. Our results suggest that the PGDD effect is not simply a person distancing him/herself from negative attributes as suggested by Hodson and Esses (2002). In fact, people may have a multiply categorizable concept of the self as the target of discrimination. As such, it is possible that activating specific mental representations of the self could

shift beliefs about personal discrimination on explicit measures. For example, domains in which a person may not need self-protection could show an explicit PGDD result that mimics the implicit.

At a minimum, our results reaffirm the importance of a multi-method approach when assessing experiences of discrimination. The dissociation between the explicit and implicit measures of the PGDD suggests that each measure may offer unique variance in predicting important social, emotional, and health outcomes. As noted by the 2004 National Research Council (NRC; 2004) report *Measuring Racial Discrimination*, self-report data on experiences of discrimination are important to obtain because they uniquely permit estimates of the population distribution and cumulative impact of this exposure.

Equally important, research in social cognition shows many ways in which implicit measures can often diverge from explicit measures and can uniquely predict important outcomes such as medical care (Green et al., 2007). The NRC report, in fact, urged researchers to “combine methods, using data and results from multiple sources” (2004, p. 75). Based on the present results, we propose that investigations on the impact of discrimination consider use of both explicit and implicit measures.

Note

1. In this paper, the authors showed that the PGDD did not appear when the implicit measure of self-identity was used comparing an implicit self + discrimination and women + discrimination association. This result held even when corrections were made for the data problems, for which the first author of the retracted paper took sole responsibility, that led to the paper’s retraction (see Ruggiero, Mitchell, Krieger, Marx, & Lorenzo, 2000, 2002).

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