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How does stigma spoil relationships? Evidence that perceived discrimination harms romantic relationship quality through impaired self-image

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Abstract

Research is beginning to reveal negative effects of perceived discrimination on romantic relationship quality among members of devalued groups, yet potential mechanisms driving these effects remain underexplored. In the current work, we examined the mediating role of self-image. Data from two cross-sectional studies with samples composed of racial minorities (Study 1) and sexual minorities (Study 2) provided support for a model, whereby the negative association between perceived discrimination and romantic relationship quality is partially mediated by impaired self-image. As proposed, results from bootstrapping analyses revealed significant indirect effects of perceived discrimination on relationship quality through self-image. Implications of social identity threats for the romantic relationships and families of members of stigmatized groups are discussed along with other potential mechanisms.

Romantic relationships are a defining and foundational aspect of human experience for most adults across diverse cultures and societies. Fundamentally a social species, humans are motivated to seek and maintain close relationships with others (Baumeister & Leary, 1995; Ryff & Singer, 2000). In fact, close relationships are strongly related to psychological health and well-being (Baumeister & Leary, 1995; Hawkley & Cacioppo, 2010). However, recently researchers have begun to recognize that threats to social identity, such as prejudice and discrimination, can have detrimental effects on romantic relationship quality for members of stigmatized groups, including racial minorities (e.g., Doyle & Molix, 2014; Murry, Brown, Brody, Cutrona, & Simons, 2001; Trail, Goff, Bradbury, & Karney, 2012) as well as sexual minorities (e.g., Kamen, Burns, & Beach, 2011; Otis, Rostosky, Riggle, & Hamrin, 2006).

Although past work has conceptualized prejudice and discrimination as stressors that spill over and contaminate romantic relationship quality (e.g., Doyle & Molix, 2014; Otis et al., 2006), potential mechanisms that could drive these effects have not yet been adequately examined. One such potential mechanism is self-image, or one's attitudes, cognitions, and evaluations directed toward the self. Early theorists suggested that members of stigmatized groups might evidence changes to the self as a result of prejudice and discrimination (e.g., Allport, 1954; DuBois, 1903). For example, the looking-glass perspective on the self proposed that individuals are highly influenced by their perceptions of how others perceive them (Cooley, 1956; Mead, 1934). Therefore, members of devalued groups may come to internalize negative attitudes directed toward their own groups. Although research has generally failed to provide support for mean differences in self-image between members of dominant and devalued groups (Crocker & Quinn, 2000), more recent work has confirmed that for members of stigmatized groups, perceived discrimination is predictive of lower levels of self-esteem (e.g., Branscombe, Schmitt, & Harvey, 1999) as well as impaired self-acceptance (e.g., Ryff, Keyes, & Hughes, 2003). Because a positive self-image is important in the maintenance of romantic relationship quality (Griffin & Bartholomew, 1994; Murray, Holmes, & Collins, 2006; Murray, Holmes, Griffin, Bellavia, & Rose, 2001), we hypothesized that impairments in self-image resulting from perceived discrimination would mediate the negative effects of perceived discrimination on romantic relationship quality.

Social stigma and romantic relationships

For members of stigmatized groups, including racial and sexual minorities, prejudice and discrimination constitute threats to social identity (Steele, Spencer, & Aronson, 2002).

Members of stigmatized groups are often vigilant for cues in their social environment that signal devaluation based on group membership and can experience threat responses when confronted with these cues (Steele et al., 2002), including prejudice and discrimination. Although a sizable literature has examined the effects of such threats on psychological and physical health (e.g., Paradies, 2006; Pascoe & Richman, 2009; Williams & Mohammed, 2009), much less work has focused on the implications of social identity threats for the romantic relationships of stigmatized group members.

Among racial minorities, theoretical work (e.g., Bryant et al., 2010) and qualitative studies (e.g., Mays, Cochran, & Rhue, 1993) have both suggested that perceived discrimination might negatively affect romantic relationship quality. For example, work grounded in family stress theory has posited that prejudice and discrimination are potent stressors in the lives of racial minorities, on par with other commonly examined stressors such as financial strain (Bryant et al., 2010). Bryant et al. (2010, p. 163) argued that perceived discrimination creates distress in both marriages and families but identified research on this topic as a significant gap in the literature. Despite the general lack of research on perceived discrimination and relationship quality among racial minorities, data from several cross-sectional studies bolster the hypothesis that perceived discrimination has deleterious effects (e.g., Lincoln & Chae, 2010; Murry et al., 2001, 2008; Trail et al., 2012). For example, in a sample of low-income Latino newlyweds, perceived discrimination was found to be associated with impaired marital quality (Trail et al., 2012). These effects appeared to be driven by verbal aggression, although this was only true for husbands, not wives, who reported lower ethnic group identification. In addition to cross-sectional evidence, in a recent study African Americans currently involved in romantic relationships were randomly assigned to read about either the continuing prevalence of discrimination against African Americans (a social group to which they belonged) or the Inuit (a social group to which they did not belong; Doyle & Molix, 2014, Study 2). For individuals involved in shorter relationships, social stigma salience led to decreased self-reported relationship quality.

In addition to effects observed among racial minorities, social identity threats may be especially likely to harm romantic relationship quality for another social group—sexual minorities. Negative attitudes and behaviors directed toward sexual minorities often stem from or include reference to their sexual and romantic partners (i.e., members of the same sex). Thus, their romantic relationships, or potential romantic relationships, are often a core motivator of prejudice and discrimination. Indeed, cross-sectional work has generally found that perceived discrimination negatively impacts the romantic relationships of sexual minorities (e.g., Balsam & Szymanski, 2005; Kamen et al., 2011; Mohr & Fassinger, 2006; Otis et al., 2006), although many of the observed effects have been indirect (e.g., no direct effects of perceived discrimination on relationship quality but instead on romantic partner's general stress; Otis et al., 2006) or moderated by other factors, such as relationship characteristics (e.g., negative effects of perceived discrimination only for those with lower partner trust; Kamen et al., 2011). In addition to these cross-sectional studies, there have been a handful of qualitative studies on this topic utilizing sexual minority samples (e.g., Frost, 2011; Mays et al., 1993; Rostosky, Riggle, Gray, & Hatton, 2007). Frost (2011) collected personal relationship narratives from 99 sexual minority men and women involved in romantic relationships. After coding these narratives, he identified a number of different themes related to social stigma, including both the "heavy weight" of stigma on relationships and stigma as contamination in relationships.

Along with individual forms of prejudice and discrimination, systemic discrimination against sexual minorities based on their romantic partners is enshrined in public policies such as the federal Defense of Marriage Act as well as constitutional bans on same-sex marriage in the majority of the United States. Researchers have argued that these institutional forms of discrimination against sexual minorities can also harm romantic relationships (Maisel & Fingerhut, 2011; Riggle & Rostosky, 2007) just as they have been shown to harm psychological health (Hatzenbuehler, Keyes, & Hasin, 2009; Hatzenbuehler, McLaughlin, Keyes, & Hasin, 2010). Thus, understanding how threats to social identity influence romantic relationship quality for sexual minorities is a vital task for both researchers as well as public policy makers. In the current work, we posited that for both racial and sexual minorities, perceived discrimination would have negative effects on romantic relationship quality through the mechanism of self-image.

Self-image as a link between social identity threats and relationship quality

Similar to definitions of self-views offered by Swann, Chang-Schneider, and McClarty (2007), we view self-image as a broad construct encompassing traditional conceptions of evaluations of the self (e.g., self-esteem; Rosenberg, 1965) along with more recent conceptions including both attitudes toward the self as well as acceptance of divergent aspects of the self (e.g., self-acceptance; Ryff, 1989). Although possession of a stigmatized identity is not necessarily associated with impaired self-image on average (Crocker & Major, 1989; Twenge & Crocker, 2002), research has shown that chronically perceiving oneself to be the target of social identity threats can negatively affect self-image (e.g., Branscombe

et al., 1999; Doyle & Molix, in press; Ryff et al., 2003). The negative effect of social identity threats on self-image may be due to the perception that such threats are stable and uncontrollable stressors in one's life (Branscombe et al., 1999). For both racial and sexual minorities, chronic devaluation is a common and pervasive problem. Therefore, in the current studies we predicted that members of stigmatized groups who perceived greater levels of discrimination would experience less positive global self-image, as shown in past work (e.g., Branscombe et al., 1999; Doyle & Molix, in press; Ryff et al., 2003).

What implications might less positive self-image have for the romantic relationships of members of stigmatized groups? Past research has found that less positive self-image is generally related to impaired romantic relationship functioning (e.g., Murray et al., 2001). For example, individuals with low self-esteem have difficulty trusting in their partners' positive regard and often ironically end up pushing their partners away because of their own insecurities (Murray, Holmes, & Griffin, 2000; Murray et al., 2001). Other research from an attachment theory perspective has found that self-acceptance is related to a positive attachment model of the self (Griffin & Bartholomew, 1994), which is necessary in order to maintain healthy romantic relationships (Mikulincer & Shaver, 2003). Although much of this past work has been conducted with White and heterosexual participants, it is likely that self-image also has implications for the intimate relationships of racial minorities (e.g., Braithwaite & Thomas, 2001) and sexual minorities (Elizur & Mintzer, 2003). Taken together, there is evidence that self-image is related to both romantic relationship quality and perceived discrimination. Therefore, research investigating self-image as a mediator in the association between perceived discrimination and relationship quality may provide important insights into the nature of how stigma contaminates romantic relationships.

Present research

The goal of the present work was to examine whether self-image acts as a mechanism linking perceived discrimination to romantic relationship quality among both racial and sexual minorities. Drawing from recent research, both cross sectional (e.g., Trail et al., 2012) and experimental (Doyle & Molix, 2014), we hypothesized that greater levels of perceived discrimination would be associated with impaired romantic relationship quality. Also in line with past work, we predicted that greater levels of perceived discrimination would be associated with less positive self-image (e.g., Branscombe et al., 1999). The primary goal of the present studies was to test whether self-image acts as a mediator of the negative association between perceived discrimination and romantic relationship quality.

Study 1

We began by testing our hypotheses in a large probabilistic national data set of racial minority participants. Specifically, we analyzed secondary data from the Midlife in the United States (MIDUS): Survey of Minority Groups (Hughes & Shweder, 2005). In Study 1, we began by examining self-acceptance (a component of self-image) as a mediator between perceived discrimination and relationship quality.

Method

Participants

Data from 630 racial minority participants (274 women) who reported being currently married (89.7%) or involved in a romantic relationship (10.3%) were included in the current study. All participants were currently residents of the United States and identified as Puerto Rican (35.9%), Mexican (27.9%), Dominican (19.4%), and African American (16.8%). Only members of these racial groups were recruited for the MIDUS: Survey of Minority Groups. The mean age of the sample was 43.56 (standard deviation [*SD*] = 12.59), and the mean relationship length was 238.32 months (*SD* = 239.48).

Materials and procedure

The procedure for the MIDUS: Survey of Minority Groups involved all participants completing face-to-face interviews with trained research assistants who administered the entire survey instrument. Participants were recruited through stratified random sampling utilizing fixed quotas for ethnicity, age, and gender. All participants resided in New York City or Chicago and were run through study procedures between 1995 and 1996. Further details regarding the MIDUS: Survey of Minority Groups protocol and survey instrument can be obtained elsewhere (see Hughes & Shweder, 2005). Here we describe the measures used in the current work.

Perceived discrimination

For the current study, we utilized measures of both chronic experiences with daily discriminatory hassles (everyday-perceived discrimination) as well as perceptions of major lifetime discriminatory events (lifetime-perceived discrimination).[1] The first measure, everyday-perceived discrimination, was composed of a total of nine items. Participants were

[1]Although in the MIDUS: Survey of Minority Groups participants were not required to focus on one specific social identity when completing these measures of perceived discrimination, other work utilizing these same measures has shown that nearly 90% of non-Hispanic Blacks and 77% of other racial minorities report attributing these experiences to their race/ethnicity (Kessler, Mickelson, & Williams, 1999).

Table 1 Correlation Matrix, Means, and Standard Deviations for Variables in Study 1

Measure	1	2	3	4	5	Range	*M*	*SD*
1. Gender	—							
2. Everyday-perceived discrimination	–.06	—				1–5	1.47	0.67
3. Lifetime-perceived discrimination	–.13**	.35***	—			0–6	0.62	1.11
4. Self-image	–.13**	–.14***	–.09*	—		1–7	5.83	1.17
5. Relationship quality	–.15***	–.11**	–.13**	.27***	—			

Note. Range of scores displayed is possible range not observed range. Relationship quality is a standardized variable. $n = 630$. *$p < .05$. **$p < .01$. ***$p < .001$.

instructed to think of their day-to-day experiences, then rate how often each of the forms of discrimination occurred on a scale ranging from 1 (*never*) to 5 (*very often*). Examples of everyday discriminatory hassles from this scale include "Do people act as if they think you are not smart?" and "Are you treated with less respect than other people?" We refer to this as everyday-perceived discrimination to distinguish it from our other measure of major lifetime events; however, assessments were made at one point in time and not on a daily basis. This measure is widely used in research on perceived discrimination and its physical and mental health correlates (see Williams & Mohammed, 2009 for a review) along with recent research on perceived discrimination and relationship quality (Trail et al., 2012) and evidenced good internal consistency among the current sample (*alpha* = .90). The second measure, lifetime-perceived discrimination, was composed of six items. Participants were instructed to indicate whether they had *ever* in their lives experienced six major forms of discrimination, including "Have you ever prevented from renting or buying a home in the neighborhood you wanted?" and "Have you ever been discouraged by a teacher or advisor from seeking higher education?" Participants indicated either "*yes*" or "*no*" for each item listed and then the total number of events each participant had reported ever experiencing were tallied. As displayed in Table 1, these two measures of perceived discrimination were significantly correlated but were not entirely overlapping, thus confirming our decision to retain them as two separate predictors in the following analyses.[2]

[2]In order to examine whether the everyday and lifetime-perceived discrimination measures were tapping different constructs, we also conducted an exploratory factor analysis with varimax rotation extracting two factors. As predicted, the two factors emerged with eigenvalues of 6.02 and 1.79. All items from the everyday-perceived discrimination measure loaded above .60 on Factor 1 and below .24 on Factor 2. Similarly, all items from the lifetime-perceived discrimination measure loaded above .51 on Factor 2 and below .24 on Factor 1. Results were similar when we did not specify the number of factors to be extracted, although a third factor with an eigenvalue of 1.06 also emerged. However, only two items from the everyday-perceived discrimination measure loaded substantially onto this factor, and this factor was not of substantial theoretical interest to warrant independent examination.

Self-image

The self-acceptance subscale from Ryff's (1989) measure of psychological well-being was used to gauge self-image in Study 1. This three-item subscale (rated on a 7-point scale from *strongly disagree* to *strongly agree*) is composed of items designed to tap both self-evaluations and acceptance of both positive and negative aspects of the self. Example items include "I like most parts of my personality" and "When I look at the story of my life, I am pleased with how things have turned out so far." In the current data set, as in previous research (e.g., Keyes, Shmotkin, & Ryff, 2002; Ryff et al., 2003), this subscale evidenced relatively poor internal consistency (*alpha* = .56) and was not improved by exclusion of any of the three items. The poor internal consistency of this measure is likely a factor of its brevity, a characteristic deemed necessary due to time and cost restrictions associated with the MIDUS national survey (Ryff & Keyes, 1995). Despite this limitation, previous research has confirmed the validity of this measure and shown that the short-form version correlates highly with a 14 item long-form version (Keyes et al., 2002; Ryff & Keyes, 1995).

Relationship quality

To assess relationship quality, we examined two separate theoretical constructs: current relationship quality and future relationship expectations. Our current relationship quality scale included four items, with sample items including "How would you rate your marriage (or close relationship) these days?" and "How much thought and effort do you put into your (marriage/close relationship) these days?" Our measure of future relationship expectations, on the other hand, was composed of two items: "Looking ahead ten years into the future, what do you expect your (marriage/close relationship) will be like at that time?" and "What do you think the chances are that you and your partner will eventually separate?" (reverse scored). After calculating scores on both of these measures, however, we found that they were extremely highly correlated, $r = .82$, $p < .001$. We further examined the distinction between our two measures of relationship quality

Table 2 Means and Standard Deviations for Variables in Study 1 by Gender and Race

	Everyday-perceived discrimination, *M* (*SD*)	Lifetime-perceived discrimination, *M* (*SD*)	Self-image, *M* (*SD*)	Relationship quality, *M* (*SD*)
Gender				
Male	1.50_a (0.76)	$.74_a$ (1.22)	5.98_a (1.12)	$.15_a$ (0.68)
Female	1.42_a (0.54)	$.46_b$ (0.95)	5.69_b (1.18)	$-.10_b$ (0.91)
Race				
Puerto Rican	1.45_a (0.59)	$.68_a$ (1.07)	5.93_a (1.19)	$.10_a$ (0.76)
Mexican	1.39_a (0.79)	$.25_b$ (0.76)	5.84_a (1.11)	$.20_a$ (0.57)
Dominican	1.40_a (0.56)	$.46_a$ (1.06)	5.61_a (1.25)	$-.20_b$ (0.99)
African American	1.71_b (0.69)	1.28_c (1.43)	5.98_a (1.00)	$-.07_{ab}$ (0.89)

Note. Univariate analyses of variance and post hoc tests with Scheffé's correction were conducted to compare group means. Differing subscripts within columns represent significant differences between groups ($p < .05$).

by conducting an exploratory factor analysis on all six items. Results from this factor analysis revealed one factor with an eigenvalue of 4.35 and all other factors with eigenvalues below 1.00. Additionally, all six items loaded on the first factor with values above .75. Based on these results, we combined our two measures into one composite measure of relationship quality composed of standardized scores (because they were measured on different scales), with greater scores reflecting greater levels of relationship quality. This composite relationship quality measure evidenced good internal consistency (*alpha* = .91).

Results and discussion

Means and *SD*s for each of the main variables in Study 1 as well as zero-order correlations among these variables are presented in Table 1. Means and *SD*s broken down by gender and race are presented in Table 2. To examine the main hypotheses, we began by conducting a series of regression analyses, plotted in Figures 1 and 2, substituting everyday-perceived discrimination and lifetime-perceived discrimination as the primary predictors, respectively. Because of national data on a gender gap in relationship quality and stability (see Doyle & Molix, 2014) as well as group differences observed in the current sample (see Table 2), we included gender as a covariate in these analyses (effects coded as male = −1, female = 1). In our first model with everyday-perceived discrimination as the primary predictor, the negative association between everyday-perceived discrimination and relationship quality was found to be statistically significant as hypothesized, $b = -.15$, standard error (*SE*) = .05, $p < .01$. Furthermore, everyday-perceived discrimination significantly predicted self-image, $b = -.25$, $SE = .07$, $p < .001$, with those reporting greater everyday-perceived discrimination also reporting less positive self-image. Finally, when including self-image as a predictor along with perceived discrimination, the effect of everyday-perceived discrimination on relationship quality became smaller in magnitude, $b = -.11$, $SE = .05$, $p = .02$, and the effect of self-image on relationship quality was significant, $b = .17$, $SE = .03$, $p < .001$. In our second model, the pattern of effects for lifetime-perceived discrimination was identical. Lifetime-perceived discrimination predicted both relationship quality, $b = -.11$, $SE = .03$, $p < .001$, and self-image, $b = -.11$, $SE = .04$, $p < .01$. When including self-image as a predictor, the effect of lifetime-perceived discrimination on relationship quality became smaller in magnitude, $b = -.09$, $SE = .03$, $p < .01$, and the effect of self-image on relationship quality was significant, $b = .17$, $SE = .03$, $p < .001$.

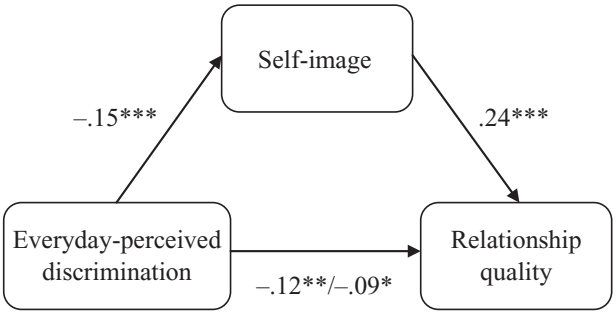

Figure 1 Mediational model with everyday-perceived discrimination predicting relationship quality in Study 1. All values presented are standardized regression coefficients controlling for gender. In the path from perceived discrimination to relationship quality, the first value indicates the coefficient before self-image is entered into the model while the second value indicates the coefficient after. *$p < .05$. **$p < .01$. ***$p < .001$.

In order to examine whether the indirect effect of perceived discrimination on relationship quality through self-image was significant, we utilized bootstrap procedures via a macro created by Preacher and Hayes (2008). Bootstrap procedures are currently recommended in the literature above other methods to test for mediation, such as the causal steps approach or product-of-coefficients approach, due to skew in the sampling distribution of the indirect effect and increased statistical power and accuracy (MacKinnon, Fairchild, & Fritz, 2007; Preacher & Hayes, 2008; Shrout & Bolger, 2002).

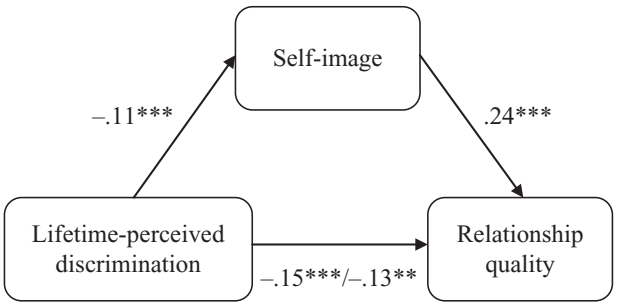

Figure 2 Mediational model with lifetime perceived discrimination predicting relationship quality in Study 1. All values presented are standardized regression coefficients controlling for gender. In the path from perceived discrimination to relationship quality, the first value indicates the coefficient before self-image is entered into the model while the second value indicates the coefficient after. $^{**}p < .01$. $^{***}p < .001$.

We specified a total of 5,000 resamples in estimating the indirect effect and computed 95% confidence intervals (CIs) around this effect. First, we found evidence for an indirect effect of everyday-perceived discrimination on relationship quality through self-image, $b = -.04$, 95% CI (−.08, −.02). Overall, this model was significant and accounted for approximately 9% of the variance in relationship quality, $F(3, 626) = 21.37$, $p < .001$, $R^2 = .09$. We also found parallel results for lifetime-perceived discrimination. Lifetime-perceived discrimination also had an indirect effect on relationship quality through self-image, $b = -.02$, 95% CI (−.04, −.01), with the overall model also significant and accounting for approximately 10% of the variance in relationship quality, $F(3, 626) = 23.17$, $p < .001$, $R^2 = .10$.

We also alternated the position of self-image and relationship quality in both of these models in order to examine other possible causal patterns. In these models, we found a significant indirect effect of everyday-perceived discrimination on self-image through relationship quality, $b = -.05$, 95% CI (−.10, −.02), as well as a significant indirect effect of lifetime-perceived discrimination on self-image through relationship quality, $b = -.04$, 95% CI (−.07, −.02). Furthermore, these alternate models respectively accounted for approximately 9% of the variance in self-image, $F(3, 626) = 21.25$, $p < .001$, $R^2 = .09$, and approximately 8% of the variance in self-image, $F(3, 626) = 18.70$, $p < .001$, $R^2 = .08$.

In sum, we found strong support for our hypothesized model among racial minorities in the United States. Perceived discrimination (both daily chronic hassles and major lifetime events) was found to be negatively associated with both relationship quality and self-image. Furthermore, results from Study 1 provided evidence for self-image (operationalized in this study as self-acceptance) as a partial mediator of the negative effect of perceived discrimination on relationship quality. However, we also found evidence for an alternate causal model in which perceived discrimination exerts a deleterious indirect effect on self-image through relationship quality. Therefore, we conducted another examination of these models to further explicate these effects.

Study 2

Having established that self-image partially mediates the negative effect of perceived discrimination on relationship quality in a large national sample of racial minorities, in Study 2 we sought to replicate and expand on this work by investigating our hypotheses with a smaller community sample of gay men. In Study 2, self-image was assessed by way of Rosenberg's (1965) measure of self-esteem. Additionally, we sought to once again compare the proposed model to an alternate causal model in which self-image and relationship quality trade places as the mediator and dependent variable.

Method

Participants

Forty-seven gay men currently involved in romantic relationships participated in exchange for $10 compensation. The mean age of participants was 34.49 ($SD = 10.12$), and the mean relationship length was 62.23 months ($SD = 73.07$). Participants were primarily White (70.2%), but included men who identified as African American (10.6%), Hispanic (12.8%), Asian (2.1%), and multiracial (4.2%).

Materials and procedure

All participants were recruited at a gay community festival in Chicago, IL. Trained research assistants approached festival attendees and described the study and inclusion criteria: self-identification as a gay man over the age of 18 and current involvement in a same-sex romantic relationship of any length. Participants were asked to complete a survey lasting approximately 15 minutes that was composed of demographic items and measures of perceived discrimination, self-image, and relationship quality.

Perceived discrimination

We assessed perceptions of discrimination based on sexual orientation with an adapted version of a measure originally designed to assess gender discrimination (Schmitt, Branscombe, Kobrynowicz, & Owen, 2002). Items were reworded to reflect perceptions of discrimination based on sexual orientation rather than gender. For example, "I feel like I am personally a victim of society because of my gender" was changed to "I feel like I am personally a victim of society because of my sexual orientation." Participants indicated their level of agreement with each item on a scale ranging

Table 3 Correlation Matrix, Means, and Standard Deviations for Variables in Study 2

Measure	1	2	3	4	Range	*M*	*SD*
1. Race	—						
2. Perceived discrimination	–.27†	—			1–7	3.67	1.78
3. Self-image	–.13	–.24	—		1–4	3.50	0.43
4. Relationship quality	–.26†	–.24	.32*	—	0–8	6.95	1.27

Note. Range of scores displayed is possible range not observed range. $n = 46$. †$p < .10$. *$p < .05$.

from 1 (*strongly disagree*) to 8 (*strongly agree*). The original version of this measure evidenced strong internal consistency (*alpha* = .82; Schmitt et al., 2002), as did our adapted version employed in the current study (*alpha* = .85).

Self-image

As mentioned previously, in Study 2 we gauged self-image via Rosenberg's (1965) measure of self-esteem. This well-validated measure consists of ten items that are rated on a 4-point scale (from *strongly disagree* to *strongly agree*). Example items include "I take a positive attitude toward myself" and "On the whole I am satisfied with myself." This measure evidenced satisfactory internal consistency in the current study (*alpha* = .74), as in past research (*alphas* from .72 to .88; Gray-Little, Williams, & Hancock, 1997).

Relationship quality

Relationship quality was assessed with the commitment subscale from Rusbult's investment model scale (Rusbult, Martz, & Agnew, 1998). Rusbult and colleagues proposed in their discussion of the utility of the investment model scale that "commitment level arguably is an excellent single indicator of overall couple adjustment" (p. 383). Therefore, due to the need for brevity in the survey instrument, we chose to include only this subscale as an indicator of current relationship quality. This measure consists of seven items rated by participants on a scale ranging from 0 (*do not agree at all*) to 8 (*agree completely*). Sample items from this measure include "I am committed to maintaining my relationship with my partner" and "I feel very attached to our relationship—very strongly linked to my partner." This measure has evidenced good internal consistency in development (ranging from *alpha* = .91 to .95; Rusbult et al., 1998) as well as in the current study (*alpha* = .82).

Results and discussion

Means and *SD*s for each of the main variables in Study 2 as well as zero-order correlations among these variables are presented in Table 3. Because Study 2 was as a conceptual replication of Study 1 (in which we confirmed the predicted direction of effects) and due to our relatively smaller sample size, we conducted one-tailed tests for all of the following analyses (Brown & Harris, 1986, p. 740; but also see Hays, 1994 for a discussion of issues related to one-tailed tests). Specifically, we once again conducted a series of regression analyses, plotted in Figure 3, to examine the main hypotheses. In Study 2, we included racial minority status as a covariate (effects coded as White = –1, non-White = 1) due to national data on marital status and divorce suggesting a racial gap in relationship quality (Doyle & Molix, 2014). Similarly to the results of Study 1, in the current study the negative association between perceived discrimination and relationship quality was found to be statistically significant, $b = -.24$, $SE = .10$, $p = .02$. Furthermore, perceived discrimination significantly predicted self-image, $b = -.07$, $SE = .04$, $p = .03$, with those reporting greater perceived discrimination also reporting less positive self-image. Finally, when including self-image as a predictor along with perceived discrimination, the effect of perceived discrimination on relationship quality dropped in magnitude, $b = -.18$, $SE = .11$, $p = .05$, and self-image had a marginally significant effect on relationship quality, $b = .64$, $SE = .43$, $p = .07$.

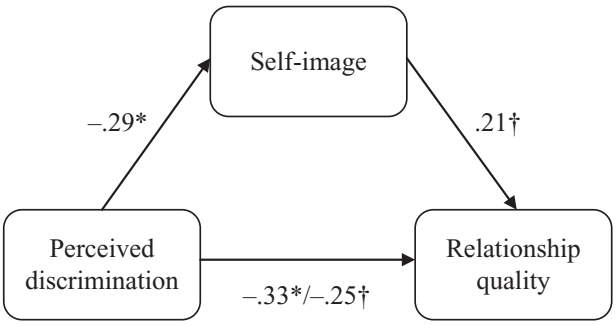

Figure 3 Mediational model with perceived discrimination predicting relationship quality in Study 2. All values presented are standardized regression coefficients controlling for racial minority status. In the path from perceived discrimination to relationship quality, the first value indicates the coefficient before self-image is entered into the model while the second value indicates the coefficient after. †$p < .10$. *$p < .05$.

In order to examine whether the indirect effect of perceived discrimination on relationship quality through self-image was significant as predicted, we once again utilized bootstrap techniques via a macro created by Preacher and Hayes (2008).

In the current study, we specified a total of 5,000 resamples in estimating the indirect effect and computed 90% CIs around this effect. We found evidence for an indirect effect of perceived discrimination on relationship quality through self-image, $b = -.05$, 90% CI (−.17, −.01). Overall, this model was significant and accounted for approximately 22% of the variance in relationship quality, $F(3, 42) = 3.86$, $p = .01$, $R^2 = .22$.

As in Study 1, we once again alternated the position of self-image and relationship quality in order to examine other possible causal patterns. However, unlike in Study 1, in Study 2 we did not find evidence for a significant indirect effect of perceived discrimination on self-image through relationship quality, $b = -.17$, 90% CI (−.54, .02), and the alternate model was only marginally significant and accounted for a smaller proportion of the variance in self-image, $F(3, 42) = 2.28$, $p = .05$, $R^2 = .14$, suggesting that the alternate model was a poorer fit for the data.

Overall, the results of Study 2, conducted with a smaller community-based sample, confirmed the results of Study 1: Perceived discrimination had a negative effect on relationship quality that was partially mediated by self-image. Contrary to findings from Study 1, we did not find support for an alternate causal model in which self-image and relationship quality trade places as the mediator and dependent variable. Furthermore, Study 2 extended the results of Study 1 by replicating the proposed model with a sample composed of sexual minorities, a stigmatized group for whom the negative effects of prejudice and discrimination on romantic relationships may be especially prevalent and influential.

General discussion

A small but growing body of literature is beginning to provide empirical support for the hypothesis that stigma and resulting social identity threats can have detrimental effects on the romantic relationships of members of devalued groups (e.g., Doyle & Molix, 2014; Kamen et al., 2011; Lincoln & Chae, 2010; Murry et al., 2001; Otis et al., 2006; Trail et al., 2012). An important step in the growth of this nascent line of research requires understanding the mechanisms through which these effects operate. In the current investigation, two separate cross-sectional studies with racial and sexual minority participants revealed that the negative effects of perceived discrimination on romantic relationship quality were partially mediated by self-image. Specifically, members of stigmatized groups who reported experiencing more instances of prejudice and discrimination also reported less positive self-image and impaired romantic relationship quality. Furthermore, the negative effects of experiences with prejudice and discrimination on self-image partially accounted for the negative effects of prejudice and discrimination on romantic relationship quality. In line with early theorizing (e.g., Allport, 1954; DuBois, 1903) and recent research (e.g., Branscombe et al., 1999; Ryff et al., 2003), the current work further elucidates the insidious effects of perceived discrimination on the self-views of members of stigmatized groups. However, this work also extends research on this topic by examining an underexplored outcome of such threats to the self—impaired romantic relationship quality.

Although evidence for self-image as a mechanism linking perceived discrimination to impaired romantic relationship quality was observed in three models with two separate samples, it is important to highlight that partial mediation was found in each of these models, meaning that self-image explains only a portion of the effect of perceived discrimination on relationship quality. Therefore, other mechanisms contribute to these effects and may have even greater explanatory power. Some early work on this topic suggests that stress may play a role in the association between perceived discrimination and relationship quality among sexual minorities; however, although results from one study showed that perceived discrimination predicted greater levels of stress and greater levels of stress predicted impaired relationship quality, the authors failed to find evidence for mediation (Otis et al., 2006). Yet stress remains an important potential mechanism that warrants further investigation. Future research may benefit from examining this topic through a stress and coping framework (Lazarus & Folkman, 1984) in which characteristics of romantic partners and of the couple influence the ways in which stressors are appraised (e.g., Doyle & Molix, 2014).

Other potential mechanisms responsible for these effects may include constructs relevant to the close relationships literature more broadly, such as social support and empathy. In addition, these relational mechanisms may be affected by the ways in which perceived discrimination is appraised. For example, Trail et al. (2012) found that verbal aggression mediated the association between perceived discrimination and impaired relationship quality for Latino men, but only for those relatively lower in ethnic group identification. Therefore, it may be important to examine other identity-related factors, such as minority group identification, that influence the ways in which perceived discrimination manifests itself in the relationships of members of stigmatized groups.

In addition to the effects of perceived discrimination on romantic relationships, results from the current studies have implications for family stability among members of stigmatized groups. As other researchers have indicated (Trail et al., 2012), prejudice and discrimination may contribute to relationship dissolution and divorce among couples, including those who are raising children. Consequently, children from broken homes tend to exhibit poorer psychological functioning and greater behavioral problems compared with children from intact homes (Amato & Keith, 1991). Such parenting outcomes are likely to perpetuate disadvantage for racial

minority families (Coll & Pachter, 2002) as well as sexual minority families (Patterson, 2000). Studies explicitly focusing on members of stigmatized groups who are raising children would be useful in clarifying these potential effects.

Although the current work provides important contributions to the growing literature on social stigma and romantic relationships, these studies do have some limitations. First, both studies were cross sectional; experimental work is necessary before firm conclusions regarding causation can be established. However, previous experimental work on the effects of perceived discrimination on both self-image (e.g., Jetten, Branscombe, Schmitt, & Spears, 2001; Major, Kaiser, O'Brien, & McCoy, 2007) and relationship quality (Doyle & Molix, 2014) lend support to the direction of effects posited in our model. We also found less support for alternate causal models in which relationship quality acted as a mediator across the current studies. Another limitation specific to Study 2 was the relatively small sample size. Although the pattern of effects observed was consistent with evidence from the models tested in Study 1, our statistical power was limited. In this case, additional attention to the effect sizes obtained is prudent. Effect sizes from the standardized regression coefficients in the meditational model (displayed in Figure 3) as well as the overall proportion of variance accounted for by the model indicate that perceived discrimination may have larger effects on self-image and relationship quality for sexual minorities as compared with racial minorities, suggesting that limitations due to statistical power should not cast considerable doubt upon the conclusions drawn from this research. Additionally, the poor internal consistency of the measure of self-image utilized in Study 1 may have resulted in the attenuation of effect sizes; further research on this topic among devalued groups could benefit from the use of other, more psychometrically sound measures of self-image.

Another direction for future work that would build this line of research involves focusing on both members of romantic couples. Although our results address individual effects, the consequences of discrimination may unfold differently based on characteristics of one's romantic partner. For example, a partner's ability to provide support and affirmation may be compromised by their own high levels of perceived discrimination. However, it is also possible that if one's partner perceives significantly more or less discrimination compared with oneself, the discrepancy in views and experiences may be related to distress (e.g., Mohr & Fassinger, 2006). Further work on these topics is necessary to tease apart the intricacies of the effects of social identity threats on romantic relationships. Finally, we should also note that Study 2 was conducted as a conceptual replication of Study 1, and thus different devalued social groups were recruited and different measures were utilized to gauge each of the main constructs (with the measure of self-image in Study 1 exhibiting relatively poor internal consistency). Conceptual replications are valuable in that they provide important evidence for the generalizability of observed effects. Further research could examine other stigmatized groups as well (e.g., heavyweight persons, individuals with mental illnesses).

Conclusion

We concur with other researchers who have proposed that social stigma has interpersonal consequences warranting greater scrutiny in the literature (Major & Sawyer, 2009). However, we believe that these interpersonal consequences reach beyond domains previously explored, such as the social costs of claiming discrimination among one's group and the potential for damaged relationships with perpetrators (e.g., Garcia, Reser, Amo, Redersdorff, & Branscombe, 2005; Kaiser & Miller, 2001, 2003). Specifically, we suggest that the constant need for self-protection due to threats to social identity can damage self-image for members of devalued groups, leading them to feel less comfortable in their close relationships with intimate others. Arguably, damage to these types of intimate interpersonal relationships can be more impactful in terms of psychological health and well-being compared with strained relationships with acquaintances from one's own social group and members of dominant groups, meaning that research aimed at understanding and alleviating the effects of perceived discrimination on close relationships is critical. The results described here represent a vital early effort to understand the complicated processes whereby social stigma contaminates romantic relationship quality, but the future for research on this topic remains broad and open.

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