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FlashReports

Solo status revisited: Examining racial group differences in the self-regulatory consequences of self-presenting as a racial solo [☆]Sarah E. Johnson ^{a,*}, Jennifer A. Richeson ^{a,b}^a Department of Psychology, Northwestern University, 2029 Sheridan Road, Evanston, IL 60208, United States^b Institute for Policy Research, Northwestern University, 2040 Sheridan Road, Evanston, IL 60208, United States

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ABSTRACT

The present study examined the impact of racial group membership on the self-regulatory consequences of self-presenting with racial solo status. Based on the strength model of self-regulation, we proposed that individuals who acquire more practice with solo status by virtue of their racial group membership, may find it less depleting relative to individuals with less practice. To examine this, White and racial minority (Black, Hispanic) students at a predominantly White university were asked to engage in a self-presentation task in which they were assigned either racial solo or nonsolo status. Persistence on a subsequent hidden objects task served as the measure of depletion. Results revealed an interaction between racial group membership and solo status. In particular, consistent with previous research, White participants were more depleted (i.e., persisted less) after self-presenting with solo (vs. nonsolo) status. Racial minority participants, however, were not similarly impaired by solo status. These results suggest that our social group memberships, by virtue of the experiences they typically confer, may play an important role in determining which social demands will be depleting for whom.

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Our social group memberships play a profound role in shaping how we experience the world around us. Not only do social group memberships influence how we perceive and construe our environments, but they also often predict the types of social situations we are likely to encounter. For instance, being in a situation where one is the sole member of one's racial group—i.e., having solo status—is a far more likely occurrence for racial minority individuals than for members of the racial majority. This increased propensity for solo status implies that members of some groups (i.e., racial minorities) face increased exposure to the costs derived from this situation relative to members of the majority group (Whites). At the same time, however, it also suggests that members of racial minority groups, on average, will gain more experience contending with these demands compared with individuals in the majority. The current study examines one potential implication of this group-level difference in experience. In particular, we explore whether the self-regulatory costs associated with self-presenting as a racial solo differ as a function of racial group membership.

Previous research suggests there are any number of costs associated with solo status. For instance, solo status individuals are

subject to increased scrutiny and biased evaluation by majority group perceivers (e.g., Crocker & McGraw, 1984; Kanter, 1977; Taylor, Fiske, Etcoff, & Ruderman, 1978). In addition to being more perceptually salient to observers (Kanter, 1977), the distinctiveness of solo status may be burdensome in part because of the increased salience of one's (discrepant) social identity to oneself. That is, the awareness of being the sole member of one's group—and thus representing that group—may impose a burden of self-presentational demands; one that usurps cognitive resources that could otherwise be directed towards the task at hand (Lord & Saenz, 1985). Indeed, solo status has been shown to disrupt cognitive functioning and, as a result, compromise learning and performance (Inzlicht & Ben-Zeev, 2000, 2003; Lord & Saenz, 1985; Saenz, 1994; Sekaquaptewa & Thompson, 2002a). Vohs, Baumeister, and Ciarocco (2005) recently considered the implications of solo status—and particularly the associated self-presentational demands of representing one's social group—for individuals' self-regulatory resources. These researchers posited that engaging in self-presentation with solo status, wherein solos are perceived as representatives of their group, requires individuals to exert additional self-regulatory resources, thereby temporarily depleting these resources. Consistent with this hypothesis, among individuals asked to make a tape discussing a race-related topic for several minutes, those told their tape would be the only one made by a student of their race (i.e., racial group solos) were subsequently more depleted (they persisted for less time on a difficult task), compared

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* Corresponding author.

E-mail address: sjohnson@northwestern.edu (S.E. Johnson).

with individuals who were not racial group solos. These results provide compelling evidence regarding the self-regulatory costs of managing racial solo status.

It is important to note, however, that all of the participants in Vohs et al.'s (2005) study were White students at a predominantly White university.¹ Hence, it is likely that self-presenting with racial solo status was particularly unfamiliar to these participants and, we argue, especially demanding. Consequently, it remains unclear whether the Vohs et al. findings will generalize to individuals who are more likely to have encountered this type of self-presentation situation previously; namely, racial minority students at a predominantly White university. We predict that self-presenting as a racial token will be relatively familiar for racial minority students at predominantly White universities, affording them critical experience dealing with the demands of the situation that, in turn, makes it less depleting for them.

The notion that familiarity with particular self-regulatory demands can influence the extent to which individuals find them depleting is supported by the strength model of self-regulation (Baumeister, Vohs, & Tice, 2007; Muraven & Baumeister, 2000), which contends that self-regulation operates like a limited but renewable resource. Moreover, this model suggests that just as a muscle can be developed through training, practice with self-regulatory tasks can increase individuals' capacity to contend with them, making each exertion less depleting. Indeed, mounting evidence in support of this claim demonstrates that individuals who get practice with self-regulatory demands are subsequently less easily depleted by them (see Baumeister, Gailliot, DeWall, & Oaten, 2006 for a review). In particular, this work has shown that individuals who get practice with self-regulatory tasks by virtue of dispositional characteristics (e.g., high motivation to respond without prejudice), seem to benefit from this practice such that they are less depleted by related self-regulatory tasks (e.g., stereotype suppression), compared with individuals not sharing the relevant disposition (Gailliot, Plant, Butz, & Baumeister, 2007; Seeley & Gardner, 2003).

In the current work, we build on these findings to consider differences in patterns of self-regulatory depletion that arise from differential experience based not on individual dispositional differences, but rather on social group membership. Specifically, we adopt the paradigm used by Vohs and colleagues (2005) to examine whether racial group membership moderates the depleting effect of self-presenting with racial solo status. Because the context of a predominantly White university provides racial minority students considerable experience with situations in which they are the sole member of their racial group, racial minority students should not suffer the depleting effects of self-presenting as a racial solo. Replicating Vohs et al. (2005), however, White students should be more depleted after self-presenting with, compared to without, racial solo status.

Method

Participants and design

Thirty-two White and 34 racial minority (Black and Hispanic) Northwestern undergraduates participated in this study for partial course credit or in exchange for \$5. The design was a 2 (participant race: White vs. racial minority) \times 2 (status: solo vs. nonsolo).

Hidden objects task

Persistence on a challenging task is known to require self-regulation (e.g., Muraven, Tice, & Baumeister, 1998). Hence, we as-

sessed self-regulatory depletion by measuring participants' persistence on an unsolvable hidden objects task. Participants were instructed to find and circle each of a set of target objects "hidden" in a picture at the top of the page. To make the task impossible to complete, the set of target objects included several objects that did not actually appear in the picture. The amount of time (seconds) participants persisted on the task constituted the dependent measure of self-regulatory depletion. Shorter persistence times reflect greater self-regulatory depletion.

Procedure

The procedure for our study was adapted from Vohs and her colleagues (2005)²; in particular, we borrowed their cover story and manipulation of solo status. Rather than discussing "racial inequality" during the self-presentation task, however, our participants discussed a different race-related topic; namely "campus diversity". After introducing the self-presentation task and reading a topic prompt, the experimenter,³ who remained blind to condition, gave the participant a sheet of paper explaining how the tape of their discussion would be used; this explanation contained the manipulation of solo status. All participants were told their tape would be heard and evaluated by a focus group. In addition, participants in the solo condition were told this focus group consisted entirely of racial outgroup members (i.e., for White participants, the audience consisted of only racial minority individuals; for Black and Hispanic participants, the audience consisted of only White individuals). Further, to create solo status, these participants were told their tape would be "the only tape on this topic made by a person of their race to be heard by the focus group". In contrast, participants in the non-solo condition were not given explicit information about the racial makeup of the focus group and were simply told their tape would be one of several tapes on their topic heard by the focus group.

Participants were left alone for four minutes to complete the self-presentation task. Afterwards, participants were asked to complete a brief measure of their current mood (PANAS; Watson, Clark, & Tellegen, 1988). Next, the experimenter introduced the hidden objects task and instructed participants to open the door once he or she had completed the task or "decided to stop working". Experimenters timed how long participants remained in the room working on the task.

Following the persistence task, participants were given a final questionnaire that included a 1-item measure of familiarity with solo status ("I have often been in situations where I am expected to represent members of my race or ethnic group") that was rated on a scale from 1 (*not at all*) to 9 (*extremely*). Finally, participants were debriefed, given the opportunity to erase their audiotape (none did), then thanked and dismissed.

Results

We first examined results from the PANAS, which revealed no significant effects of racial group, solo status, or their interaction for either positive or negative affect. Next, we examined self-reported familiarity with solo status. As expected, racial minority participants reported significantly greater familiarity ($M = 6.44$, $SD = 2.69$) with the situation of representing members of their race than did Whites ($M = 2.94$, $SD = 1.65$), $t(64) = 6.34$, $p < .001$.

To examine our primary hypothesis, persistence times on the hidden objects task (in seconds) were log-transformed in order to better approximate normality. For ease of presentation, how-

² We thank Kathleen Vohs for sharing her materials with us upon request.

³ White participants' sessions were conducted by a White experimenter; racial minority participants' sessions were conducted by a Black experimenter.

¹ Kathleen Vohs provided this information to us via personal communication.

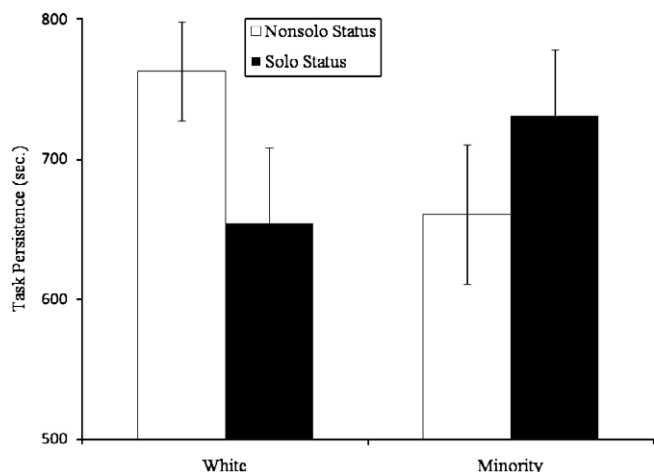


Fig. 1. Mean task persistence as a function of participant racial group and solo status.

ever, untransformed means are presented in Fig. 1. The transformed persistence times were submitted to a two-way analysis of variance, with participant racial group and solo status as between-subjects factors. As predicted, this analysis revealed a significant interaction between racial group and solo status, $F(1, 62) = 4.03, p = .049$ (see Fig. 1). Similar to Vohs et al. (2005), White participants in the solo condition tended to persist less (i.e., were somewhat more depleted) after the discussion task compared with White participants in the nonsolo condition, $t(30) = 1.83, p = .077$, albeit the difference did not reach conventional levels of statistical significance. In contrast to the White participants, and as predicted, the persistence of racial minority participants in the solo and nonsolo status conditions did not differ, $t(32) = 1.08, p = .29$.

Discussion

The present results support our hypothesis that the depleting effect of self-presenting with racial solo status varies by racial group membership. We found that for White participants, results were similar to previous findings where, after engaging in self-presentation, participants who did so as racial solos persisted marginally less on a difficult task compared with those who did not have solo status. In contrast, solo status did not undermine the self-regulatory resources of racial minority participants. Unlike their White peers, racial minority participants were not more depleted by the solo status. In fact, quite to the contrary, minority participants in the solo status condition persisted a bit longer than their nonsolo counterparts, although this trend was far from reliable.⁴ Nevertheless, the results suggest that our social group memberships, by virtue of the experiences they typically confer, may indeed play an important role in determining which social demands will be depleting for whom.

Although these findings are compelling, it is important to situate them within the larger context of research on the consequences of solo status. On the whole, this work suggests that members of low

status groups suffer greater costs from solo status compared with members of high status groups (Cohen & Swim, 1995; Fløge & Merrill, 1986; Sekaquaptewa & Thompson, 2002a but see Craig & Rand, 1998; Fuegen & Biernat, 2002). What might account for the apparent discrepancy between this extant work and the present results? One relevant feature of the previous work is that it typically involved contexts and/or tasks that activate negative group stereotypes pertaining to the lower status group. Thus, it is likely that contending with negative stereotypes contributed to the impaired performance suffered by low status group members in solo situations (e.g., Inzlicht & Ben-Zeev, 2000; Sekaquaptewa & Thompson, 2002b; Steele, Spencer, & Aronson, 2002). In contrast, because the self-presentation domain examined herein does not activate negative group stereotypes or low performance expectancies for racial minorities, they were not disproportionately affected.

One limitation of the present work is that we did not document the mechanism responsible for the group difference in depletion. In support of our premise regarding differential experience with the demands of self-presenting with solo status, racial minority participants indeed reported substantially greater familiarity with the situation of being a racial solo compared with White participants. It is important to note, however, that self-reported familiarity was not significantly (positively) correlated with persistence for either racial minority or for White participants in the solo status conditions. Hence, it is possible that familiarity/experience is not linearly related to self-regulatory depletion, but rather, that the relation may operate more like a threshold: with sufficient experience self-presenting as a racial solo, depletion is no longer an issue.⁵ Given the large racial group difference in self-reported familiarity with solo status, this interpretation is certainly consistent with our results.

Recent work by White (2008), however, suggests another possible mediator of the differential effects of solo status on White and racial minority participants. Specifically, White (2008) found that the detrimental effect of solo status on performance was moderated by individuals' cognitive appraisals; individuals reporting "low" cognitive appraisals (i.e., fewer resources to cope with the situation), had poorer task performance compared to those with "high" cognitive appraisals. Applying these findings to the present work, it seems plausible that increased familiarity with self-presenting as a racial solo leads individuals to appraise such situations as challenges rather than threats, thereby making the situation less of a demand on self-regulatory resources (see Inzlicht, Aronson, Good, & McKay, 2006 for a related argument).

In conclusion, the present study supports the notion that our social group memberships play an important role in shaping the types of situations and demands we will find most (and least) depleting. As such, this study presents a new way of conceptualizing the consequences of managing social identities that are often "devalued"—namely, that while such identities can often incur great costs, the experience of managing them may also afford under-appreciated strengths. Consistent with the conclusions of the recent APA Task force on Resilience and Strength in Black Children and Adolescents (2008), we hope these results trigger additional research on the ways in which stigmatized identities may result in unexpected strength and resilience in the face of psychologically demanding situations.

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⁴ This pattern of means also highlights the relatively short persistence times of the minority participants in the nonsolo condition. Indeed, the interaction between racial group membership and solo status resulted, in part, from the difference between White vs. racial minority participants in the nonsolo status condition ($p = .10$). Because this difference was neither predicted nor reliable, we do not speculate on it in the main document. This unexpected result does suggest, however, that White and racial minority participants may have experienced both the solo and nonsolo status conditions differently.

⁵ We thank the editor for offering this interpretation of the data.

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