BRIEF REPORTS

Further Validation of the Psychosocial Costs of Racism to Whites Scale on a Sample of University Students in the Southeastern United States

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We examined the factor structure of the Psychosocial Costs of Racism to Whites Scale (PCRW; Spanierman & Heppner, 2004) on 766 White American university students from the southeastern United States. Results from confirmatory factor analyses supported the 3-factor model proposed by Spanierman and Heppner (2004). The construct validity of the PCRW was further strengthened by its convergent validity demonstrated by the associations among its subscales and White racial identity attitudes and White privilege attitude. Our findings support the continued exploration of the validity and reliability of the PCRW as well as its utility as a measure of White individuals' affective responses to racism.

Keywords: racism, privilege, scale validation, Whites

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Recent researchers have begun to discuss and investigate the costs of racism to the White majority in the United States, though these costs are not the same costs people of color have to deal with on a daily basis (Goodman, 2001; Kivel, 1996; Spanierman & Heppner, 2004). On the basis of the premise that racism affects the victims, the blatant perpetrators of racism, as well as the "silent" and "blind" White majority, Spanierman and Heppner (2004) developed the Psychosocial Costs of Racism to Whites Scale (PCRW) to facilitate the investigation of the negative effects of racism to Whites. Though a validation study of the PCRW conducted by Poteat and Spanierman (2008) on a sample of employed adults indicated support for the scale's factor structure, items on the White Guilt subscale had low reliability and indicated a need for refinement. Further studies with additional samples are needed to verify the scale's validity and extend its utility (Poteat & Spanierman, 2008; Spanierman & Heppner, 2004).

Professional standards for psychological testing further necessitate that the validation process of a measure be ongoing, with continuing efforts to establish its usefulness for specific populations and purposes (American Educational Research Association, 1999). We designed the present study to further investigate the psychometric properties of the PCRW by focusing on its factorial and convergent validity on a sample of White graduate and undergraduate students in the southeastern United States.

PCRW

Based on their review of the literature regarding the psychosocial costs of racism to White people, Spanierman and Heppner (2004) developed the PCRW, a 16-item self-report measure, to assess negative consequences of racism experienced by White persons. The developers used the maximum-likelihood extraction with an oblique rotation method to ascertain the factor structure of the 36 original items. The items retained had factor loadings of .35 or greater with no cross loadings or redundancy of items within the factors. The resulting 16 items accounted for approximately 49% of the variance and were primarily affective versus cognitive or behavioral. The results indicated a three-factor structure was the best fit for the data.

The three factors constituting the three PCRW subscales are White Empathic Reactions Toward Racism (hereafter referred to as *White Empathy*), White Guilt, and White Fear of Others (hereafter referred to as *White Fear*). They were named based on emotional themes of the participants' responses to racism. The White Empathy subscale comprises six items, such as "I become sad when I think about acts of racial injustice." The White Guilt subscale comprises five items, such as "I never feel ashamed about being White." The White Fear subscale comprises five items, such as "I feel safe in most neighborhoods, regardless of the racial composition." In the initial exploratory and confirmatory studies, Cronbach's alphas for White Empathy were .78, .84, and .85. Alphas for White Guilt were .73, .69, and .78; and those for White Fear were .63, .95, and .81. Test–retest reliabilities for subscales during a 2-week period ranged from .69 for White Guilt to .95 for White Fear (Spanierman & Heppner, 2004). The three-factor structure was recently replicated in a geographically dispersed sample of employed White adults (Poteat & Spanierman, 2008).

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Evidence of construct validity of the measure was demonstrated by confirmatory factor analysis (CFA) and correlations with other measures of related constructs. CFA on another sample of college students indicated support for the three-factor structure of the measure (Spanierman & Heppner, 2004). The subscales were found to have expected pattern of correlations with the Color-Blind Racial Attitudes Scale (Neville, Lilly, Duran, Lee, & Browne, 2000), the Scale of Ethnocultural Empathy (Wang et al., 2003), the Quick Discrimination Index (Ponterotto, Potere, & Johansen, 2002), and the Oklahoma Racial Attitudes Scale (LaFleur, Leach, & Rowe, 2002). Additionally, the measure was found to not be associated with socially desirable responding and not be related to the general negative affectivity of the participants (Spanierman & Heppner, 2004).

Participants in the initial studies (Spanierman & Heppner, 2004) were White undergraduate psychology and education majors from a midsized midwestern university. Women scored higher on all PCRW factors than did men, and their White Empathy scores were statistically significantly higher than were those of the men. Participants with higher levels of exposure scored significantly lower on White Fear than did those reporting moderate or low levels of exposure to other races. Participants reporting that 75%–100% of their friends were White had higher White Fear scores than did those reporting lower percentages. Participants with high and moderate amounts of multicultural education had significantly lower scores on White Fear than did those with no or very little multicultural education.

The utility of the PCRW was demonstrated in a recent study by Spanierman, Poteat, Wang, and Oh (2008) indicating that, as a measure of affective responses to racism, the PCRW subscales predicted White applied psychology trainees' multicultural counseling competencies (MCC). Specifically, Spanierman et al. found that White Empathy, White Guilt, and White Fear predicted the knowledge component of self-reported MCC, White Guilt predicted demonstrated MCC, and White Empathy predicted observed MCC.

The Present Study

We designed the present study to examine the factorial and convergent validity of the PCRW on a sample different from the original college sample used for scale development. On the basis of existing findings (Spanierman & Heppner, 2004; Poteat & Spanierman, 2008), we expected to replicate the scale's three-factor structure in the study sample. If the factor structure were replicated, we would proceed to examine its convergent validity with conceptually related constructs.

Following Spanierman and Heppner's (2004) recommendation to research the scale's convergent validity with conceptually related constructs like White racial identity, we selected the White Racial Identity Attitude Scale (WRIAS; Helms, 1995; Helms & Carter, 1990), a commonly used measure in the literature, to assess the PCRW's convergent validity. Because the WRIAS examines the relationships between racism and privilege and affective responses such as guilt and fear that mitigate racial identity development (Helms, 1995), we expected to find significant associations among the PCRW factors and the WRIAS subscales.

White privilege attitude has been shown to be associated with racism (Branscombe, Schmitt, & Schiffhauer, 2007). We decided

to further examine the measure's convergent validity by investigating its relationship with White privilege. We expected to find significant associations between the PCRW factors and White privilege.

Method

Procedure and Participants

We developed an online survey for this validation study. An invitation to participate in the survey was sent electronically to students currently enrolled in a university in the southeastern United States with a student body of about 20,000 at the time of the survey. No incentives were offered for participation. We received 1,144 completed surveys. In addition to the survey items, the participants also completed demographic items. Participants who self-identified as White ($n = 788$) were directed to complete the PCRW, the WRIAS, and the White Privilege Scale (WPS; Swim & Miller, 1999). Participants who identified as non-White were directed to complete a measure of ethnic identity development and the WPS. The present study focused on White participants' responses.

We omitted data from 22 participants because of excessive missing data, resulting in a usable sample of 766 (328 men, 435 women, and 1 participant who did not report gender). For the purposes of CFA, we randomly selected approximately 50% ($n = 395$) of the participants and reserved the remaining participant data ($n = 371$) for a cross-validation analysis. Chi-square tests did not show any statistically significant differences between the two samples with regard to participants' gender, $\chi^2(1) = 3.13$; age, $\chi^2(2) = 2.15$; grade level, $\chi^2(2) = 1.25$; and political affiliation, $\chi^2(1) = 4.49$. Detailed demographic characteristics of the sample are presented as an online supplement.

Materials

PCRW. The PCRW is a 16-item self-report measure that assesses individuals' affective responses to racism. It allows for responses to range from 1 (*strongly disagree*) to 6 (*strongly agree*). The scale consists of three subscales: White Empathy, White Guilt, and White Fear. Details of the scale were discussed earlier. The alphas for the three PCRW subscales in the present study were .84 (White Empathy), .75 (White Guilt), and .79 (White Fear), indicating satisfactory levels of internal consistency.

WRIAS. Helms (1984, 1995) developed a White racial identity development model that posits that White individuals respond to racial issues through one of six statuses. The model theorizes that White individuals who experience emotions such as shame and guilt when confronted with racism are moving forward to the next status of racial development. The first three statuses (contact, disintegration, and reintegration) describe the progression away from a racist frame of reference before entering the next three statuses (pseudoindependence, immersion–emersion, and autonomy) where progression toward a nondefensive and nonracist White identity occurs.

Based on the model, the WRIAS, a six-factor 60-item inventory, was developed (Helms, 1995). Initial studies (e.g., Helms & Carter, 1990) utilizing the WRIAS reported alphas of .55 for the contact status, .77 for the disintegration status, .80 for the reinte-

gration status, .71 for the pseudoindependence status, .82 for the immersion–emersion status, and .70 for the autonomy status. Alphas for the present study were .65 for contact, .66 for disintegration, .87 for reintegration, .58 for pseudoindependence, .81 for immersion–emersion, and .51 for autonomy.

The reliability coefficients for four of the WRIAS statuses were unacceptably low in the study sample (i.e., <.70). Other studies had also reported similar low reliability coefficients for these statuses (Behren, 1997; Ottavi, Pope-Davis, & Dings, 1994). Consequently, we used only the reintegration status and the immersion–emersion status to access the convergent validity of the PCRW in this study.

WPS. White privilege is defined as a system of an identifiable racial hierarchy that creates a system of advantages for White individuals that is based on race, not merit (McIntosh, 1989; Neville, Worthington, & Spanierman, 2001). White privilege, often invisible and taken for granted, is rooted in social and economic privilege, and its meaning and significance are highly situational (McDermott & Samson, 2005). Swim and Miller (1999) developed the WPS, a five-item single-factor structure ($\alpha = .72$) self-report measure from McIntosh's (1989) chapter, "White Privilege: Unpacking the Invisible Knapsack." The WPS items (e.g., "Status as a White person grants me unearned privileges in today's society") allow for responses to range from 1 (*strongly disagree*) to 5 (*strongly agree*). The alpha for the WPS in this study was .90.

Results

CFA

To test the three-factor structure of the PCRW, a CFA was conducted using LISREL (Jöreskog & Sörbom, 1996). A maximum-likelihood method was used to estimate goodness of fit of the three-factor model because this estimation method is robust to nonnormality in CFA when sample size is large (Anderson & Gerbing, 1984; Benson & Fleishman, 1994; Browne, 1984). Following recommendations in the literature (Browne & Cudeck, 1993; Hu & Bentler, 1999), we used five indices to assess goodness of fit of the model: comparative fit index (CFI), nonnormed fit index, normed fit index (values greater than .90 indicate reasonable good fit), standardized root-mean-square residual, and root-mean-square error of approximation (values of .05 or less indicate close approximate fit of the model, and values between .05 and .08 suggest reasonable error of approximation).

Table 1 presents the results of the CFA. All fit indices in the study sample model and the cross validation model fell within acceptable values, supporting the three-factor structure reported by Spanierman and Heppner (2004).

We conducted a multiple group analysis to examine whether the factor loadings for affective responses to racism items on their respective latent variables (i.e., White Empathy, White Guilt, and White Fear) were invariant across the two samples. Different levels of factorial invariance between the two samples were tested through the following three steps: First, all parameters were freely estimated (Model 1, baseline model); second, the factor loadings were constrained to be equal for each pair of the three factors between the two samples (Model 2); and the last step involved constraining factor loadings and error variances to be equal for each pair of the three latent variables between the two groups

Table 1
Factor Analysis: Goodness-of-Fit Summary

Index	Study sample ($n = 395$)	Cross-validation sample ($n = 371$)
CFI	.96	.95
NNFI	.95	.95
NFI	.94	.93
SRMR	.07	.07
RMSEA	.07	.07
90% confidence interval of RMSEA	[.06, .08]	[.06, .08]
χ^2	299.09	273.81
df	101	101
χ^2/df	2.96	2.71

Note. CFI = comparative fit index; NNFI = nonnormed fit index; NFI = normed fit index; SRMR = standardized root-mean-square residual; RMSEA = root-mean-square error of approximation.

(Model 3). Because of the sensitivity of the chi-square to sample size, this study, however, placed more emphasis on a change in CFI values of .01 or below (Cheung & Rensvold, 2002) to flag significant differences when testing the models: Model 1, $\chi^2(221) = 766.23$, CFI = .95; Model 2, $\chi^2(224) = 769.18$, CFI = .95; Model 3, $\chi^2(237) = 792.11$, CFI = .94. The changes of chi-square values were insignificant in comparison to the changes of degree freedom, and the changes of CFI values were not more than .01 for the three cumulative models. As a result, we concluded that factorial structure was invariant between the two samples randomly split from the whole study sample.

Convergent Validity

We examined the PCRW's convergent validity by correlating its subscales with the WRIAS reintegration and immersion–emersion statuses and the WPS. The pattern of the correlation coefficients supports our expectations for conceptually meaningful associations between the PCRW and the White racial identity and White privilege attitude.

White Empathy was negatively correlated with reintegration ($r = -.70$, $p < .01$) and positively correlated with immersion–emersion ($r = .35$, $p < .01$). White Guilt was significantly positively correlated with immersion–emersion ($r = .31$, $p < .01$) and had a nonsignificant relationship with reintegration ($r = -.01$, $p > .05$). White Fear was positively correlated with reintegration ($r = .65$, $p < .01$) and had a nonsignificant relationship with immersion–emersion. White privilege was significantly correlated with all three PCRW subscales: White Empathy ($r = .30$, $p < .01$), White Guilt ($r = .26$, $p < .01$), and White Fear ($r = .10$, $p < .01$).

Analysis of the PCRW Factors and Demographic Variables

The associations between the PCRW factor scores and demographic variables (gender, grade level, age, religious affiliation, multicultural education, political affiliation, and levels of mother and father's education) were examined. For a report of a series of multivariate analysis of variance that indicated significant demographic differences for gender, grade level, age, religious affilia-

tion, multicultural education, and political affiliation, please see the online supplement.

Discussion

The present study provides support for the psychometric properties of the PCRW, a recently developed measure that examines the affective responses of White individuals regarding racial issues. Findings were as expected. CFA results in this study support the measure's factorial invariance across samples. The findings of conceptually meaningful associations among the PCRW factors and the WRIAS reintegration and immersion–emersion statuses and the WPS further strengthen the measure's construct validity. Findings in this study provide evidence supporting the utility of the measure.

The PCRW and the WRIAS

The associations among the PCRW subscales and the two WRIAS statuses make conceptual sense. The PCRW construct helps to illuminate the affective experiences of White individuals as they relate to racial identity development. The reintegration status of the WRIAS is characterized by a retreat into Whiteness, actively and passively endorsing White superiority and Black inferiority. Individuals in this status may become hostile to racial minorities, become defensive, and deny their role in the perpetuation of racism in society. Some may overidealize the White culture as superior, and their perceptions of racial minorities may become negative and distorted (Helms, 1995). This factor of the WRIAS was significantly negatively correlated with White Empathy and positively correlated with White Fear. Individuals with higher scores in this status tend to empathize less with other racial groups and have greater fear regarding the diminishment of their racial status. The nonsignificant relationship between reintegration and White Guilt makes conceptual sense because individuals in the reintegration status endorse White superiority and do not feel ashamed about being White (Spanierman & Heppner, 2004).

The immersion–emersion status of the WRIAS is characterized by an acknowledgment of racial inequalities, a willingness to forgo privileges associated with Whiteness, and a commitment to developing a positive White identity through self-exploration and meaningful contact with members of other racial groups (Helms, 1995). This status was found significantly positively correlated with White Empathy and White Guilt. The more individuals in this status are exposed to members of other racial groups, the more they become aware of racial inequalities and experience guilt or empathy as a result (Helms, 1995). Individuals' scores in this status are not related to their experience of fear of others. Rather, these individuals seek out meaningful contact with other racial groups.

The PCRW and the WPS

Individuals with greater acknowledgment of White privilege tend to score higher levels on the PCRW subscales. The associations between White privilege and White empathy ($r = .30$) and White privilege and White guilt ($r = .26$) are stronger than that between White privilege and White fear of others ($r = .10$). It seems reasonable that individuals with greater understanding of

White privilege would empathize more with other racial minority groups who do not enjoy similar privileges and concomitantly experience greater guilt being White.

The range of emotions captured by the PCRW factors is expected as White individuals struggle to conceptualize White privilege and examine the reality that White individuals, while be it unknowingly, perpetuate the oppression of minority groups (Hays, Chang, & Dean, 2004). Many have difficulty accepting the existence of White privilege (Ancis & Szymanski, 2001) due to the invisibility of White privilege and the differential ways some White individuals (i.e., women, sexual minorities, people who are disabled, and individuals with a low socioeconomic status) experience its benefits (Neville et al., 2001).

Limitations

There are several limitations to this study. First, the PCRW, WRIAS, and WPS are self-report measures so participants may have selected socially desirable responses. Second, the survey was not run from a secure online server; therefore, the possibility of a participant completing the instruments more than once exists. However, we did not expect anyone would spend his or her time completing the survey more than once. Third, the results from this sample of university students may not generalize to the nonstudent population of this area or to other areas in the United States. Finally, the suboptimal reliability coefficients on most of the WRIAS statuses in this study limit its adequacy as an instrument to examine the convergent validity of the PCRW. Future researchers should consider using another White racial identity development measure that has better psychometric properties to further examine the association between the PCRW and White racial identity.

Along with Spanierman and Heppner's (2004) and Poteat and Spanierman's (2008) psychometric findings on the PCRW, the present study provides additional evidence in support of the PCRW as a psychometrically sound instrument for identifying and examining emotional reactions that facilitate or impede White individuals' awareness of racial issues and racial identity development. The PCRW offers promise as an instrument useful in elucidating the complexity of White individuals' defensive or progressive attitudes about racial issues. Future psychometric research on the PCRW should include other forms of reliability (e.g., test–retest reliability) and validity (e.g., criterion validity).

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