The Power of Sport: Examining the Influence of Sport-Related Contact and Culture Context on Intergroup Anxiety and Racism

Woonjun Lee
George B. Cunningham

Racism is prevalent across society. Both critical race theory (Hylton, 2009) and systemic racism theory (Feagin, 2006) point to the institutionalized nature of racism, holding that racist ideals and norms are woven into the cultural fabric. There is considerable data to support this position; for instance, in the United States, racial minorities are more likely to live in poverty, be unemployed, and face mental and physical health ailments than are their White counterparts (Adler & Rehkopf, 2008; Bell, 2007; Schnittker & McLeod, 2005). Racial prejudice is also observed at the interpersonal level, such as in interviews (Huffcutt & Roth, 1998), while conducting performance evaluations (Stauffer & Buckley, 2005), and in the expression of uncivil workplace behaviors (Cortina, 2008), among others.

Given this trend, a number of researchers have endeavored to understand ways to reduce racism (see Paluck & Green, 2009, for a review). Perhaps the best known of these approaches is Allport’s (1954) contact hypothesis. He argued that racial prejudice is maintained because of unfamiliarity with and separation from persons different from the self; as such, the key to reducing bias is to enable people from different groups to have interpersonal contact with one another. He also suggested that the benefits of contact would be best realized when there was institutional support, the possibility of intimate contact, equal status among group members, and cooperation. Pettigrew (1998) later argued that the potential to develop friendships was a key element of contact (see also Cunningham, 2008). Collectively, these factors are referred to as the conditions of contact (Pettigrew, 1998; Pettigrew & Tropp, 2006).

Allport (1954) and Pettigrew (1998) argue that contact results in a number of important intergroup processes, all of which ultimately reduce prejudice. First, because the two parties gather information about one another, contact has the potential to alter preconceived notions
and stereotypes. Second, contact allows for behavioral changes, as interacting with dissimilar others represents an activity that is outside the norm for many people. Third, contact might result in reductions in intergroup anxiety and corresponding increases in empathy and perspective taking. Finally, intergroup contact allows people to reappraise their own in-group. Specifically, because contact allows people to see that their (and other in-group members') world-view is one of many, they come to re-evaluate the way they see themselves and others.

Empirical support for Allport's theory is robust (see Dovidio, Glick, & Rudman, 2005). In one of the most comprehensive examinations of this theory, Binder et al. (2009) collected longitudinal data from thousands of European school students. They found that contact with dissimilar others did reduce later assessments of intergroup anxiety, which in turn, was associated with prejudice toward out-group members. These effects were particularly strong (a) for majority members, and (b) when the out-group members were perceived to be prototypical (i.e., a "typical" out-group member). Pettigrew and Tropp's (2006) meta-analysis of over 500 studies also points to the efficacy of the contact hypothesis. In addition to further demonstrating the link between contact and reduced prejudice, their examination also illustrated that contact can reduce bias across a host of diversity dimensions, including race, sexual orientation, physical and mental ability, and age. And, while some researchers have found that the relationship between contact and prejudice is bidirectional (e.g., Binder et al., 2009), meta-analytic evidence suggests that the stronger association is from contact to prejudice reduction (Pettigrew & Tropp, 2006; see also Pettigrew, 2008).

In the current analysis, we seek to expand this literature in two meaningful ways: by examining (a) the relationship among sport-related contact, intergroup anxiety, and racial prejudice, and (b) how these relationships varied across cultures. Expansion of the model is warranted for several reasons. First, effectively managing diversity and reducing prejudice is a key component of sport managers' jobs (Cunningham, 2011). Second, and from a different perspective, Chalip (2006) encouraged researchers to explore the unique features of sport and phenomena might differ in that context relative to others. Third, one method of extending theory and better understanding various phenomena is to explore novel mediating and moderating variables (Colquitt & Zapata-Phelan, 2007). It is also important to consider boundary conditions of a theory (Bacharach, 1989) to determine if the relationships vary based on time, space, or context. Given this need for additional research, our study stands to make unique contributions to the literature.

**Unique Nature of Sport**

Much of the contact hypothesis literature focuses on generalized contact with out-group members, or, more re-
cently, the presence of out-group members as friends (Binder et al., 2009; Cunningham, 2008; Pettigrew, 1998). And, as previously noted, such interactions are expected to reduce intergroup anxiety and ultimately prejudice toward the out-group. In extending this argument, we hold that contact in some contexts, such as while participating in sport and physical activity, is likely to be particularly conducive to consequent reductions in anxiety and bias, even beyond the influence of intergroup friendships. Furthermore, the contact hypothesis has not been critically examined in the sport setting—a point we expand upon in the following space.

This position is consistent with a functionalist perspective of sport and physical activity, which holds that sport positively contributes to society by bringing people together, promoting cooperation, and building character (see Eitzen & Sage, 2009). We are cognizant of criticisms of functionalism (e.g., Coakley, 2009; Zeigler, 2007), and we are also mindful that sport is not a context that is free from racial subjugation (Hawkins, 2002; Hylton, 2009; Long, Robinson, & Spracklen, 2005; Singer, 2005). What we also argue, though, is that sport, with its flaws, can also be a place where people come into contact with persons they might not have otherwise, that it can be a place of communal bonding, and that as people learn about and interact with one another, sport can be a site where prejudices and preconceived notions can be broken down. There is also evidence that support this position. Hums and MacLean (2009) note that sport participation, in addition to promoting character and leadership, allows “unique opportunities for...cross-cultural contact” (p. 80). Chalip (2006) also recognized these potential benefits, as he argued that given the proper structure, sport has the potential to build self-esteem, encourage moral development, and engender important life skills.

Sport’s unique characteristics allow for these benefits to be realized. Unlike the majority of other contact situations, sport and physical activity are characterized by shared sacrifices, a communal commitment to excellence, and a heightened sense of common fate (i.e., if the team wins, all are rewarded). Even in exercise (i.e., non-competitive sport) settings, where some of these characteristics might not be as salient, there is still a shared understanding of the commitment, work, and endurance needed to achieve excellence. These characteristics have a way of bringing sport and physical activity participants together, thereby bridging the racial gap that exists in so many other situations. They are also not present in many other contact situations, such as having out-group members as co-workers, neighbors, or friends.

There is equivocal support for sport’s ability to reduce intergroup bias. Early empirical work suggested that team participation had little influence on racial attitudes (Chu & Griffey, 1985; Ibrahim, 1968; Sargent, 1972). Chu and Griffey, in a study of high school aged students in New York, observed that athletes and non-athletes did not differ in
their attitudes or behaviors toward Blacks. The authors did find, however, that as the proportion of Black athletes on the team increased, so too did cross-race communications. More recently, Brown et al. (2003) conducted an examination of intercollegiate football players and observed that sport represents a context in which many athletes are “subjectively freed from ideological constraints of race that are operative in other social contexts and institutions” (p. 165). As a result, sport served to bridge the racial gaps that might have otherwise existed for participants in their study. Another example comes from the Dallas Cup, an international weeklong youth soccer tournament (see Cunningham, 2011). Local players provide accommodations to international players, and the dissimilarities frequently result in initial feelings of anxiety and unrest. However, after competing with one another over the course of a week, the players generate affective ties, and close friendships form. In fact, tears of sadness frequently accompany the goodbyes at tournament’s end. Others have observed similar effects in sport-focused activities, such as after school programs (Bruening, Madsen, Evanovich, & Fuller, 2010) and a study abroad program (Cunningham, Bopp, & Sagas, 2010). Thus, while the pattern of findings is not always consistent, there is evidence that sport can serve to reduce intergroup bias.

CROSS-CULTURAL COMPARISONS

In addition to examining the unique role of sport in reducing intergroup anxiety and racial prejudice, we were also interested in comparing the effects of contact across culture. Such analyses are rare. Of the 713 samples Pettigrew and Tropp (2006) analyzed in their meta-analysis, only 54 (7.6%) were set in Asia, and only 3 (0.4%) contained data from both Asian and US samples. Consistent with this trend, Barlow, Louis, and Terry (2010) observed that most social psychological research has been set in Western countries and focused on Whites’ attitudes toward racial minorities. These are meaningful limitations because cultural context could serve as a boundary condition; that is, the influence of contact on prejudice reduction could be stronger in some settings than in others. If these boundary conditions are present, then the generalizability of the theory is also impacted (see also Bacharach, 1989). As such, we sought to address this shortcoming by comparing the association among contact, intergroup anxiety, and racism for South Koreans and White Americans.

In developing our hypotheses, we draw from Tsui, Egan, and O’Reilly’s (1992) non-symmetry hypothesis. Their perspective is related to the impact of being dissimilar from one’s coworkers, but has implications here. Specifically, Tsui et al. argue that people who are not accustomed to being in the minority will be more strongly affected by holding that role than will others who are usually in the minority. Thus, for instance,
the influence of differing based on sexual orientation on one’s satisfaction with coworkers should be stronger for a heterosexual (i.e., one who is usually not in the minority role) than for a person who is lesbian, gay, bisexual or transgender (i.e., one who might be in the minority role more frequently). Tsui et al. offered initial evidence of these effects, as they found that Whites and men reacted more strongly to being different from others in a group than did racial minorities and women. Cunningham and Saggas (2007) observed similar gender differences with respect to the impact of treatment discrimination.

These findings have direct relevance to the current discussion. Specifically, people who are not accustomed to intergroup contact are likely to react stronger to such interactions. In other words, the relationship between contact and corresponding reductions in intergroup anxiety and racial bias should be stronger for persons who do not regularly interact with out-group members. Tropp and Pettigrew (2005) provided initial evidence of this linkage, as they found that the relationship between contact and prejudice was stronger for majority members than for minority members. Binder et al. (2009) later found similar support in their longitudinal analysis of European school-aged children.

Black Americans constituted 12.2% of the US population in 2010 (www.census.gov), and other research suggests that they constitute a sizeable portion of sport and physical activity participants (DeHass, 2008). Thus, Whites are likely to have had at least some contact with Blacks, particularly in the sport context. On the other hand, Blacks are all but non-existent in South Korea (Shin, 2006) and, as a result, South Korean’s contact with Blacks is limited (Kang, 2009). Thus, relative to White Americans, South Koreans are likely to have had less intergroup contact, and as a result, potentially benefit more from such interactions.

**Current Study**

The purpose of the current study was to examine the influence of intergroup contact on subsequent intergroup anxiety and racial prejudice. Specifically, we conducted a cross-sectional study of White Americans and South Koreans, asking them about their interactions with Blacks, their anxiety around Blacks, and the level of racial prejudice they held.

Recent formulations of the contact hypothesis (Binder et al., 2009; Pettigrew & Tropp, 2006) have demonstrated that contact has the potential to reduce prejudice because of the negative impact it has on intergroup anxiety. That is, the more people interact with those different from the self, the less anxious they are in such settings. As previously noted, we argue that this pattern should be particularly observed when the con-
text is in the sport and physical activity setting. Sport has a way of bringing people together and uniting them, even beyond what is observed in other settings (e.g., contact as coworkers or friends). As such, we hypothesized that sport-related contact with out-group members will be negatively associated with intergroup anxiety, even beyond the effects of contact as friends (Hypothesis 1).

We also expected this pattern to vary based on the culture. Consistent with the non-symmetry hypothesis (Tsui et al., 1992), we argue that the effects of contact are strongest for people who do not usually experience such interactions. Given that White Americans are more likely to have contact with Blacks than are South Koreans, we predicted that the relationship between sport-related contact and intergroup anxiety will be moderated by the setting in which the study participants are located, such that the negative association will be stronger for South Koreans than it will for White Americans (Hypothesis 2).

Finally, recent research suggests that intergroup anxiety should be positively associated with racial prejudice (Binder et al., 2009; Brown & Hewstone, 2005; Pettigrew & Tropp, 2006). When people feel a sense of uneasiness or apprehension being around out-group members, they are likely to also view those persons negatively. On the other hand, when intergroup anxiety is reduced, then corresponding reductions in prejudice should manifest as well. As an illustrative example, Eller and Abrams (2003) examined the experiences of Americans studying Spanish in Mexican language institutes. They observed that friendships with out-group members was negatively associated with both anxiety directed toward the out-group and social distancing. Binder et al. (2009) found similar effects. Thus, we hypothesized that intergroup anxiety will be positively associated with racial prejudice (Hypothesis 3).

**Method**

**Participants**

Students ($N = 204$) enrolled at major public universities in South Korea ($n = 104$) and the United States ($n = 100$) participated in the study. All students from South Korea identified as Korean, while all students in the United States identified as White. The overall sample included 106 women (52%), and the mean age was 21.28 years ($SD = 2.32$). The South Korean sample included 73 women (70%) and 31 men (30%), with a mean age of 22.64 years ($SD = 2.14$). The US sample included 33 women (33%) and 67 men (67%), with a mean age of 19.86 years ($SD = 1.54$).

**Measures**

Participants completed a questionnaire asking them to provide their demographic information and to respond to items measuring their contact with Blacks in the sport and physical activity setting, intergroup anxiety, and racial prejudice. For the South Korean questionnaire, we translated the English version into Korean, and an expert flu-
ent in both English and Korean then translated the questionnaire back to English. Minor discrepancies between the two versions were then rectified. This process ensured that participants in both countries had questionnaires with the same meanings and items.

In drawing from Herek and Capitanio (1996), we measured intergroup contact by asking participants “how many of your _____ are Black/African American?” We then included “friends,” “former or current teammates,” and “exercise partners” as options. Participants responded using a 5-point scale that included the following response options: 1 (none), 2 (1-3), 3 (4-6), 4 (7-9), and 5 (10 or more). Responses to the “friends” item represented contact with out-group members as friends, while we took the mean of the “teammates” and “exercise partner” items \( r = .56 \) to represent sport-related contact with out-group members.

We used Binder et al.’s (2009) scale to measure intergroup anxiety. They adapted the scale from Stephan and Stephan’s (1985) work and demonstrated reliability and validity evidence. The stem read, “Please indicate how you feel when interacting with Blacks/African Americans.” Items included “comfortable,” “threatened,” “confident,” “anxious,” “at ease,” and “awkward.” Responses were made on a 7-point scale from 1 (not at all) to 7 (extremely). Positively oriented words were reverse coded so higher scores were reflective of greater intergroup anxiety. The scale had an acceptable reliability \( (\alpha = .89) \).

Finally, we measured racial prejudice using the McConahay’s (1986) Modern Racism Scale. Others have also used this scale in assessments of bias and racism (e.g., Barlow et al., 2010; Miller, Smith, & Mackie, 2004). Sample items include “Over the past few years, Blacks have gotten more economically than they deserve” and “Blacks should not push themselves where they are not wanted.” Responses were made on a 7-point Likert-type scale from 1 (strongly disagree) to 7 (strongly agree). The reliability was acceptable \( (\alpha = .78) \).

**Procedure**

Questionnaire packets (i.e., a cover letter explaining the purpose of the study and a questionnaire) were distributed at the end of the class period to students enrolled in kinesiology classes at a South Korean and US university. Participation was voluntary, and the questionnaire required 10 minutes to complete. All responses remained anonymous, and no identifying information was included on the completed questionnaires.

**RESULTS**

**Confirmatory Factor Analysis**

We first computed a confirmatory factor analysis to examine validity evidence based on questionnaire structure, analyzing fit using the chi-square statistic, root mean square error of approximation (RMSEA), and confirmatory fit index (CFI). Following Hu and Bentler (1999), RMSEA values .06 or less and
### Table 1

**Results of Confirmatory Factor Analyses**

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>df</th>
<th>CFI</th>
<th>RMSEA (CI)</th>
<th>$\Delta\chi^2 (\Delta df)$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesized</td>
<td>24.03</td>
<td>22</td>
<td>.99</td>
<td>.02 (.00, .06)</td>
<td>---</td>
</tr>
<tr>
<td>Contact</td>
<td>33.90</td>
<td>24</td>
<td>.98</td>
<td>.05 (.00, .08)</td>
<td>9.87 (2)*</td>
</tr>
<tr>
<td>Anxiety and prejudice</td>
<td>131.50</td>
<td>25</td>
<td>.88</td>
<td>.15 (.12, .17)</td>
<td>107.47 (3)**</td>
</tr>
</tbody>
</table>

*Note.* Hypothesized model is the four-factor model, with sport-related contact, intergroup anxiety, and racial prejudice specified as latent variables, and contact as friends specified as an observed variable. The Contact model specified all contact items as item indicators for a contact latent variable, the intergroup anxiety latent variable, and racial prejudice latent variable. The Anxiety and Prejudice model specified the intergroup anxiety and racial prejudice items as item indicators of a single latent variable, sport-related contact as a latent variable, and contact as friends as an observed variable. *$p < .01$. **$p < .001$.***

### Table 2

**Means, Standard Deviations, and Bivariate Correlations**

<table>
<thead>
<tr>
<th>Item</th>
<th>$M$ (%)</th>
<th>$SD$</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Entire Sample</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Sample</td>
<td>51</td>
<td></td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>2. Contact as friends</td>
<td>2.23</td>
<td>1.32</td>
<td>-.67***</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Sport-related contact</td>
<td>1.78</td>
<td>1.00</td>
<td>-.63***</td>
<td>.75***</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Intergroup anxiety</td>
<td>3.17</td>
<td>1.36</td>
<td>.69***</td>
<td>-.69***</td>
<td>-.58***</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>5. Racial prejudice</td>
<td>31.74</td>
<td>27.41</td>
<td>.57***</td>
<td>-.55***</td>
<td>-.51***</td>
<td>.66***</td>
<td>---</td>
</tr>
<tr>
<td><strong>South Koreans</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Sample</td>
<td>---</td>
<td></td>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Contact as friends</td>
<td>1.36</td>
<td>.68</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Sport-related contact</td>
<td>1.17</td>
<td>.49</td>
<td>---</td>
<td>.72***</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Intergroup anxiety</td>
<td>4.09</td>
<td>.81</td>
<td>---</td>
<td>-.48***</td>
<td>-.57***</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>5. Racial prejudice</td>
<td>47.04</td>
<td>23.96</td>
<td>---</td>
<td>-.26**</td>
<td>-.34***</td>
<td>.30**</td>
<td>---</td>
</tr>
<tr>
<td><strong>White Americans</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Sample</td>
<td>---</td>
<td></td>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Contact as friends</td>
<td>3.13</td>
<td>1.21</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Sport-related contact</td>
<td>2.42</td>
<td>1.00</td>
<td>---</td>
<td>.53***</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Intergroup anxiety</td>
<td>2.22</td>
<td>1.13</td>
<td>---</td>
<td>-.39***</td>
<td>-.16</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>5. Racial prejudice</td>
<td>15.83</td>
<td>21.01</td>
<td>---</td>
<td>-.31**</td>
<td>-.21*</td>
<td>.61***</td>
<td>---</td>
</tr>
</tbody>
</table>

*Note.* *$p < .05$. **$p < .01$. ***$p < .001$. Sample coded as $0 =$ White Americans, $1 =$ South Koreans.
CFI values .95 or greater were considered reflective of good model fit. We tested our hypothesized model against two theoretically plausible alternatives, with results depicted in Table 1. Results indicate that the hypothesized model (a) was a close fit to the data, $\chi^2 (n = 204, df = 22) = 24.03, p = .35; \chi^2 / df = 1.09; CFI = .99; RMSEA (90\% CI: .00, .06) = .02$, and (b) a significantly better fit to the data than alternative models. These findings offer validity evidence for the instruments used.

**Descriptive Statistics**

Means, standard deviations, and bivariate correlations are presented in Table 1. We present the findings separately for the entire sample, South Koreans only, and White Americans only. Several general trends emerged across the different samples: (a) the mean scores for contact, both with friends and in a sport-related context, were low; (b) contact in different contexts was negatively associated with intergroup anxiety; and (c) intergroup anxiety was positively associated with racial prejudice. The one exception to these trends was the association between sport-related contact and intergroup anxiety for White Americans, as those two variables were not significantly related to one another. Mean scores also differed between samples, as White Americans expressed greater contact with Blacks, both as friends and in the sport context, less intergroup anxiety, and less racial prejudice. Analysis of variance procedures indicated that all mean differences were significant, all $F$'s $\geq 4.35$, all $p$'s $< .05$.

**Hypothesis Testing**

Recall that we predicted (a) sport-related contact with out-group members would be negatively associated with intergroup anxiety, even beyond the effects of contact as friends, (b) culture would moderate the aforementioned relationship, and (c) intergroup anxiety would be positively associated with racial prejudice. We tested the hypotheses through structural equation modeling, following Marsh, Wen, and Hau’s (2004) guidelines for interactions. Specifically, we coded sample as $0 =$ White Americans and $1 =$ South Koreans, standardized the sport-related contact variable, and created a sample $\times$ sport-related contact interaction term. We then included these three variables, along with the contact as friends variable as exogenous variables, all of which correlated with one another. Intergroup anxiety and racial prejudice were both specified as latent variables. As too many item indicators reduces the fit of a model, we used three parcels for item indicators of both the intergroup anxiety and racial prejudice latent variables. As Little, Cunningham, Shahar, and Widaman (2002) explain, a parcel represents “an aggregate-level indicator comprised of the sum (or average) of two or more items, responses or behaviors” (p. 152).

Results of the SEM indicated that the data were a close fit to the data: $\chi^2 (n = 204, df = 28) = 28.19, p = .45; \chi^2 / df = 1.07; CFI = 1.00; RMSEA (90\% CI: .00,
The Power of Sport

Figure 1: Illustrative Summary of Structural Equation Model

.05) = .01, p_{close} = .92. The model accounted for 65% of the variance in intergroup anxiety and 15% of the variance in racial prejudice. An illustrative summary is presented in Figure 1.

Hypothesis 1 predicted that sport-related contact with out-group members would be negatively associated with intergroup anxiety, even beyond the effects of contact as friends. This hypothesis was not supported, as the relationship between sport-related contact and intergroup anxiety was not significant (β = .03, p = .68).

Hypothesis 2, which predicted that the aforementioned relationship would be moderated by culture, was supported. The sample × sport-related contact inter-

Figure 2: Influence of culture context on the relationship between sport-related contact and intergroup anxiety
action term was significant ($\beta = -0.23, p < 0.01$). We computed a simple slope analysis, following Cohen, Cohen, West, and Aiken’s (2003) guidelines. As seen in Figure 2, the relationship between sport-related contact and intergroup anxiety was stronger for South Koreans ($B = -0.58, p < 0.01$) than it was for White Americans ($B = 0.05, p = 0.65$), as we predicted.

Finally, Hypothesis 3 was also supported, as intergroup anxiety was positively associated with racial prejudice ($\beta = 0.38, p < 0.001$).

**Supplementary Analysis**

As noted, we found support for the interactive effects of sample location and sport-related contact, thereby seemingly providing support for the importance of sport-related contact for South Koreans. It is also possible, though, that contact as friends would have offered similar results. We tested this possibility through an additional SEM analysis. Specifically, we first standardized the contact as friends variable and then created a sample $\times$ contact as friends interaction term. We then computed a model with the three first order effects (sample, sport-related contact, and contact as friends) and the two interaction terms serving as exogenous variables, the intergroup bias latent variable serving as the mediator, and the racial prejudice latent variable serving as the dependent variable. The model was a close fit to the data: $\chi^2 (n = 204, df = 33) = 31.80, p = 0.53; \chi^2 / df = 0.96; CFI = 1.00; RMSEA (90\% CI: 0.00, 0.05) = 0.01, \ p_{close} = 0.96$. Examination of the specific path coefficients indicated that while the sample $\times$ sport-related contact remained significant ($\beta = -0.31, p < 0.01$), the sample $\times$ contact as friends interaction was not significantly related to intergroup bias ($\beta = 0.12, p = 0.22$). These results further buttress the meaningfulness of sport-related contact for South Koreans.

**DISCUSSION**

Cunningham (2011) has noted that “diversity is one of the most important topics in the context of sport and physical activity today” (p. 4), and as such, it is incumbent upon sport managers to take steps to effectively manage diversity in their sport organizations. Initiating contact among persons different from one another represents one of the more effective approaches, with meta-analytic research showing the robust effects inter-group contact can have on prejudice reduction (Pettigrew & Tropp, 2006). The purpose of this study was to extend the contact hypothesis literature in two meaningful ways: by examining the unique effects of sport-related contact with out-group members and by investigating these differences across cultures.

Results indicate that, contrary to our first hypothesis, sport-related contact did not hold a negative association with intergroup anxiety. However, and in support of our second hypothesis, this finding was qualified by the significant sport-related contact by sample interaction. Specifically, South Koreans’ intergroup anxiety significantly decreased
when they participated in sport and physical activity with Blacks, but the same was not necessarily the case for White Americans (whose intergroup anxiety remained the same).

The findings might be explained by returning to our theoretical framework. The non-symmetry hypothesis (Tsui et al., 1992) and recent formulations of the contact hypothesis (Binder et al., 2009; Pettigrew & Tropp, 2006) both suggest that the effects of contact on prejudice reduction are most pronounced for people who are not accustomed to interacting with dissimilar others. While Koreans' general interactions with Blacks is limited, this is especially the case within the sport and physical activity context; however, the same is not necessarily the case for Whites, as Blacks are regular participants in many forms of sport and physical activity. These differences might correspond to the benefits of contact such that Koreans who interact with Blacks while participating in sport and physical activity are more likely than Whites to have attitudinal and behavioral changes necessary for prejudice reduction (see Allport, 1954; Pettigrew, 1998). Or, put differently, because sport-related contact with out-group members is routine for White Americans, the unique opportunities to learn about the out-group are no longer present, and the relationship between contact and prejudice reduction becomes mooted.

Supplementary analyses also indicated that the benefits of sport-related contact were stronger than other types of interactions—findings that can also be explained by returning to our theoretical framework. Others have also argued that sport has potentially transformational effects in terms of intergroup relationships (e.g., Brown et al., 2003; Cunningham, 2011; Huns & MacLean, 2009). In fact, Brown et al. argued that sport frees people from the ideological constraints that otherwise impinge upon intergroup interactions. We argue that these benefits manifest because of the unique characteristics of sport and physical activity—individuals engage in shared commitment, communal striving for excellence, and common fate more so than in almost any other setting. These characteristics serve to unite sport and physical activity participants, creating a common bond, and thereby bridging the racial gap that otherwise divides in-group and out-group members.

Finally, we found that intergroup anxiety was significantly associated with racial prejudice, a pattern consistent with other research (Binder et al., 2009; Brown & Hewstone, 2005; Pettigrew & Tropp, 2006). Thus, as the trepidation and uneasiness associated with intergroup interactions decreases, so too does racial prejudice. Binder et al.'s (2009) longitudinal analysis provided evidence of this causal order. The findings highlight the need to consider key process variables that mediate the relationship between contact and prejudice reduction. Allport (1954) also recognized as much, suggesting that intergroup contact allows for stereotype disconfirmation, behavioral changes, greater empathy toward the out-group, and in-group reappraisal. Others have
suggested that contact might allow for differentiation (i.e., seeing the out-group member as a unique individual rather than a homologous group; Hewstone, Rubin, & Willis, 2002), personalization (i.e., seeing the out-group member’s similarity in relation to the self; Hewstone et al., 2002), and the potential to learn from out-group members (Ely & Thomas, 2001; Hewstone & Brown, 1986)—all of which should reduce bias and prejudice.

Implications, Contributions, Limitations, and Future Directions

This research holds several potential implications for people seeking to reduce racial prejudice. First, our findings illustrate that people need to experience contact in situations to which they are otherwise unaccustomed. For the South Koreans in our sample, this meant engaging in sport-related contact, but for other persons (e.g., Whites), this might mean other situations. Second, when sport-related contact is used, the unique aspects of sport should be emphasized. This includes emphasizing the need for common goals, common fate, shared sacrifices, and character development (Eitzen & Sage, 2009; Hums & MacLean, 2009). Doing so has many benefits. Not only do the sport participants enjoy the physical and psychological advantages associated with being physically active, but they might also learn more about one another, develop empathy for people dissimilar to the self, and experience decreases in their intergroup anxiety—all of which should result in prejudice reduction (Pettigrew & Tropp, 2008).

This study also makes several contributions to the literature. First, while most of the contact literature has focused on the effects of generalized forms of contact, we highlighted the importance of sport-related contact with out-group members. Thus, this study contributes to the small, but growing body of literature pointing to the benefits of sport in reducing prejudice (Brown et al., 2003; Bruening et al., 2010; Cunningham et al., 2010). Second, almost all of the contact research has been conducted in Western countries, thereby largely foregoing examinations set in Asia or cross-cultural examinations (see Pettigrew & Tropp’s, 2006, meta-analysis). Our study of South Koreans and White Americans addresses this substantial gap in the literature.

Despite the strengths of the study, there are potential limitations. First, we had a convenience sample of college-aged students; thus, additional data, with both older and younger participants, is needed before strong conclusions can be drawn. We suspect that, given the history of racial segregation in both the US and South Korean societies, the benefits of contact would be even stronger for older persons. Additional research is needed to explore these possibilities. Second, we collected the data on a single questionnaire, opening the potential for method variance. It is worth noting, though, that these concerns are alleviated when considering moderating effects (McClelland & Judd, 1993), as we did in our analysis. Finally,
we note that the data are correlational in nature, thereby precluding causal inferences.

Finally, there are several avenues for future research. First, most of the contact research is quantitative in nature, as was this examination. Qualitative assessments might yield additional insights into why sport-related contact provides the benefits it does. Indeed, evidence from sport-focused research related to contact attests to as much (see Brown et al., 2003; Bruening et al., 2010; Cunningham et al., 2010). Furthermore, we focused on racial prejudice, but Pettigrew and Tropp’s (2006) meta-analysis illustrated that contact can reduce bias across several diversity dimensions, including sexual orientation, age, and mental and physical ability. Future researchers should consider the role of sport-related contact in reducing these forms of prejudice. For instance, how would participation in the Gay Games affect a heterosexual’s bias toward lesbian, gay, bisexual, and transgender individuals? Or, how would exercising with a person with physical disabilities impact intergroup anxiety related to physical ability? These are but two possibilities, but given the prevalence of prejudice in society, these are questions that warrant investigation.

References


contact and political predispositions on prejudice: Role of intergroup emotions. *Group Processes & Intergroup Relations*, 7, 221-237.


