Imagine that: examining the influence of sport-related imagined contact on intergroup anxiety and sexual prejudice across cultures

Woojun Lee, George B. Cunningham
Laboratory for Diversity in Sport, Texas A&M University

Correspondence concerning this article should be addressed to George B. Cunningham, Laboratory for Diversity in Sport, Texas A&M University, TAMU 4243, College Station, TX 77843-4243, USA.
E-mail: gbcunningham@tamu.edu
doi: 10.1111/jasp.12247

Abstract

The purpose of this study was to examine (a) the relationship among sport-related imagined intergroup contact, intergroup anxiety, and sexual prejudice, and (b) how these relationships varied across cultures. Students enrolled at major public universities in South Korea (n = 100) and the United States (n = 100) participated in an experiment in which they imagined playing basketball and then engaging in a conversation with a gay man or with a friend. They then responded to a post-experiment questionnaire. South Koreans’ intergroup anxiety significantly decreased when they imagined contact with a gay man, but the same was not necessarily the case for Americans. Intergroup anxiety mediated the relationship between imagined contact and sexual prejudice for Americans, but not for Koreans.

Introduction

Sexual prejudice is the term used to describe the collective negative attitudes and stereotypes directed toward an individual on the basis of her or his sexual orientation (Herek, 2010). Due primarily to the constraints in how modern society defines the sexual norm, this type of prejudice focuses on people who identify as or are presumed to be lesbian, gay, bisexual, or transgender (LGBT). Unfortunately, most adults living in the United States harbor negative feelings and attitudes toward homosexual behavior, viewing the act as unnatural (Herek & Capitanio, 1996) and immoral (Sartore & Cunningham, 2009). A similar pattern is evident in sport, as LGBT players, coaches, and sport administrators have encountered considerable sexual prejudice and discrimination over the years (Anderson, 2002; Griffin, 1998; Krane & Barber, 2005). Because of sexual prejudice, there have been innumerable examples of LGBT individuals who have encountered discrimination within the sport and physical activity context, and this takes many shapes. For example, LGBT persons face negative attitudes among parents and players (Gill, Morrow, Collins, Lucey, & Schultz, 2006; Sartore & Cunningham, 2007, 2009; Shang & Gill, 2012), may have limited opportunities when they are applying for a job (Cunningham, Sartore, & McCullough, 2010), generally receive less compensation than their heterosexual counterparts (Blandford, 2003), feel pressured not to reveal their sexual orientation at work (Cavalier, 2011), and face hostility within their workplace environments (Griffin, 1998; Krane & Barber, 2005).

Not only does sexual prejudice negatively affect LGBT individuals, but there is emerging evidence that it also prohibits sport teams and organizations from reaching their full potential. Anderson (2011) observed that inclusiveness on men’s sport teams resulted in greater bonding and cohesion among the players. Cunningham, in a series of studies of American athletic departments, observed that high sexual orientation diversity, coupled with an inclusive culture free from prejudice, resulted in athletic departments far outperforming their peers in both creativity in the workplace (Cunningham, 2011a) and objective measures of performance (Cunningham, 2011b). Finally, Cunningham and Melton (2011) presented a theoretical framework in which sexual orientation diversity resulted in increased organizational effectiveness via enhanced decision-making capabilities, improved workplace understanding, and goodwill from external stakeholders. These studies suggest that sport organizations marked by heterosexism and discrimination are not able to perform as well as their more inclusive counterparts.

Collectively, this literature suggests that sexual prejudice is prevalent in sport organizations, and its existence hurts both the individuals within those workplaces and the organizations themselves. These findings point to the primacy of
effective diversity management in the sport industry—sentiments raised by others, too (Doherty & Chelladurai, 1999)—and more specifically, prejudice-reduction techniques. The purpose of this study, therefore, was to examine the efficacy of one such technique: imagined contact with out-group members. In drawing from the imagined contact hypothesis (Crisp & Turner, 2012), we argue that when heterosexuals imagine interacting with LGBT individuals within a sport setting, their anxiety levels are likely to decrease, which in turn, should be associated with a corresponding reduction in sexual prejudice. We test these predictions across cultures, examining the patterns in both U.S. and South Korean samples. In the following space, we present our theoretical framework and specific hypotheses.

**Theoretical framework**

As Paluck and Green (2009) note in their comprehensive review of the literature, there are a number of approaches aimed at reducing prejudice. Some of the more robust findings point to the efficacy of intergroup contact among dissimilar people, and Allport’s (1954) contact hypothesis highlights these mechanisms. According to this framework, contact among individuals who belong to different groups will reduce prejudice and discrimination (see also Pettigrew, 1998). When contact occurs, the individuals involved learn about others outside their groups and potentially see the similarities they share with those persons. As a result, biases and discrimination against the out-group are reduced. Pettigrew and Tropp’s (2006) meta-analysis showed that it is possible to apply the contact hypothesis to a wide variety of groups and settings, and convincingly established the basic premise that intergroup contact helps to reduce prejudice (see also Binder et al., 2009). Though considerably fewer studies have focused on the relationship between contact and sexual prejudice, the results are consistent with contact theory premises, as contact with LGBT individuals holds a negative association with sexual prejudice (Cunningham & Melton, 2012, 2013; De Bruin & Arndt, 2010; Smith, Axelton, & Saucier, 2009).

Despite the many benefits of intergroup contact, there is a central limitation to that particular prejudice-reduction strategy: the different groups have to actually interact with one another. But, for some out-groups, contact can be difficult to arrange, or contains some risks (Corrigan et al., 2002; Schulze & Angermeyer, 2003). Within the current context, LGBT coaches, players, or sport managers might be unwilling to disclose their sexual orientation in the workplace, for the many reasons previously discussed, thereby making contact difficult. Further, even if one’s sexual orientation is known, managers might be unwilling to intentionally facilitate intergroup contact because of an unwillingness to address sexual orientation issues.

These potential shortcomings point to the importance of recent developments in the area of imagined contact (Crisp & Turner, 2012). New research has suggested that actual contact may not be necessary to reduce intergroup prejudice; instead, Turner, Crisp, and Lambert (2007) argued for imagined intergroup contact as a means of reducing intergroup bias, suggesting that it is easier and more practical than actual contact, and it prepares persons for future interactions with out-group members. Indeed, researcher related to mental imagery suggests imagining phenomena (a) stimulates similar motivational responses as does actually experiencing them (Dadds, Bovbjerg, Redd, & Cutmore, 1997), (b) shares many of the same neurological mechanisms as emotions and memories (Kosslyn, Ganis, & Thompson, 2001), and (c) can aid people in their pursuit of goals and performance gains (Vealey & Greenleaf, 2009). These linkages suggest that imagining positive intergroup contact with out-group members has the potential to elicit several of the same concepts that actual interactions do (see also Crisp & Turner, 2009). Turner, Crisp et al. (2007) also suggested that imagined contact would improve intergroup attitudes when participants imagine themselves interacting with out-group members (i.e., the mental imagery must include more than the out-group in isolation) and when such interactions are imagined to be positive. This evidence suggests imagining pleasant intergroup interactions and friendships might be sufficient to reduce intergroup anxiety and subsequent prejudice. In this way, indirect contact has emerged as a way of accessing the psychological benefits of contact when actual face-to-face contact is not possible (Turner, Hewstone, Voci, Paolini, & Christ, 2007).

There is a growing number of researchers who support the claim that imagined contact has a unique and positive impact on a variety of outcomes commonly associated with more positive intergroup relations (see also Crisp & Turner, 2012, impressive review of the literature). For example, across three studies, Turner, Crisp et al. (2007) discovered that imagined contact with an individual who was defined as a member of an out-group led to more positive out-group evaluations as well as creating greater perceived out-group variability. Other researchers have observed that imagined contact affects implicit attitudes toward the out-group (Turner & Crisp, 2010); enhances people’s contact self-efficacy (Sathi, Crisp, & Hogg, 2011); promotes stereotype change (Brambilla, Ravenna, & Hewstone, 2012); is associated with improved intergroup intentions (Husnu & Crisp, 2010b); increases out-group trust (Vezzali, Capozza, Stathi, & Giovannini, 2012); and prepares people for successful face-to-face contact with out-group members because of improved intergroup (subtle, nonverbal) behaviors (Turner & West, 2012). These effects are present across a range of out-groups, including those based on ethnicity and nationality (Sathi & Crisp, 2008), sexual orientation
(Turner, Crisp et al., 2007), religion (Husnu & Crisp, 2010b), and weight (Turner & West, 2012), among others.

Cross-cultural comparisons

While research related to imagined contact has focused on a number of out-group members, a common theme among the studies is the consistency of the in-group. That is, researchers have failed to consider potential differences in the effects of imagined contact across cultures. This is an unfortunate omission because many researchers have demonstrated that prejudice is seen in all cultures, time periods, nations, and languages, as there is no single culture, race, ethnic group, or gender that has a monopoly on prejudice (Brewer, 1979; Brown, 1995; Fowers & Richardson, 1996; Triandis, 1994). Given the prevalence of prejudice and discrimination across cultures, it is worthwhile to consider whether prejudice-reduction techniques are also applicable in different contexts. We examined this possibility in the current study.

Just as it can be shown in many other nations, researchers have found that there is prevalent sexual prejudice in Korea (Douglas, 2009; Kim & Hahn, 2006; Kimmel & Yi, 2004). Consider, for instance, that there are no laws prohibiting discrimination against LGBT individuals in Korea, largely because homosexuality is considered too unnatural to be mentionable in any context (Kim & Hahn, 2006). Furthermore, conservative religious teachings are widespread and strongly oppose homosexuality (LeVay & Nonas, 1995). Unfortunately, sexual minorities who have disclosed their sexual orientation have been dismissed from work and most transgendered people are deprived of their right to work because of extreme discrimination (Douglas, 2009). Therefore, most Korean LGBT individuals keep their sexual orientation a secret from their extended family, work colleagues, and friends (Douglas, 2009).

In the context of the current study, this literature suggests that cultural differences are present in people’s interactions with LGBT individuals, with South Koreans having less exposure than their American counterparts. These differences are meaningful because people least accustomed to intergroup contact benefit the most from it (Lee & Cunningham, 2013; for similar arguments related to the effects of interacting with out-group members, see Tsui, Egan, & O’Reilly, 1992). Christ et al. (2010), in their study of extended contact, also found this to be the case, as extended contact’s effects on attitudes and behavioral intentions toward out-group members were strongest for people not accustomed to interacting with out-group members. Prejudice is maintained through unfamiliarity with the out-group, intergroup anxiety, and a lack of empathy toward people different from the self (Allport, 1954; Pettigrew, 1998; Stephan & Stephan, 1985). Thus, people deal in categorizations and stereotypes. But, as Pettigrew and Tropp (2008) have illustrated, intergroup contact serves to reduce these barriers, as people report more understanding, empathy toward, and less anxiety around dissimilar others after interacting with them. Within the current discussion, this would suggest the benefits of contact on anxiety and prejudice reduction should be strongest for people least familiar with the out-group (see also Christ et al., 2010).

Current study

In the current study, we examined the influence of imagined contact within a sport context as a way of reducing sexual prejudice. This is an ideal setting for a number of reasons. First, because of the hyper-masculine, heterosexist discourse pervasive in sport, historical precedent, and prevailing stereotypes about who should and should not be a sport participant (e.g., Messner, 1992; Plummer, 2006), sexual prejudice is high in sport. Yet, from a functionalist perspective, sport is also a context that has the potential to bring people together and promote cooperation (Eitzen & Sage, 2009; Lyras & Welty Peachey, 2011), thereby potentially overcoming this prejudice. There is some empirical evidence for this, albeit with a focus on racial and ethnic differences. Brown et al. (2003) observed that racial barriers were bridged among players on intercollegiate football teams, leading the authors to suggest that sport served as a setting in which many athletes are “subjectively freed from ideological constraints of race that are operative in other social contexts and institutions” (p. 165).

The prejudice-reduction benefits of intergroup contact have also been observed in other sport-focused activities, including after-school programs (Bruening, Madsen, Evanovich, & Fuller, 2010) and a study abroad program (Cunningham, Bopp, & Sagas, 2010).

As outlined more in the following sections, participants were instructed to imagine playing basketball with either a gay man or one of their friends. We then asked them about their attitudes toward LGBT individuals, including intergroup anxiety and sexual prejudice. Consistent with Allport’s (1954) original contact hypothesis and the recent work on imagined contact (Crisp & Turner, 2012), we hypothesized that people who imagined playing basketball with a sexual minority would express less intergroup anxiety (Hypothesis 1a) and sexual prejudice (Hypothesis 1b) than would persons who imagined playing basketball with one of their friends. Additionally, a number of researchers have argued that intergroup anxiety should be positively associated with prejudice (Brown & Hewstone, 2005; Pettigrew & Tropp, 2006). Imagined contact lessens fears and inhibitions about future contact with an out-group member after being exposed to the mental simulation of a positive (successful) interaction with a member of the out-group (e.g., Crisp & Turner, 2012), and in that way, it reduces intergroup anxiety (Abrams et al., 2008; Husnu & Crisp, 2010a). Thus, we hypothesized that intergroup anxiety will mediate the rela-
relationship between imagined contact and sexual prejudice (Hypothesis 2). Given the lack of extensive work looking at cross-cultural comparisons, we did not generate formal hypotheses related to the effects for Korean and U.S. participants; instead, we explored the hypotheses with the entire sample and separately for participants in both countries.

Method

Participants

Students (N = 200) enrolled at major public universities in South Korea (n = 100) and the United States (n = 100) participated in the study. The overall sample included 126 men (63%) and 74 women (37%), and the mean age was 20.88 years (standard deviation [SD] = 2.67). The South Korean sample included 62 men (62%) and 38 women (38%), with a mean age of 20.91 years (SD = 1.17). The U.S. sample included 36 women (36%) and 64 men (64%), with a mean age of 20.84 years (SD = 3.40).

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 undergraduate students enrolled in kinesiology classes in a South Korea university and a U.S. university. In both countries, participants were randomly assigned into two different groups, the experimental group (imagined contact situation) and the control group. In following the designs of previous imagined contact research (e.g., Turner, Crisp et al., 2007), the experimental group was assigned to take 5 minutes to imagine the following situation: “You played basketball with a gay man for two hours. Then, you spend about 30 minutes chatting. During the conversation you find out some interesting and unexpected things about him.” The other group, the control group, was asked to take 5 minutes to imagine playing basketball with his or her best friend. Following this manipulation, participants were asked to complete a post-experiment questionnaire. All responses remained anonymous, and no identifying information was included on the completed questionnaires. Participation was voluntary, and no reward was offered.

Measures

Participants completed a questionnaire measuring their intergroup anxiety, sexual prejudice, and demographic information (gender, age, country of origin). For the South Korean questionnaire, we translated the English version into Korean, and an expert fluent 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.

Intergroup anxiety

We measured intergroup anxiety with six items adapted from Stephan and Stephan’s (1985) scale. The revision was to account for the focus on LGBT individuals. The stem read, “Please indicate how you feel when interacting with lesbian, gay, bisexual, and transgendered individuals,” and sample items included “comfortable,” “threatened,” and “confident.” A 7-point scale from 1 (not at all) to 7 (extremely) anchored each item. Positively oriented words were reverse coded so higher scores were reflective of greater intergroup anxiety. The reliability was acceptable (α = .67).

Sexual prejudice

We used the 10-item Attitudes Toward Lesbians and Gay Men scale developed by Herek (1984) to examine the participants’ level of sexual prejudice. Sample items include “Male homosexuality is a perversion” and “Homosexual behavior between two men is just plain wrong.” Responses were made on a 7-point Likert-type scale from 1 (strongly disagree) to 7 (strongly agree). The reliability was acceptable (α = .81).

Results

Hypotheses 1a and 1b predicted that participants who imagined playing basketball with a gay man would express less intergroup anxiety and sexual prejudice than would their counterparts who did not, respectively. We examined these predictions by way of a multivariate analysis of covariance, taking into account the effects of participant gender—a step we deemed necessary given the evidence that women routinely express more positive attitudes toward sexual minorities than do men (see Herek, 2009). Consistent with this research, in our study, men expressed greater intergroup anxiety (M = 4.03, SD = .90) and sexual prejudice (M = 4.30, SD = 1.07) than did women (M = 3.62, SD = 1.16, and M = 3.65, SD = .96, respectively). Both differences were statistically significant: anxiety, F(1, 198) = 7.86, p = .006; sexual prejudice, F(1, 198) = 19.96, p < .001. Condition and country served as independent variables, while intergroup anxiety and sexual prejudice served as dependent variables. Mean scores are presented in Table 1, and we report means and standard errors (SE; controlling for participant gender) in the following space.

The effects of the control variable (participant gender) were significant, F(2, 194) = 12.27, p < .001. Results indicate the multivariate effects for condition were not significant, F(2, 194) = .86, p = .43.

There was, however, a significant Country × Condition interaction, F(2, 194) = 6.81, p = .001. Subsequent analyses
indicate significant univariate effects for both intergroup anxiety, $F(1, 195) = 13.04, p < .001$, and sexual prejudice, $F(1, 195) = 4.49, p = .04$. We present an illustrative summary of the results, controlling for participant gender, in Figure 1. Among Koreans, persons in the imagined contact condition expressed significantly less intergroup anxiety ($M = 3.87, SE = .73$) than did persons in the control condition ($M = 4.38, SE = .89$), $F(1, 97) = 9.68, p = .002$. The same pattern held for sexual prejudice, as persons in the imagined contact condition expressed less prejudice ($M = 3.81, SE = 1.36$) than did persons in the control condition ($M = 4.16, SE = 1.25$), $F(1, 97) = 6.20, p = .02$. Thus, among Korean participants, Hypotheses 1a–b were supported. A different pattern emerged among persons in the U.S. sample, however, as persons in the imagined contact condition expressed significantly more anxiety ($M = 3.89, SE = .15$) than did those in the control condition ($M = 3.39, SE = .15$), $F(1, 97) = 5.76, p = .02$. Condition did not influence sexual prejudice among Americans, $F(1, 97) = .48, p = .49$ (contact with gay man: $M = 4.23, SE = .15$; contact with friend: $M = 4.08, SE = .15$). Thus, Hypotheses 1a–1b were not supported for Americans.

Hypothesis 2 predicted that intergroup anxiety would mediate the relationship between imagined contact and sexual prejudice. We tested this possibility with the entire sample, the Korean sample, and the U.S. sample using the bootstrapping methods outlined by Preacher and Hayes (2008). This is an approach for which MacKinnon, Fairchild, and Fritz (2007) also advocate. In each analysis, we controlled for participant gender. Bivariate correlations are presented in Table 2, and an illustrative summary of the results is presented in Figure 2.

Results for the entire sample show the model accounted for 22% of the variance ($p < .001$). Intergroup anxiety did not serve as a mediator between condition and sexual prejudice.
Hypothesis 2 was rejected when considering the data from all participants. We then tested the hypothesis separately with the Korean and U.S. samples, respectively. The variance explained in the Korean-only model was 13% ($p = .004$). Imagined contact served to reduce intergroup anxiety ($B = -.51, p = .002$) and sexual prejudice ($B = -.38, p = .05$); however, intergroup anxiety did not serve as a mediator between imagined contact and sexual prejudice ($B = -.10; 95\% CI: -.31, .03$). As such, Hypothesis 2 was not supported among the Korean participants.

Finally, we tested for mediation in the U.S. sample. Results indicate that imagined contact increased intergroup anxiety toward sexual minorities ($B = .50, p = .02$), which in turn, held a positive association with sexual prejudice ($B = .55, p < .001$). Furthermore, intergroup anxiety mediated the relationship between imagined contact and sexual prejudice ($B = .28; 95\% CI: .05, .59$). While mediation was supported, the pattern was different than predicted, and thus, Hypothesis 2 was rejected for Americans.

**Discussion**

Given the prevalence of sexual prejudice in sport and the need to develop strategies aimed at reducing this prejudice, the focus of this study was to examine (a) the relationship among imagined intergroup contact, intergroup anxiety, and sexual prejudice, and (b) how these relationships varied across cultures. Contrary to previous studies in this area (Husnu & Crisp, 2010b; Turner, Crisp et al., 2007; Stathi & Crisp, 2008), we did not observe the main effects for the relationship

---

*(Figure 2 Mediating effects of intergroup anxiety on the relationship between imagined contact and sexual prejudice: (a) total sample; (b) Korean sample; and (c) U.S. sample. Note. *$p < .05$. Unstandardized coefficients are presented. Coefficients in parentheses represent direct effect of imagined contact on sexual prejudice after accounting for intergroup anxiety.)*
between imagined contact and reduced intergroup anxiety. These results were qualified, though, by the significant condition-by-culture interaction: for South Koreans, imagined contact was associated with less intergroup anxiety than that expressed by persons in the control group, while the opposite was observed for Americans.

We previously argued that imagined contact would be most beneficial for persons not used to interacting with LGBT individuals, and this was the case in our study. These findings are consistent with the few studies to explicitly examine this issue (Christ et al., 2010; Lee & Cunningham, 2013; see also Tsui et al., 1992) and suggest that, when people are unfamiliar with the out-group, imagined contact might serve to reduce unfamiliarity and increase empathy. Interestingly, we observed opposite effects for Americans, as persons in the imagined contact group expressed greater intergroup anxiety than their control group counterparts. We suspect this could be due to stereotype confirmation. Americans are more likely to have contact with LGBT individuals than are South Koreans, whether the contact is face-to-face or through various media forms, such as the Internet, books, or magazines. Thus, Americans might have developed negative impressions of LGBT based on previous experiences (see Herek, 2000), and it is possible that these previous experiences were brought to mind when imagining the sport interactions, regardless of the instructions in the experimental manipulation. On the other hand, for South Koreans, because contact is uncommon and LGBT issues are largely not discussed in the Korean society (Douglas, 2009; Kim & Hahn, 2006), these participants might therefore be free from possible constraints of their past; consequently, they might have had an easier time envisioning “interesting and unexpected things” about the gay man with whom they imagined playing basketball.

These findings suggest that alternate strategies might be needed when imagining contact with a deeply stigmatized and stereotyped out-group. Birtel and Crisp (2012) provided one alternative, as they drew from psychotherapeutic principles of exposure therapy to argue for a gradual approach of imagined contact. They asked participants to first imagine a negative encounter with out-group members and to then later imagine a positive encounter with that out-group. The underlying rationale in such an approach is that the first encounter activates the participants’ fear memory, which is then changed through additional, more positive information. Across multiple studies with varied out-groups, Birtel and Crisp found that the gradual approach was effective in reducing intergroup anxiety and increasing future contact intentions. Importantly, the research also illustrated this approach was superior to a single imagined contact experience, such as the one carried out in this experiment. Future researchers should further explore these possibilities.

Finally, we found mixed support for the prediction that intergroup anxiety would mediate the relationship between imagined contact and sexual prejudice. Among Koreans, however, imagined contact had a direct, negative effect on both intergroup anxiety and sexual prejudice, but we did not observe mediation effects. However, among Americans, imagined contact served to increase anxiety, which in turn, was positively associated with sexual prejudice. West, Holmes, and Hewstone’s (2011) findings might shed light on this pattern, as they observed that when instructions did not explicitly refer to a positive interaction (similar to our study), then imagined contact actually served to increase anxiety toward groups who are highly stigmatized. In combining these findings with those from Christ et al. (2010), we suspect that, among Americans, who likely already have more ingrained ideas about sexual minorities, not instructing them to imagine a successful (positive) interaction only served to exacerbate the anxiety they already felt.

Contributions, limitations, and future directions

This study makes several contributions to the literature. First, this is the first study (to our knowledge) to examine the effects of imagined contact applied to the sport context. Furthermore, few studies have examined imagined contact or the potential for cross-cultural differences, either within sport or outside of it. In fact, of the 713 samples Pettigrew and Tropp (2006) analyzed in their meta-analysis, less than 1% (n = 3, 0.4%) contained data from both Asian and U.S. samples. Given the increased importance of globalization in sport (Thibault, 2009), such examinations are sorely needed.

There are also a number of potential practical implications of this research. As Crisp and Turner (2012) note, imagined contact might be an effective tool in educational settings, preparing people for contact with out-group members (see also Vezzali, Capozza, Giovannini, & Stathi, 2012). We see this as particularly useful, as students in the sport industry frequently cited cross-cultural differences as an impediment to engaging in intergroup contact (Jones & Cunningham, 2008). This is also the case for heterosexuals’ contact with LGBT members in sport, as stereotypes and prejudice impede athletes’ and parents’ desire and intentions to interact with sexual minorities in the sport context (Sartore & Cunningham, 2007, 2009). Thus, coaches and athletic administrators could employ imagined contact techniques, such as those used here or by Birtel and Crisp (2012), to effectively prepare people to engage in intergroup interactions. This might be especially useful for South Koreans and other persons not familiar with LGBT individuals (see also Christ et al., 2010), or when providing explicit instructions to imagine successful contact (West et al., 2011).
Despite these contributions, there are potential limitations, too. First, our study took place in the laboratory setting with undergraduate students; thus, the applicability of the findings to other settings (i.e., organizations) or samples (i.e., older adults) might be limited. Of course, much of the social psychology related to prejudice and prejudice reduction also adopts an experimental approach, and researchers have demonstrated that effects found in the laboratory frequently mirror those observed in field settings (e.g., Nier, Gaertner, Dovidio, Banker, & Ward, 2001). Second, while Herek’s (1984) instrument is widely used in measuring attitudes toward lesbians and gay men, it is older than other, more contemporary scales, such as Morrison and Morrison’s (2002) Modern Homonegativity Scale. It is possible a different pattern of findings might have emerged using this instrument. Third, the targets of our intergroup anxiety measure (LGBT individuals in general) and sexual prejudice measure (gay men) differed slightly—differences that might have impacted the relationships among these variables. Finally, while we controlled for participant gender, it is also possible participant sexual orientation would influence the results. We did not collect this information on the questionnaire, though, and thus could not determine this possibility.

Finally, there are several avenues for future research. First, as we previously noted, additional work is needed to understand the different pattern of mediation findings among Koreans and Americans. Relatedly, as most of the research on intergroup contact and imagined contact has included participants from Western countries (Crisp & Turner, 2012; Pettigrew & Tropp, 2006), future researchers should continue to explore the efficacy of these approaches in varied contexts. In addition, we focused on basketball as the context for the imagined contact. Future researchers might consider other sport contexts, as the type of sport might serve as a moderating variable. Finally, given the prevalence of sexual prejudice in sport and the mixed findings from our research, additional work is needed focusing on reducing prejudice toward LGBT players, coaches, and administrators.

References


