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## Civic Responsibility and the Student Athlete: Validating a New Conceptual Model

What role should colleges and universities play in promoting a sense of civic responsibility among undergraduate students? What impact does participation in intercollegiate athletics have on civic values and behaviors? These questions represent pertinent issues of national concern for postsecondary institutions because of the longstanding importance of civic education as a core goal of undergraduate education. Assuming that colleges and universities should take an active role in fostering civic responsibility in the lives of students, there remain questions about the extent to which student athletes adopt civically responsible attitudes and behaviors relative to their nonathlete peers. Critics have argued that intercollegiate athletic programs create a separate culture on college campuses that isolates student athletes from their peers and conflicts with the core values of higher education (Bowen & Levin, 2003). The “win at all cost” attitude and academic scandals that plague college sports programs reflect values and behaviors that run contrary to the fundamental goals of higher education—one of which includes social responsibility. Consequently, there is concern that participation in intercollegiate athletics may limit student learning and personal development in key areas.

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*The Journal of Higher Education*, Vol. 83, No. 4 (July/August 2012)  
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Despite such criticisms, some scholars contend that intercollegiate athletic programs have the potential to impact student athletes in positive ways because of the exposure to and interaction with individuals from diverse backgrounds that occurs as a result of participation (Howard-Hamilton & Sina, 2001; Wolf-Wendel, Toma, & Morphew, 2001). In short, involvement in intercollegiate athletics has been linked to growth in essential areas of learning and development such as self-esteem, critical thinking, openness to diversity and challenge, leadership skills, as well as other affective outcomes (Ryan, 1989; Taylor, 1995; Wolniak, Pierson, & Pascarella, 2001).

Given that positive implications of athletic participation have been substantiated in empirical research studies and stand in contrast to perspectives that are critical of college sports, we cannot assume that athletic involvement impedes or promotes the development of civic engagement values and behaviors without further investigation. This study, using subsamples of athletes and nonathletes, tests the applicability of a new conceptual model designed to illustrate the relationship between civic values and behaviors. In so doing, we explore the validity of conflicting perspectives on college sports. Our intent is to assess how athletic participation shapes the relationship between social activism goals (a measure of civic values) and subsequent charitable involvement behaviors (a measure of civic behavior/engagement).

The Civic Values and Behaviors Conceptual Model was derived from a larger study that examined the interrelationships among college culture, cocurricular engagement, commitment to social activism goals, and charitable involvement (Bryant, Gayles, & Davis, in press). In addition to the interrelationships among the variables, the authors were interested in the directionality of the relationship between civic values and behaviors. The conceptual model is informed by four theoretical perspectives: (a) Astin's I-E-O Model, (b) Astin's Involvement Theory, (c) expectancy-value theory, and (d) belief-action reciprocity theory. In short, Astin's (1993) Input-Environment-Outcome model is one of the most frequently used frameworks for understanding the effects of college on a range of outcomes of undergraduate education. The I-E-O model suggests that educational outcomes are a function of the prior experiences and characteristics students bring with them to college and the types of experiences they have while in college. Thus, the conceptual model takes into account a precollege measure of students' civic attitudes and behaviors, which are presumed to have an influence on social activism and charitable involvement three years later. Astin's (1984) involvement theory is related to the I-E-O model in that it focuses on environmental influences, such as academic and social experiences in

college. The theory assumes that learning and development occur as a result of the amount of physical and psychological energy that students invest in the academic and social aspects of college. To that end, cocurricular engagement is included in the conceptual model because of its direct influence on students' values and behaviors.

The latter two perspectives that inform the conceptual model and our understanding of the relationship between values and behaviors were taken from the educational psychology literature. Expectancy-value theory explains how beliefs and values—which may include estimations of the probability of successfully completing a task, the perceived level of difficulty associated with completing a task, and the value that is attached to a task—impact behavior (Eccles, 1983; Spence & Helmreich, 1983). However, the relationship between beliefs and behaviors, particularly how they influence one another is not well understood. Belief-action reciprocity theory has a strong grounding in the psychology literature and suggests that the relationship between beliefs and behavior is cyclical (Oskamp & Schultz, 2005). In other words, in the same way that beliefs and attitudes have the potential to influence behavior, performing a task such as community service (behavior) has the potential to influence a person's social attitudes and beliefs. Thus, in a previous paper we examined the fit of two models, one which proposed that social activism goals (values) predicted charitable involvement (behaviors) and one which proposed that charitable involvement (behaviors) predicted social activism goals (values) (Bryant, Gayles, & Davis, in press).

Figure 1 portrays the conceptual model with the best fit—suggesting that social activism mediates the relationships between the input/environmental variables and charitable involvement. More specifically, the model suggests that social activism and charitable involvement at Time 1, college culture, and students' engagement in cocurricular activities are related to commitment to social activism three years after college and, subsequently, to charitable involvement at Time 2.

Several fit statistics were used to determine how well the model fit the data in the previous study (Bryant, Gayles, & Davis, in press). All of the fit statistics were in acceptable ranges (e.g., RMR, GFI, and RMSEA). The chi-square value was slightly outside of the range of 1:3; however, it was considered in conjunction with the other goodness-of-fit statistical measures. All of the paths were positive and significant. The results from the study in which the model was tested show that social activism serves as an important mediator in the relationships between input/experience measures and the outcome, charitable involvement at Time 2.

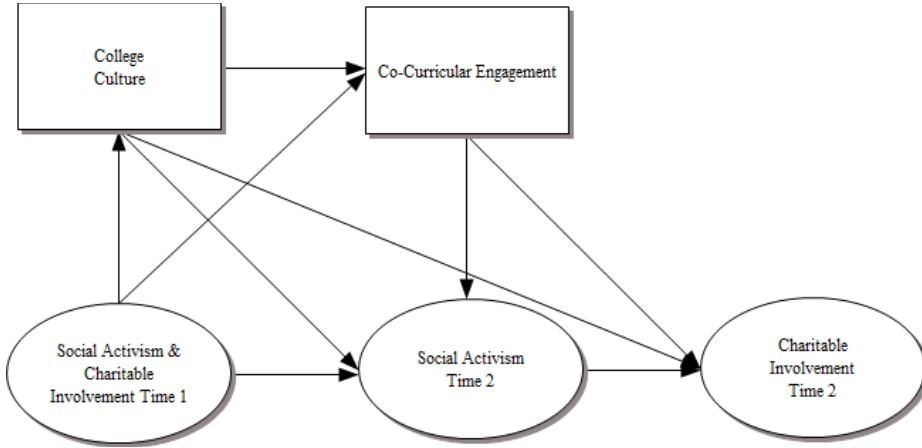


FIG 1. Civic Values and Behavior Conceptual Model

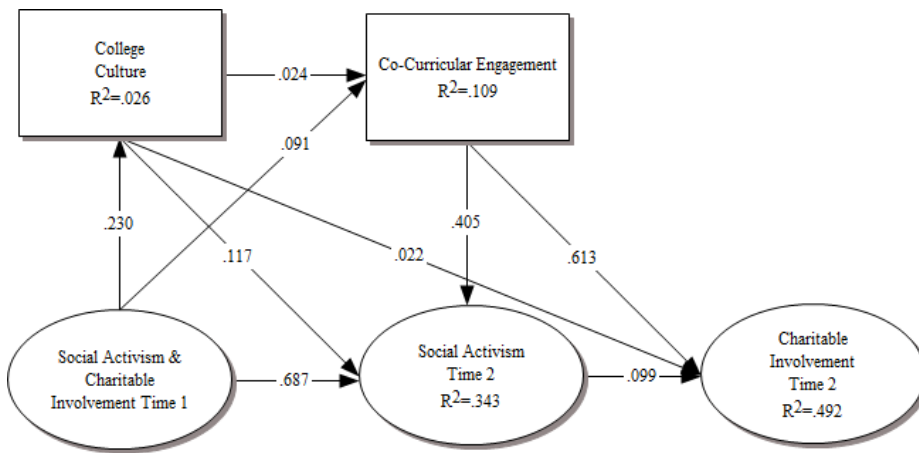


FIG 2. Unstandardized Path Estimates for Athletes

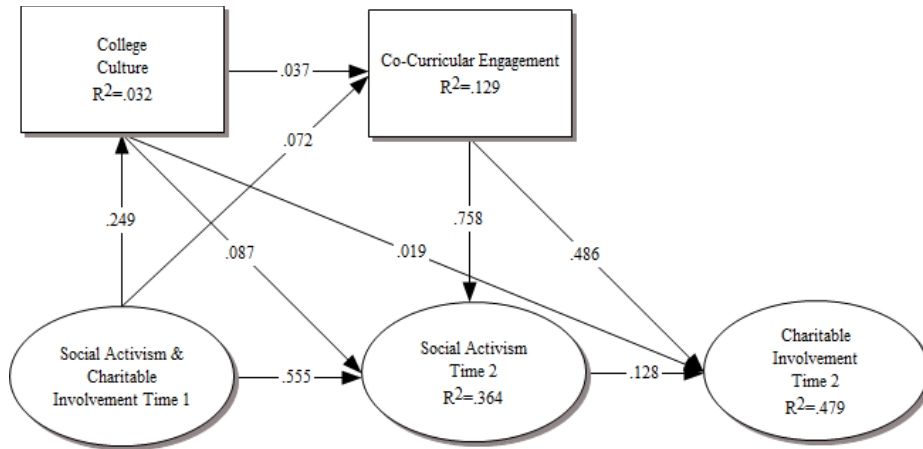


FIG 3. Unstandardized Path Estimates for Nonathletes

*Literature Review*

*Community Service, Volunteering, and Social Values and Behaviors*

The literature on how college shapes affective outcomes of undergraduate education such as civic responsibility is growing, especially in light of higher education’s renewed focus on social values and behaviors, and the growing interest in community service and volunteerism on college campuses. Data from the Cooperative Institutional Research Program (CIRP) show that college students’ interest in volunteerism and community service has been on the rise over the past two decades. In 2009, a record number of entering freshmen reported that they expect to participate in community service and/or volunteer work during college, whereas only 10% indicated no plans to volunteer in college (Pryor, Hurtado, DeAngelo, Palucki, & Tran, 2009). Moreover, there has been a steady increase in the percentage of students reporting the intent to engage in community service and volunteer work since 1990 when the question first appeared on the CIRP Freshmen Survey. CIRP data also show that volunteering in high school increases the likelihood that students will engage in similar behaviors in college and that service participation is positively associated with social values and pluralistic orientation (Pryor et al., 2009).

Although students' interest in community service participation and volunteerism in college has steadily increased over the past two decades, political values and social interest have waned. Data from the same 2009 CIRP report show that students are less interested in keeping up with politics than in the previous year—2008 (Pryor et al., 2009). Fewer students across all racial groups reported that helping to promote racial understanding was “essential” or “important” compared to the previous year. In addition, there was a drop in the importance of developing a meaningful purpose in life and influencing social values. In contrast, of most importance to students for two consecutive years was the value of being well-off financially, followed by raising a family.

Considering the increased interest in community service and volunteerism and the decreased interest in politics and social responsibility, scholars have focused their attention on the extent to which engaging in community service and volunteerism is related to values and attitudes associated with civic responsibility. As a result, important and positive linkages between civic responsibility and community service and volunteerism have been documented in the literature (Astin & Sax, 1998; Astin, Sax, & Avalos, 1999; Astin, Vogelgesang, Ikeda, & Yee, 2000; Hunter & Brisbin, 2000; Sax, 2004). The weight of the evidence suggests that various types of service participation and volunteerism have a positive and lasting influence on civic responsibility, as well as other personal development and academic outcomes. In addition to service and volunteer opportunities, other types of involvement and environmental factors have been linked to civic values and behaviors. Environmental factors such as institutional peer culture matter to developing a sense of social responsibility. Sax (2004) found that students who attended institutions where students in the aggregate held strong social activism goals were more likely to help others in difficulty and influence the political structure.

#### *Athletes and the College Experience*

Given the concern that athletic participation may deter students from the purposes and values intrinsic to undergraduate education, more empirical evidence is needed to understand the effects of participation in college sports on a range of educational outcomes. Some scholars have approached this problem by examining student athletes' experiences on college campuses under the assumption that involvement in campus life is associated with positive gains across a host of educational outcomes. Although early evidence suggests that participation in college sports has a negative impact on involvement in campus life and satisfaction with the college experience (Blann, 1985; Sowa & Gres-

sard, 1983; Stone & Strange, 1989), more recent evidence reveals that student athletes *are* engaged in campus life and in ways that mirror their nonathlete peers (Gayles & Hu, 2009; Schroeder, 2000; Umbach, Palmer, Kuh, & Hannah, 2006). Using NCAA data to examine factors associated with student athletes' engagement in educational activities, Gayles and Hu (2009) found that interacting with students other than teammates was the most frequent type of engagement, and it was also the form of engagement that had the strongest effect on the outcomes of interest. Moreover, interacting with students other than teammates was positively associated with gains in positive cultural attitudes.

Other scholars have focused on the extent to which athletes differ from their peers in the areas of student learning and personal development. As a result, there is some evidence indicating that athletic participation impacts cognitive development, even if what we know is inconclusive (Astin, 1993; Pascarella, Bohr, Nora, & Terenzini, 1995; Pascarella, Truckenmiller, Nora, Terenzini, Edison, & Hagedorn, 1999). However, much less is known about the impact of athletic involvement on affective outcomes, particularly those associated with civic responsibility.

#### *Athletes and Affective Outcomes Related to Social Values and Behaviors*

The literature on the impact of athletic participation on affective outcomes suggests a positive or null relationship between athletic involvement and civic values and behaviors (Pascarella & Smart, 1991; Whitt, Edison, Pascarella, Terenzini, & Nora, 2001). Some studies suggest that participation in sports has a positive impact on values associated with civic responsibility such as openness to diversity and challenge (Whitt et al., 2001), and that male student athletes do not differ from their peers regarding political views and civic values (Pascarella & Smart, 1991). Wolniak, Pierson, and Pascarella (2001) were able to disaggregate their data by level of sport to show that male athletes in revenue sports did not differ substantially from male nonathletes in their level of openness to diversity and challenge. Somewhat surprisingly, male athletes in non-revenue sports reported lower levels of openness to diversity compared to their male peers. Even so, participation in football and men's basketball yielded the highest levels of openness to diversity and challenge.

Although the literature on the impact of intercollegiate athletic participation on behavioral outcomes associated with civic engagement is scarce, there are a few studies that yield important observations. Shulman and Bowen (2001) used data from 30 highly selective institutions across all three divisions to debunk some of the myths about intercol-

legiate athletics in higher education. In their analysis of the college and postcollege experiences of about 90,000 student athletes who entered college at three points in time (1951, 1976, and 1989), the authors found that former student athletes did not differ from their peers in their level of volunteerism. More current data on the impact of athletic involvement on the decision and intention to volunteer suggest that athletics has a null effect (Cruce & Moore, 2007). In other words, student athletes were not different from their peers in terms of the extent to which they volunteered or had intentions for volunteering. Additionally, Sax (2004) found that exercising and playing sports had a positive effect on community involvement, a measure of civic behavior. In this analysis it is unclear whether Sax is referring to intercollegiate or intramural sport participation.

Taken together, the scarcity of evidence and mixed results on the impact of intercollegiate athletic participation on civic values and behaviors warrant further investigation in this area. Thus, the purpose of this study was to compare the fit and structural relationships of a previously tested conceptual model across two student populations: Athletes and nonathletes. The following research questions guided the study:

- How do students with varying levels of athletic involvement differ with respect to their social activism goals and charitable involvement behaviors?
- To what extent is the conceptual model, which depicts the relationships among student predispositions toward civic responsibility, college culture, college involvement, and college civic values and behaviors, applicable to athletes and nonathletes?

## *Methods*

### *Sample*

This study was based on two national college student surveys, the 2000 Cooperative Institutional Research Program (CIRP) Freshman Survey and the 2003 College Students Beliefs and Values (CSBV) Survey, developed by UCLA's Higher Education Research Institute (HERI). The 2000 CIRP is an instrument that measures a wide range of constructs associated with students' behaviors, attitudes, values, self-assessments, and expectations as they enter college. It was administered to a national sample of entering first-year college students at 434 baccalaureate colleges and universities across the country. In 2003, a subsample of students who had participated in the 2000 CIRP administration was asked to respond to the CSBV survey, an instrument that includes



measures pertaining to meaning, purpose, civic responsibility, and spirituality. The CSBV survey was developed in conjunction with HERI's Spirituality in Higher Education project, a major multiyear program of research that was initiated in 2003 with funding from the John Templeton Foundation.<sup>1</sup>

The final sample consisted of 3,680 students at 46 institutions who responded to both the CIRP and CSBV surveys. The 46 institutions represented in the sample included colleges and universities that varied by type (university vs. four-year college), control (public, private nonsectarian, or religious), selectivity, and size, although private institutions and four-year colleges were overrepresented in the sample. Approximately two thirds of the sample attended private and/or four-year institutions. With respect to the demographic characteristics of the sample, the respondents were 67% female and included students of six racial/ethnic groups as follows: 87% White, 5% Black/African American, 4% Asian/Asian-American, 4% Latino/a, 2% Native American, and 3% other. (Percentages total to more than 100 because students were given the option of marking more than one race/ethnicity.) Regarding sports involvement, 4% of the sample ( $n = 147$ ) participated in high-profile sports (football and basketball), 20% ( $n = 706$ ) participated in low-profile sports, and 3% ( $n = 99$ ) participated in both high-profile and low-profile sports.

To reduce response bias in the data, cases that were missing responses to 18 or more survey questions were omitted. Missing data for continuous variables were replaced using the Missing Values Analysis procedure with the expectation-maximization (EM) method supported by SPSS 17.0, resulting in a final sample of  $n = 3,569$ .

### *Measures*

The five measures in the conceptual model validated by Bryant, Gayles, and Davis (in press) included three latent constructs and two observed variables. The latent constructs were evaluated via confirmatory factor analysis (CFA) using the statistical package AMOS 17.0 (See Table 1).

*Social Activism and Charitable Involvement at Time 1* consisted of charitable involvement and social activism indicators in the database. Charitable involvement indicators at Time 1 (e.g., volunteering, doing community service as part of a class) were measured during students' last year of high school. Social activism indicators at Time 1 (e.g., commitment to goals such as promoting racial understanding and becoming a community leader) were measured upon entry to college. This "pretest" construct was intended to control for students' preexisting

TABLE 1  
Fit Indices for Confirmatory Factor Analysis of Individual Scale Fit

Model	$\chi^2$	<i>df</i>	$\chi^2/df$	RMR	GFI	CFI	RMSEA
Social activism and charitable involvement Time 1	67.96	4	16.99	0.04	0.99	0.99	0.067
Social activism Time 2	39.94	2	19.97	0.03	0.99	0.99	0.073
Charitable involvement Time 2	14.99	2	7.50	0.01	1.00	0.99	0.043

proclivities in the model. It included 10 items that were parceled into five composites. Initial factor loadings based on a CFA of all 10 items were used to determine item pairs for the composites. This “parceling” procedure involves pairing items with low and high factor loadings to balance the error across each composite. Table 2 details the item pairings and resultant factor loadings for each composite.

*Social Activism* at Time 2 was comprised of eight items associated with students’ *goals* to reduce pain and suffering in the world, help others in difficulty, influence the political structure, influence social values, help to promote racial understanding, become a community leader, participate in a community action program, and become involved in programs to clean up the environment.

*Charitable Involvement* at Time 2 consisted of four items involving students’ *behaviors* during college: volunteering, donating money, participating in clothing or food drives, and helping friends with personal problems. Although the Cronbach’s alpha of 0.60 proved to be lower than the traditionally accepted level of 0.70, the factor loadings and fit indices suggest an acceptable fit with the data.

Lastly, two observed variables—college culture and cocurricular engagement—were included in the model. College culture was a composite of the mean of social activism at Time 2 and the mean of charitable involvement at Time 2, aggregated by institution. In other words, the college culture measure approximated the peer environment to which students on a given campus were exposed. This observed variable also served as an institution-level variable to control for some of the error associated with the nested structure of the data. We recognize that students attending the same institution are likely to behave in similar ways. In order to keep the model as parsimonious as possible, we intentionally selected campus culture as an institution-level variable to control for the clustered sampling design, which has the potential to produce small

TABLE 2  
Factor Loadings for Confirmatory Factor Analyses

Factor/Item	Loading
Social activism and charitable involvement Time 1 ( $\alpha = 0.80$ )	
Social activism/charitable involvement 3 <sup>a</sup>	0.79
Social activism/charitable involvement 1 <sup>b</sup>	0.70
Social activism/charitable involvement 2 <sup>c</sup>	0.69
Social activism/charitable involvement 4 <sup>d</sup>	0.59
Social activism/charitable involvement 5 <sup>e</sup>	0.56
Social activism Time 2 ( $\alpha = 0.83$ )	
Social activism Time 1 <sup>f</sup>	0.79
Social activism Time 3 <sup>g</sup>	0.77
Social activism Time 4 <sup>h</sup>	0.71
Social activism Time 2 <sup>i</sup>	0.68
Charitable involvement Time 2 ( $\alpha = 0.60$ )	
Performed other volunteer work	0.62
Participated in community food or clothing drives	0.59
Donated money to charity	0.49
Helped friends with personal problems	0.40

<sup>a</sup> Composite includes: Goal: Promoting racial understanding and Performed volunteer work in last year of high school.

<sup>b</sup> Composite includes: Goal: Participating in community action program and Did community service as part of a class.

<sup>c</sup> Composite includes: Goal: Be a community leader and Hours per week: Volunteering in last year of high school.

<sup>d</sup> Composite includes: Goal: Influencing social values and Goal: Becoming involved in programs to clean up the environment.

<sup>e</sup> Composite includes: Goal: Helping others who are in difficulty and Goal: Influencing the political structure.

<sup>f</sup> Composite includes: Goal: Participating in a community action program and Goal: Influencing the political structure.

<sup>g</sup> Composite includes: Goal: Becoming a community leader and Goal: Reducing pain and suffering in the world.

<sup>h</sup> Composite includes: Goal: Helping others who are in difficulty and Goal: Influencing social values.

<sup>i</sup> Composite includes: Goal: Helping to promote racial understanding and Goal: Becoming involved in programs to clean up the environment.

standard errors. Additionally, we used a more conservative alpha value for significance testing ( $p < 0.01$ ). Future studies might employ a more advanced structural equation modeling technique that controls for more institution-level variables.

The second observed variable, students' cocurricular engagement in college, reflected student involvement in five activities expected to encourage socially responsible goals and behaviors during the first three years of college. These variables included whether students had joined a social fraternity or sorority, participated in student government, attended a racial/cultural awareness workshop, participated in leadership training, or joined a religious organization on campus. Scores were

calculated by summing responses on all five items and dividing by the number of items. As a result, respondents received a score ranging from 1 to 2 on the co-curricular composite measure, with "1" representing no involvement and "2" representing involvement in all five activities.

The student athlete variable distinguished the following groups: non-athletes, low-profile athletes, high-profile athletes, and athletes involved in both high- and low-profile sports. The applicability of the model was assessed for (a) nonathletes and (b) athletes identifying with any of the three levels of sport involvement.

Items, factor loadings, and Cronbach's alphas for each latent construct are shown in Table 2. Appendixes A and B provide means, standard deviations, minimum and maximum values, and intercorrelations for all variables in the model.

### *Analysis*

The analysis began by comparing the four groups with varying levels of athletic involvement (none, low-profile, high-profile, and high- and low-profile) on observed measures of social activism and charitable involvement at Time 2 using analysis of variance (ANOVA) techniques. Where significant differences were identified, post-hoc comparisons (Tukey HSD and Tamhane's T2) were used to specify the differences between groups.

Structural equation modeling (SEM) with AMOS 17.0 was used to examine the utility of the model by athletic participation (i.e., athletes vs. nonathletes). First, we conducted separate SEM analyses for each group to ensure that the model fit was acceptable across both groups. Various fit indices were used to judge the adequacy of the resultant models. The ratio of the chi-square ( $\chi^2$ ) to its degrees of freedom (*df*) was used as a descriptive index of improvement in fit per degree of freedom. The chi-square index is commonly used to evaluate the degree to which the estimated model fits the sample data, with nonsignificant values indicating optimal fit (Schumaker & Lomax, 1996). We also used the root mean square error of approximation (RMSEA) as an indication of model-data fit. RMSEA represents closeness of fit and should be 0.06 or less (Hu & Bentler, 1999). The root mean residual (RMR), the average absolute value of the covariance residuals between the specified and obtained variance-covariance matrices, should be less than 0.08 (Hu & Bentler, 1999). Finally, the goodness-of-fit index (GFI; which reflects the percentage of observed covariances explained by the covariances implied by the model) and the comparative fit index (CFI; which reflects the percent of covariation in the data that can be reproduced by

the given model) should reach 0.90, but ideally should be 0.95 or higher (Hu & Bentler, 1999).

Second, we tested for measurement invariance to shed light on whether model parameters differed significantly between athletes and nonathletes. Testing for measurement invariance involves comparing the unconstrained model for pooled comparison groups with models in which certain parameters are constrained to be equal between the groups. For this study, we compared the unconstrained model to models with (a) measurement weights (latent construct factor loadings) constrained to be equal and (b) structural weights (regression coefficients) constrained to be equal. The chi-square difference statistic was used to assess whether there were significant differences between the unconstrained and the constrained-equal models. When the change in chi-square proved nonsignificant from the unconstrained to constrained-equal models, invariance (i.e., applicability of the model across groups) was assumed. We investigated parameter differences when significant changes in chi-square suggested noninvariance. Specifically, we compared unstandardized measurement weights (factor loadings) and structural weights (regression coefficients) across groups using a *t*-test statistic (Sax, 2008).

## *Results*

### *Differences in Social Activism and Charitable Involvement by Athletic Involvement*

The one-way ANOVA revealed no differences in mean social activism across different levels of athletic participation ( $F = 1.624, p = 0.182$ ). In other words, college students maintain equivalent levels of commitment to social activism goals regardless of their involvement in college sports. By contrast, group means on the charitable involvement construct evidenced significant differences ( $F = 3.573, p = 0.013$ ). Post-hoc comparisons illuminated differences between nonathletes and high-profile athletes and between low-profile athletes and high-profile athletes. In both cases, high-profile athletes were the least involved in charitable endeavors. Interestingly, although the differences on the social activism construct were non-significant, high-profile athletes exhibited the highest score; the fact that they demonstrated the lowest scores on the behavioral measure of engagement in charitable activities points to an important contrast between the intentions and goals of high-profile athletes and their actual behaviors. Means on both constructs by group are provided in Table 3.

TABLE 3  
Means for Social Activism and Charitable Involvement by Athletic Participation

Group	Social Activism Mean	Charitable Involvement Mean
Nonathletes	18.90	8.47
Low-profile athletes	19.23	8.42
High-profile athletes	19.45	8.04
Low/high-profile athletes	18.94	8.43

### *Multigroup Analysis*

When comparing the applicability of the conceptual model for athletes and nonathletes, the first step entailed running separate models for each group. The resultant fit indices suggested that the model generally fit the data for each group. The  $\chi^2/df$  ratio for athletes was 3.422, the CFI 0.951, the GFI 0.962, the RMSEA 0.050, and the RMR 0.060. By comparison, the  $\chi^2/df$  ratio for nonathletes was 7.290, the CFI 0.957, the GFI 0.971, the RMSEA 0.049, and the RMR 0.053. The expected cross-validation index (ECVI), which yields lower values for better fitting models, was 0.372 for athletes and 0.254 for nonathletes, a difference which is statistically significant and indicative of the model approximating the nonathlete data more effectively than the athlete data.

In the second step of the multigroup analysis, comparison of the unconstrained model for the pooled groups to models in which certain parameters were constrained to be equal between the two groups revealed significant differences between the unconstrained model and models in which (a) measurement weights (latent construct factor loadings) were constrained to be equal and (b) structural weights (regression coefficients) were constrained to be equal. In other words, invariance (uniform model applicability) could not be assumed for athletes and nonathletes.

The final step of the multigroup analysis involved comparing factor loadings and path estimates across groups to locate the source of the noninvariance. As shown in Table 4, none of the path estimates differ significantly between the two groups at  $p < 0.01$ . That is, the relationships among student predispositions toward civic responsibility, college culture, cocurricular engagement, and civic values and behaviors are relatively similar for students regardless of sport participation. Two paths were significantly different at  $p < 0.05$ . First, social activism and

charitable involvement at Time 1 is positively related to social activism at Time 2 for both groups, but the path is somewhat stronger for athletes. Second, cocurricular engagement is positively associated with social activism at Time 2 for athletes and nonathletes, but the relationship is slightly stronger for nonathletes. Even so, we applied a stringent alpha value of  $p < 0.01$  in this study, and therefore consider these group differences to be minimal. Another source of noninvariance concerns the measurement weights (i.e., factor loadings, not shown): Among athletes, three of the factor loadings on the social activism and charitable involvement at Time 1 construct are significantly greater relative to nonathletes. Table 5 displays direct, indirect, and total effects by group, and Figures 2 and 3 present the unstandardized estimates in diagram form.

TABLE 4  
Structural Path Differences: Unstandardized Estimates for Athletes and Nonathletes

Path	Athletes			Nonathletes			<i>t</i>	Sig.
	b	SE	Sig.	b	SE	Sig.		
Social activism/charitable involvement Time 1								
College culture	0.230	0.052	***	0.249	0.030	***	-0.316	
Cocurricular engagement	0.091	0.011	***	0.072	0.006	***	1.516	
Social activism Time 2	0.687	0.057	***	0.555	0.027	***	2.093	*
College culture								
Cocurricular engagement	0.024	0.007	***	0.037	0.004	***	-1.612	
Social activism Time 2	0.117	0.030	***	0.087	0.016	***	0.882	
Charitable involvement Time 2	0.022	0.010	*	0.019	0.005	***	0.268	
Cocurricular engagement								
Social activism Time 2	0.405	0.144	**	0.758	0.085	***	-2.111	*
Charitable involvement Time 2	0.613	0.062	***	0.486	0.035	***	1.784	
Social activism Time 2								
Charitable involvement Time 2	0.099	0.014	***	0.128	0.009	***	-1.742	

\*\*\* $p < 0.001$ ; \*\* $p < 0.01$ ; \* $p < 0.05$

TABLE 5  
Unstandardized Direct, Indirect, and Total Effects for Athletes and Nonathletes

Structural Path	Athletes			Nonathletes		
	Direct	Indirect	Total	Direct	Indirect	Total
Social activism/charitable involvement Time 1						
College culture	0.230	-	0.230	0.249	-	0.249
Cocurricular engagement	0.091	0.006	0.097	0.072	0.009	0.081
Social activism Time 2	0.687	0.066	0.753	0.555	0.083	0.639
Charitable involvement Time 2	-	0.139	0.139	-	0.126	0.126
College culture						
Cocurricular engagement	0.024	-	0.024	0.037	-	0.037
Social activism Time 2	0.117	0.010	0.127	0.087	0.028	0.116
Charitable involvement Time 2	0.022	0.027	0.050	0.019	0.033	0.052
Cocurricular engagement						
Social activism Time 2	0.405	-	0.405	0.758	-	0.758
Charitable involvement Time 2	0.613	0.040	0.653	0.486	0.097	0.583
Social activism Time 2						
Charitable involvement Time 2	0.099	-	0.099	0.128	-	0.128

### *Discussion*

This study explored the impact of college athletic participation on the relationship between social activism goals and charitable involvement—civic engagement measures that have not been the focus of previous research on students' involvement in college sports. Some have expressed concern regarding the influence of athletic participation on higher education generally and on students specifically (Bowen & Levin, 2003). This study confirms that, despite their best intentions to be socially engaged citizens, student athletes—and especially high-profile athletes—are less involved in charitable activities than their nonathlete peers. Perhaps reflective of the significant time constraints student athletes face, the findings from this study highlight an evident disconnect between the values student athletes profess and their ability to translate social values into social action.

Even so, this study posits that college environments and experiences can be adjusted in such a way to promote civically responsible values and behaviors, regardless of athletic participation. As we would expect on the basis of past research on civic attitudes and behaviors (Astin, 1996; Astin & Sax, 1998; Astin, Sax, & Avalos, 1999; Eyler & Giles,



1999; Eyer, Root, & Giles, 1998; Kezar & Rhoads, 2001; Pascarella & Terenzini, 2005; Sax, 2004; Sax & Astin, 1997), cocurricular engagement in myriad contexts are of particular importance; the combined effects of leadership training sessions, student government, campus religious organizations, racial/cultural awareness workshops, and fraternities/sororities on social activism goals and charitable involvement are noteworthy. In fact, student engagement in cocurricular activities, which is predicated on prior beliefs and experiences as well as the peer environment on campus, is influential in promoting social activism goals and subsequent charitable behaviors regardless of athletic participation. This finding in particular supports previous research suggesting that interaction with peers other than teammates, which typically occurs through engagement in the campus environment, is beneficial to student learning and personal development (Gayles & Hu, 2009; Schroeder, 2000; Umbach, Palmer, Kuh, & Hannah, 2006).

Involvement in athletics, it seems, neither furthers nor substantially detracts from the way college affects students' civic values and behaviors. In relation to existing research and perspectives on college sports that paint such engagement in either a positive (Pascarella & Smart, 1991; Whitt, Edison, Pascarella, Terenzini, & Nora, 2001; Wolf-Wendel, Toma, & Morphew, 2001) or negative (Bowen & Levin, 2003) light, the findings of this study assume a relatively neutral stance regarding the impact of athletic involvement, reiterating the results of Cruce and Moore (2007). The good news is that athletic involvement is not a deterrent among student athletes when other promising involvements are available. This finding provides an alternative answer to the question of whether student athletes benefit from the college experience to the same extent as their peers. Although it would be ideal if athletic participation on its own accord enhanced civic values and behaviors, it is reassuring to know that institutions committed to fostering these values and behaviors across the entire student body—and those that provide student athletes with opportunities to participate in cocurricular activities within and beyond the athletic program—may encourage *all* students to develop congruence between their civic values and behaviors.

#### *Implications for Practice*

Our study suggests that student athletes are not significantly different from other students in their goals to be socially active citizens. Their concerns and commitments generally mirror those of nonathletes. Yet, limitations on their time appear to prohibit—to a slight extent—their ability to act on their intentions and goals. The pragmatic message of this study is to provide outlets for student athletes to engage in chari-

table behaviors in conjunction with their athletic participation. One tactic often used by athletics administrators is to integrate leadership and involvement opportunities *within* athletic programs to achieve desired outcomes. This approach has been implemented through initiatives such as the Challenging Athletes' Minds for Personal Success (CHAMPS)/Life Skills program at over 1,000 colleges and universities with athletic programs around the country. The CHAMPS/Life Skills program has an integral service/volunteer component, which, together with personal development and academic excellence foci, works to enhance student athletes' overall college experience. However, student athletes should be encouraged to also interact with their non-athlete peers as this type of involvement has been shown to enhance personal growth and development (Gayles & Hu, 2009). Concern has also been expressed about the duplication of programs and services on college campuses, particularly over the last few years of economic downturn that has rippled across the country. Encouraging collaborations between college sport programs and student service offices on campus would ensure that student athletes have opportunities to engage in educational activities with their peers, thus maximizing the benefits for all students.

#### *Limitations and Future Research*

There are a few limitations of this study that warrant attention. First, despite the large number of participants, the sample for the CSBV survey overrepresents students attending private and/or four year institutions, women, and White students. Because of its focus on meaning, purpose, and spirituality it is likely that private institutions were more attracted to the CSBV survey compared to public institutions. For future administrations of the survey, researchers might consider explaining the benefits of understanding affective outcomes for students attending public institutions and be more intentional about oversampling public institutions to account for this potential bias. Second, the college culture variable may not be as reflective of the attitudes and values of all students at each institution because of the way it was calculated. The measure was based solely on students who responded to the survey rather than on the student body as a whole. Thus, it is not as accurate as it might have been had the entire population or a representative sample of the population been used to approximate college culture.

#### *Conclusion*

In conclusion, the findings from this study add to the scarce literature on the impact of athletic participation on an important aspect of

personal development. Moreover, the results debunk some of the negative messages about student athletes' college experience—particularly those suggesting that student athletes do not benefit in positive ways from participation in college sports. At a time when higher education is committed to renewing its focus on civic education, it is imperative to know how such efforts are experienced by various subcultures of campus environments. It appears that there is incongruence between student athletes' social values and subsequent charitable behaviors, and helping student athletes find ways to align the two will be beneficial to their personal growth and development.

*Note*

<sup>1</sup> The study's Co-Principal Investigators are Alexander W. Astin and Helen S. Astin, and the project is directed by Jennifer A. Lindholm.

APPENDIX A

Means, Standard Deviations, and Minimum and Maximum Values for Athletes and Nonathletes

Variable	Athlete ( <i>n</i> = 952)			Nonathlete ( <i>n</i> = 2,617)		
	Mean	<i>SD</i>	Max	Mean	<i>SD</i>	Max
Social activism/charitable involvement						
Time 1	21.742	4.833	39,000	21.756	5.002	38,000
College culture	27.591	1.110	31,207	27.373	1.263	31,207
Cocurricular engagement	1.265	0.240	2,000	1.263	0.242	2,000
Social activism Time 2	19.235	4.264	31,000	18.897	4.386	32,000
Charitable involvement Time 2	8.364	1.515	12,000	8.474	1.596	12,000

APPENDIX B

Bivariate Correlations

Variable	Charitable Involvement Time 2	Social Activism Time 2	College Culture	Cocurricular Engagement	Social Activism & Charitable Involvement Time 1
	Charitable involvement Time 2	1.000	0.387	0.199	0.439
Social activism Time 2	0.387	1.000	0.210	0.291	0.484
College culture	0.199	0.210	1.000	0.221	0.155
Cocurricular engagement	0.439	0.291	0.221	1.000	0.271
Social activism/Charitable involvement Time 1	0.324	0.484	0.155	0.271	1.000

Note. All correlations are significant at  $p < 0.01$ .

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