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**Building an Athlete Community Service Motivation Model:
Investigating the Relationship Between Athletic Identity, Student
Involvement, and Community Service**

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A recent study by the National Collegiate Athletic Association (NCAA) found that approximately 90% of college athletes participate in community service and nearly 60% of college coaches require community service as a team activity. Participation in community service may provide critical, yet formidable, development opportunities that college athletes may otherwise miss given the myriad of time commitments they experience. Compulsory community service may inhibit a college athlete's motivation to perform service, thereby also effectively stunting or delaying personal growth and development. The purpose of this study was to measure college athlete motivation as it pertains to community service participation, as well as how athletic identity may impact a college athlete's motivation to participate in community service. Participants included college athletes ($n = 546$) from NCAA Division I, II, and III institutions. Utilizing structural equation modeling, results of this study were used to develop an Athlete Community Service Motivation Model. There was a significant positive relationship between an athlete's year in college and the number of his/her community service hours, and a significant negative relationship between an athlete's year in college and community service motivation. Additionally, there were no significant differences between community service hours and NCAA division. Lastly, a significant, negative relationship between service as punishment and community service hours was reported.

College is a time when students begin to explore their beliefs and priorities, and often do so through involvement in different campus activities. One particular group, college athletes, is extensively involved in university-related activities. A recent study by the National Collegiate Athletic Association (NCAA) found that Division I athletes spend an average of 34 hours per week on athletic-related activities, including competition, practice, strength and conditioning, film review, and supplemental workouts (NCAA, 2016). College athletes also devote a weekly average of 38.5 hours to academic pursuits and roughly 15.5 hours socializing with friends and relaxing. Considering college students average 7 hours of sleep per night, or 49 hours per week (Kamenetz, 2016), athletes are left with approximately 36 hours to attend to other activities such as nutrition sessions, academic advising appointments, compliance meetings, treatment for injuries, and hosting prospective athletes (NCAA, 2017). In addition, more than 90% of athletes participate in community service with nearly 60% of coaches requiring such service from their athletes (NCAA, 2016).

Participation in community service may provide critical, yet formidable, development opportunities that college athletes may otherwise miss given the myriad of time commitments they experience. Prior research suggests students who participate in community service exhibit higher academic achievement (e.g., grade point average), increased levels of life skill development (e.g., critical thinking), and more civic engagement (Astin & Sax, 1998) compared to students who do not engage in these community activities. Similarly, Richard and Aries (1999) reported similar levels of development for athletes who performed community service. When community service is required by a coach or used for punishment, however, college athletes may not derive the same developmental benefits from service activities (Gage & Thapa, 2012; Henderson, Pancer, & Brown, 2014). Furthermore, compulsory community service may inhibit an athlete's motivation to perform similar service in the future, thereby effectively stunting or delaying personal growth and development.

Given this background, the present study explores athlete motivation as it pertains to community service participation. Further, given the time spent in athletic related activities, this study seeks to extend the tenets of athletic identity (Brewer & Cornelius, 2001) by examining how athletic identity may impact a college athlete's motivation to participate in community service.

Theoretical Framework

Student Involvement Theory

This inquiry seeks to extend the constructs of Astin's (1984) student involvement theory, which focuses on the physical and psychological energy students apply to their academic experience. Student involvement theory possesses five basic postulates (Astin, 1984):

- (1) Involvement refers to the investment of physical and psychological energy in various objects
- (2) Involvement occurs along a continuum
- (3) Involvement is both quantitative and qualitative

- (4) Student learning and personal development associated with any education program is directly proportional to the quality and quantity of student involvement in that program
- (5) The effectiveness of any educational practice is related to the capacity of that practice to increase student involvement (p. 298).

Astin (1984) posited that focusing on involvement instead of outcomes would lead to improved student development. Student involvement theory is framed from the perspective of higher education administrators who, in an effort to put students in “the driver’s seat” of their own learning, allow the university to play a supplemental role in showcasing student involvement opportunities instead of dictating them. This is a formidable challenge for administrators, who often have to compete with numerous other available student activities. Students face an even more difficult task than administrators, as they are presented with countless activities and a finite amount of time to pursue them.

Given the challenges students face in making decisions about their involvement in educational activities, administrators can create educational opportunities to assist their student population. With a finite amount of student time, attention to detail is essential when implementing or changing university policies and practice, as these changes (e.g. class schedules, club/intramural availability) can have a ripple effect on how students utilize their time toward their academic options. This guidance is not isolated to university administrators, but can apply to regional accreditors, athletic conferences, and system-based chancellors because academic priorities at these levels often trickle down to university-wide administrators and may ultimately influence student-based activity offerings.

Even with student involvement theory’s focus on the interaction between university and student, the tenets of student involvement theory have been understudied, especially as they pertain to community service. Studies have investigated required community service, finding mixed results on whether requiring community service affected a student’s interest in or experience with volunteering (Gage & Thapa, 2012; Henderson et al., 2014). Others have found community service organizations dissatisfied with their relationship with college organizations, often finding universities are interested in their students’ volunteering but not in building a relationship with the community service organization (Blouin & Perry, 2009; Svensson, Huml, & Hancock, 2014). These studies are limited in examining how university interaction affects a typical student’s motivation, involvement, and benefits from volunteering (Jones & Hill, 2003). Athletes, who tend to be highly involved in their sport also have a relatively high level of university interaction. Controlling for forced or required activities, there may be some expectation that athletic identity negatively affects involvement in other forms of educational experiences, such as community service. This notion, however, has yet to be tested.

Applying student development theories to college sport context remains an underdeveloped research focus (Weight, Navarro, Huffman, & Smith-Ryan, 2014). With collegiate athletes facing a unique educational experience compared to other college students, the application of theory can provide insight into an athletes’ unique academic challenges. Collegiate athletes have previously been used as a population for researchers’ applying student involvement theory (Huml, Svensson, & Hancock, 2017; Svensson et al., 2014; Weight et al., 2014), but these studies have been limited in their scope. These inquiries examined educational benefits stemming from campus involvement, but did not specifically measure involvement in community service, nor collect data directly from athletes.

Research specific to community service in intercollegiate athletics is limited. Athletic departments have been shown to use community service as a form of punishment, requiring athletes to volunteer as a form of penance for transgressions such as breaking team rules (Huml, Svensson, & Hancock, 2014). What has not been previously studied is the effect of athletic department personnel's influence on collegiate athletes' motivations to volunteer. Previous studies have investigated the impact of college students performing community service, finding mixed results. Some studies have mentioned negative ramifications, such as reduced future community service involvement, perceiving their involvement as forced labor, and fewer perceived benefits from performing community service compared to those who chose it voluntarily (Gage & Thapa, 2012). Others have reported benefits from forced community service such as exposure to volunteer opportunities they would not have chosen willingly (Henderson et al., 2014). Community service as a form of punishment is in contrast, however, to the theoretical tenets of student involvement theory, providing a unique context of application to collegiate athletes.

Each NCAA division stresses the importance of community service for their collegiate athletes differently. Both NCAA Division II and III have yearly events designed to increase interest and participation in collegiate athletes volunteering (e.g., NCAA, n.d.). This prioritization of community service runs aligns with the tenets of student involvement theory but has not been previously examined. Results have been mixed on whether athletic department mission statements have an impact on collegiate athlete community service (Andrassy & Bruening, 2011). Departmental mission statements are designed to be individualistic, limited in their potential impact when compared to strategies being implemented at the NCAA division-level.

Lastly, studies with traditional college students have reported increased participation in community service the further along they are within their program (i.e., the longer they are attending college; Astin, 1999). This association has been previously tied to student involvement theory under the premise of university students needing to become more comfortable with participating in an activity before they actually take part (Astin, 1993). This association has not been previously examined with collegiate athletes, and scholars have raised concerns about the connection between athletics and academics (Weight et al., 2015), potentially eroding the expectation of athletes being more aware and active in educational-related activities the longer they stay in college.

In the present study, the researchers extend previous literature through an examination of collegiate athletes' community service perceptions. Specifically, our study examined collegiate athletes' (a) motivations to volunteer, (b) benefits received from volunteering, and (c) community service hours performed during the past semester. This research context relates to both student involvement theory and athletic identity for multiple reasons. Therefore the following hypotheses were used to guide the application of student-involvement theory in our study:

H₁: Year in college will have a significant, positive relationship with collegiate athlete (a) motivation to perform community service, (b) number of community service hours, and (c) reported benefits from performing community service.

H₂: NCAA Division II and III collegiate athletes will have a significant, positive relationship with collegiate athlete (a) motivation to perform community service and (b) number of community service hours, compared to NCAA Division I collegiate athletes.

H₃: Performing community service as punishment will have a significant, negative relationship with collegiate athlete (a) motivation to perform community service, (b) number of community service hours, and (c) reported benefits from performing community service.

Beyond student involvement theory, this inquiry also seeks to extend the tenets of athletic identity (Brewer & Cornelius, 2001). Athletic identity is the degree to which an individual identifies with his/her role as an athlete (Brewer, Van Raalte, & Linder, 1993). Athletic identity is built from the framework of role identity theory, which describes one's occupation and negotiation among a set of roles (Stets & Burke, 2000). Individuals will prioritize certain roles over others, finding ways to seek out activities and other people who embody these prioritized roles. This can lead to greater salience within a single role, potentially to the detriment of the individual's other roles (Riley & Burke, 1995; Stryker & Serpe, 1994).

Salience of one role has been a frequently discussed phenomenon within athletic identity studies. Athletes have exhibited a willingness to sacrifice their academic and social development skills in order to focus on their sporting career (Bimper, 2014; Foster & Huml, 2017; Lally & Kerr, 2005). Even athletes proficient in time management may be able to balance academics and athletics, but at the expense of abandoning their social life (Stambulova, Engström, Franck, Linnèr, & Lindahl, 2015). For some athletes, participating in college sports is the final step before becoming a professional athlete, where athletes often double-down on their sport commitment in order to achieve a life-long dream. This increased focus on sport while in college, particularly with the dream of playing professionally, can have significant, negative consequences on their post-athletic career. Athletes have later expressed remorse for putting too much attention on sport when entering higher education, therefore reducing their post-athletic career optimism (Murdock, Strear, Jenkins-Guarnieri, & Henderson, 2016). Continuous pursuit of a professional sporting career can lead to athletes transferring schools in hopes of finding playing time, reducing their likelihood of graduation (Huml, Bergman, & Hums, 2014; Lally & Kerr, 2005; Pate, Stokowski, & Hardin, 2011).

The longer amount of time an athlete spends in college, the more likely they are to experience a reduction in their athletic identity salience and find improved balance between academics and athletics (Miller & Kerr, 2002). While scholars have identified negative relationships with the many classroom- and career-based metrics associated with athletic identity, limited research examines the interaction between athletic identity and educational-based activities beyond the classroom, such as community service (Antshel, VanderDrift, & Pauline, 2016). Finding certain educational activities that are positively associated with athletic identity from either a developmental stand-point would provide practitioners valuable assistance with offering educational experiences to athletes strongly committed to their sport. This can be especially true for community service motivation. Previous studies have highlighted the strong correlation between students' motivation to perform community service and both their community service hours and the benefits they extract from volunteering (Clary et al., 1998; Deal & Camiré, 2016; Schatteman, 2014). This showcases the potential of having community service motivation as a mediator between an athlete's athletic identity and his/her involvement in

community service. Because of this, the following hypotheses were used as guide to assess the application of athletic identity salience to our study:

H₄: Athletic identity level will have a direct, negative relationship with collegiate athlete motivation to perform community service

H_{5A}: Athletic identity level will have an indirect, negative relationship with the collegiate athlete community service hours (per semester), mediated by their motivation to perform community service

H_{5B}: Athletic identity level will have an indirect, negative relationship with collegiate athlete benefits from performing community service, mediated by their motivation to perform community service

Community Service and Student Involvement Theory

A large majority of college students perform community service on a yearly basis (Astin & Sax, 1998; Jacoby, 2009). Community service can provide volunteers with an outlet into varying forms of social-related issues, such as education, poverty, animal-related services, and health initiatives, supplementing many of the courses available on their college campus (Astin & Sax, 1998; Gage & Thapa, 2012). Students have reported numerous reasons for volunteering, such as helping others, trying to solve societal issues, or a desire for a new perspective, among many others (Clary et al., 1998). In return, volunteers self-reported benefits related to academic, social, and emotional improvements from their community service experience (MacNeela & Gannon, 2014).

Because of the positive, educational relationship between college students and community service organizations (CSOs), universities have attempted to build strong relationships with local CSOs and offer volunteer opportunities to their student population (Svensson et al., 2014). With previous scholars raising concerns about the educational environment being provided to collegiate athletes (Eckard, 2010), and the strong relationship between community service and educational-related benefits (Astin & Sax, 1998), exposing collegiate athletes to community service could be an ideal opportunity for improving the academic development of collegiate athletes. The topic, however, remains understudied.

Community Service and Athletic Identity

Community service also provides a unique context for studying the effect of athletic identity on collegiate athlete participation. Athletes have reported how their sport participation negatively affects their ability to be more involved in educational opportunities. These reports include a lack of time available to pursue such opportunities or the self-desire to focus instead on their sport (Brewer et al., 1993). Past research indicates a strong athletic identity negatively impacts an athlete's academic involvement, ranging from graduation rates, degree retention, course choices, and choosing a post-athletic career (Beron & Piquero, 2016; Eckard, 2010). Many of these studies are based on classroom-related or university outcome-based assessment, such as graduation rates, limiting the application to developmentally-enriched activities such as community service. Community service provides greater flexibility than courses and academic-related activities, as CSOs need volunteers during both traditional and non-traditional hours

(Blouin & Perry, 2009), therefore reducing some conflicts that have been reported by college athletes.

Based on these findings within sport management research, the researchers first examined the direct relationship between the constructs of athletic identity and community service motivation, followed by the indirect relationship between athletic identity and (a) community service participation and (b) community service benefits. The researchers then explored student involvement-related variables, specifically the collegiate athletes' (a) year in college, (b) their institution's NCAA division, (c) whether they performed community service as punishment, and (d) their relationship with community service motivation, benefits, and participation.

Method

Participants

The participants for this study were active collegiate athletes at NCAA member institutions ($n = 546$). To increase the generalizability of the results, the researchers targeted collegiate athletes at all three NCAA divisions. A stratified random sampling technique was used to ensure participants represented all three NCAA divisions and various geographic locations. A stratified random sample allows the research to randomly target participants across a desired variable. Since the researchers wanted to collect data from across all three NCAA divisions, NCAA divisional level was the chosen strata, or shared attribute (Cresswell, 2013). Geographic location was chosen because a university's location has shown to be associated with varying levels and commitment to community engagement (Weerts & Sandmann, 2008). The institution's NCAA division was also chosen because of public statements of prioritizing community service within specific NCAA divisions (NCAA, n.d.) and the differing educational experience of college athletes depending on their NCAA division level (Rankin et al., 2016). The sample included collegiate athletes from 17 different NCAA institutions (7 Division I, 7 Division II, 3 Division III). Frequencies and demographics of the sample population are provided in Table 1.

Instrumentation

Data were collected from participants on three separate constructs: (1) athletic identity, (2) community service motivation, and (3) community service benefits. In addition, data was collected on demographics (e.g., the participant's year in school), frequencies related to community service (e.g., the amount of community service they performed during the most recent semester), and antecedents/consequences related to community service (e.g., whether they performed community service as a form of punishment).

To assess the participant's athletic identity, the athletic identity measurement scale (AIMS; Brewer & Cornelius, 2001) was utilized. AIMS is the most frequently used instrument to measure athletic identity and has been established as a reliable and valid instrument (Ronkainen, Kavoura, & Ryba, 2016). There are two different, but similar, versions of the AIMS instrument. Initially, a 10-item, unidimensional instrument was established by Brewer, Van Raalte, and Linder (1993). Later, a 7-item, multidimensional instrument was created from a purified version of the original (Brewer & Cornelius, 2001). The more recent version for the multi-dimensionality

of the instrument was used for this study. The three subscales of AIMS include *social identity*, *exclusivity*, and *negative affectivity*.

Next, the volunteer function inventory, or VFI, was used to measure the participants' motivation to perform community service (Clary, Snyder, & Ridge, 1992). The VFI is designed to "measure the functions served by volunteerism" (Clary et al., 1998, p. 1518). The original instrument consisted of 30 items measuring six different subscales. To date, this instrument is frequently used to measure community service motivation and has been previously established as valid and reliable (Clary et al., 1998). Alterations to the instrument were made to better align with the overall purpose of this study and applied theoretical constructs. First, two subscales, values and protective, and two items in different subscales, were removed from the survey due to previous poor factor loading scores or concerns about application to the target population (Clary et al., 1992). Scholars that have utilized VFI since its introduction have frequently either not used these poorly loaded scales or heavily revised the items (Clary et al., 1998; Kim, Zhang, & Connaughton, 2010). Next, studies have showcased how college athlete volunteerism exhibits sport-related themes, such as connecting with their coaching staff, teammates, or fans (Svensson et al., 2014). In response, a new subscale to measure athletic-related motivations to volunteer (e.g., volunteering allows me to connect with my teammates) has been used to measure athlete-involved community service. Past analysis of this new subscale has provided evidence that it is valid and reliable (Huml, 2016). The version of the VFI scale used in the current study included 20 items in the following subscales: *career*, *social*, *understanding*, *enhancement*, and *sport connection*.

The final instrument used was the Inventory of Service Experience, or ISE (Taylor & Pancer, 2007). ISE was designed to measure "the extent to which they experienced positive outcomes in their community service setting" (Taylor & Pancer, 2007, p. 320). Just like the previously-mentioned scales, ISE has been previously established as valid and reliable and has been frequently used to measure benefits from performing community service (Taylor & Pancer, 2007). The original instrument consisted of 52 items measuring six different subscales. Similar to the VFI, the total items and subscales of the ISE were reduced to better align with the purpose of the study and target population. Additionally, five items previously used by Taylor and Pancer (2007) were removed due to poor factor loading scores in the original study. The final version of the ISE used for this study included 14 items across three subscales: *relations with others*, *learning skills*, and *exposure to career possibilities*.

Data Collection & Analysis

Following IRB approval for the study, the researchers started contacting NCAA institutions to participate in the study. To disburse the survey to our target population, the researchers first contacted athletic department personnel for approval before distributing to college athletes. An e-mail was sent to the university's athletic administrator in charge of academic services, community engagement, academic engagement, or head athletic director. This message provided contact information on the researchers, the purpose of the study, and a link to the Qualtrics-hosted survey. If an athletic administrator agreed to allow their collegiate athletes to be contacted for the study, another e-mail was sent to the administrator that was designed for disbursement to their college athletes. This e-mail included information on the study, IRB contact information to report any issues, a guarantee of anonymity for those who participated, and a link to the survey. One week after the study was initially disbursed, a follow-

up e-mail was sent to the athletic administrator as a reminder, which was forwarded to the participants. One week after the reminder, a final follow-up e-mail was sent. One week after the final follow-up e-mail, the survey was closed to new responses.

The researchers utilized structural equation modeling (SEM) to analyze our results. Parceling was used to test the hypothesized measurement and structural models. A parcel is an aggregate-level indicator containing the sum of multiple items within one composite score and have been widely used in academic research (Little, Cunningham, Shahar, & Widaman, 2002). These parcels were created for the subscales for each instrument (AIMS, VFI, and ISE). Additionally, exogenous variables were added to the model, following measurement model testing, to assess differences related to participant independent variables.

Measurement model. First, the researchers used AMOS 22.0 to perform a confirmatory factor analysis to assess overall model fit. Confirmatory factor analysis (CFA) is used to “examine patterns of interrelationships among several latent constructs” (Raykov & Marcoulides, 2006, p. 4). Performing a CFA allowed us to assess whether the measured variables were accurately portraying the expected constructs before reviewing the structural model (Jackson, Gillaspay, & Purc-Stephenson, 2009). Unlike exploratory factor analysis, CFA testing has the number of factors fixed a priori and variables assigned to load on a specific factor. Results were then compared to model fit standards that have been reported by Hu and Bentler (1999). Modification indices can be examined and performed if the changes can be theoretically justified and large enough to improve model fit (Raykov & Marcoulides, 2006). Additionally, the measurement model is analyzed for construct validity (convergent and discriminant validity) and internal consistency reliability as recommended by Fornell and Larcker, (1981). Once model fit had been achieved, the structural model was then examined.

Structural model. Next, AMOS 22.0 was used to assess the structural model. A structural model provides an overview of explanatory relationships among constructs, including latent constructs and exogenous variables (Raykov & Marcoulides, 2006). These relationships go beyond interrelated latent variables, and specific structural paths are designed to test theoretical concepts. Similar to the CFA, model fit was assessed by standards set forth by Hu and Bentler (1999).

Each of the previously-outlined hypotheses were aligned with the structural paths implemented into the structural model. The first three hypotheses incorporated each of the exogenous variables that were added to the model. Both (a) year in college and (b) performing community service as punishment involved structural paths to community service motivation (VFI), community service benefits (ISE), and community service hours. The participant’s division within the governing body (e.g., NCAA Division II) included structural paths to community service motivation (VFI) and community service hours. For the second set of hypotheses, structural paths were examined between athletic identity (AIMS) and community service motivation (VFI), in addition to two mediated relationships between athletic identity (AIMS) and both community service motivation (VFI) and community service benefits (ISE). Following the guidelines of Baron and Kenny (1986), mediated relationships can only be examined if the direct relationship is statistically significant. In essence, hypothesis 4 must be confirmed for us to examine hypotheses 5 and 6.

First, bivariate correlations and psychometric properties of all constructs within the model were assessed for convergent and discriminant validity. Next, the standardized path

coefficients within the structural equation model, as outlined within the hypotheses, were assessed for strength and direction. The proposed Athlete Community Service Motivation Model, is provided in Figure 1.

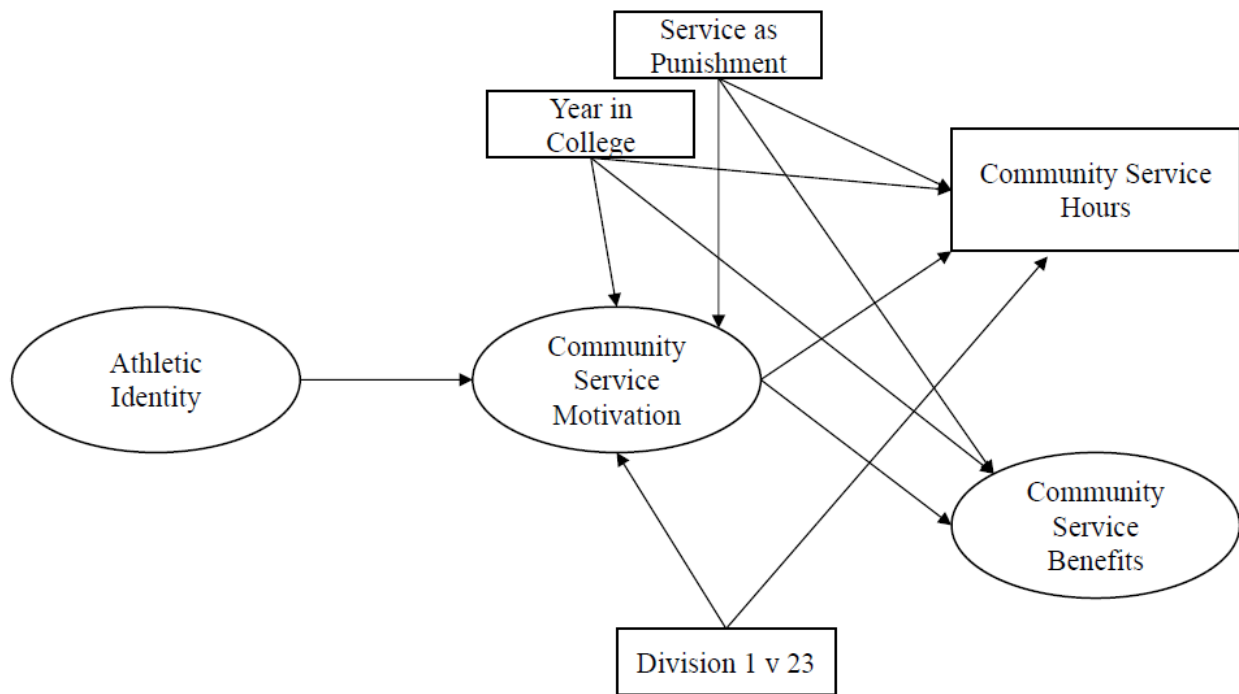


Figure 1. Athlete Community Service Motivation Model

Results

Bivariate Correlations

Bivariate correlations between subscales are provided in Table 2. Each of the bivariate correlations between subscales were significant and in the direction as expected. There were significant correlations between the VFI (community service motivations) and ISE (community service benefits) subscales. With significant research highlighting the relationship between the motivations to perform community service and the benefits from participating, this is to be expected. Also, the Sport Connect subscale within VFI was significant across all three instruments, which was to be expected as well.

Measurement Model Testing

To test the model fit between all three instruments, the researchers performed a confirmatory factor analysis. The model fit statistics are provided in Table 3. The initial model fit test was below the model fit standards outlined (Hu & Bentler, 1999; Kline, 2015). Due to the similarity and previously-reported correlations between models, modification indices were expected to improve model fit.

The first model had multiple goodness-of-fit statistics that fell below the standard threshold. Modification indices were identified and implemented in the subsequent models to improve model fit. These modifications were kept to a minimum; only implemented when the

relationship could be theoretically justified and large enough to improve model fit (Raykov & Marcoulides, 2006). These modification indices included the following parameters: (1) VFI-Career (Error) to ISE-Career Possibilities (Error) (Chi-Square Change = 126.57), (2) VFI-Social (Error) to ISE-Relations with Others (Error) (Chi-Square Change = 35.15), and (3) VFI-Social (Error) to VFI-Understanding (Error) (Chi-Square Change = 30.06). The modification indices between VFI and ISE is understandable, as these constructs are measuring similar constructs, with differences based on when the participant is reporting their volunteer experiences. The third reported modification indices was reported due to crossover between the items for both subscales, specifically that the constructs showed strong correlation in previous studies, while also possessing similarly-worded items (Clary et al., 1998). The comparative fit index (.97), goodness-of-fit index (.96), adjusted goodness-of-fit index (.94), and root mean square error of approximation (.06) all achieved the minimum standards (Hu & Bentler, 1999; Kline, 2015), suggesting a good model fit.

The factor loadings of the final scale ranged from .51 to .85 for *AIMS* subscales, .60 to .89 for *VFI* subscales, and .70 to .93 for *ISE* subscales. All of these factor loadings were reported as statistically significant and established salience between the latent variables and the observed indicator. Each subscale was also reported for Cronbach's alpha, factor loadings, standard error, critical ratio, construct reliability, and average variance explained (AVE). These statistics are provided in Table 4. Each of the factor loadings were statistically significant within their established construct and were greater than the .60 threshold (Kline, 2005), with the exception of Social Identity (*AIMS*). Construct reliabilities and AVE were also within the acceptable standards, with *AIMS*' AVE falling just shy at .46 (Fornell & Larcker, 1981). The bivariate correlation scores were also examined to test for discriminant validity. No bivariate correlations between variables were defined as highly correlated, as all fell below the .85 threshold (Kline, 2015). This statistical analysis found the model to be both valid and reliable, with the exception of one Cronbach alpha and AVE score, both from the *AIMS* scale. Because the *AIMS* scale is well-established, each of the subscales were maintained in the model moving forward.

Structural Model Testing

Structural model analysis was used to examine the hypothesized relationships between athletic identity, community service motivation, and community service benefits, in addition to our exogenous variables of (1) division within the governing body, (2) year in college, and (3) community service as punishment. The results of the proposed structural model outlined a good model fit with comparative fit index (.95), goodness-of-fit index (.95), adjusted goodness-of-fit index (.93), and root mean square error of approximation (.05) (Hu & Bentler, 1999; Kline, 2015). The model is provided in Figure 2.

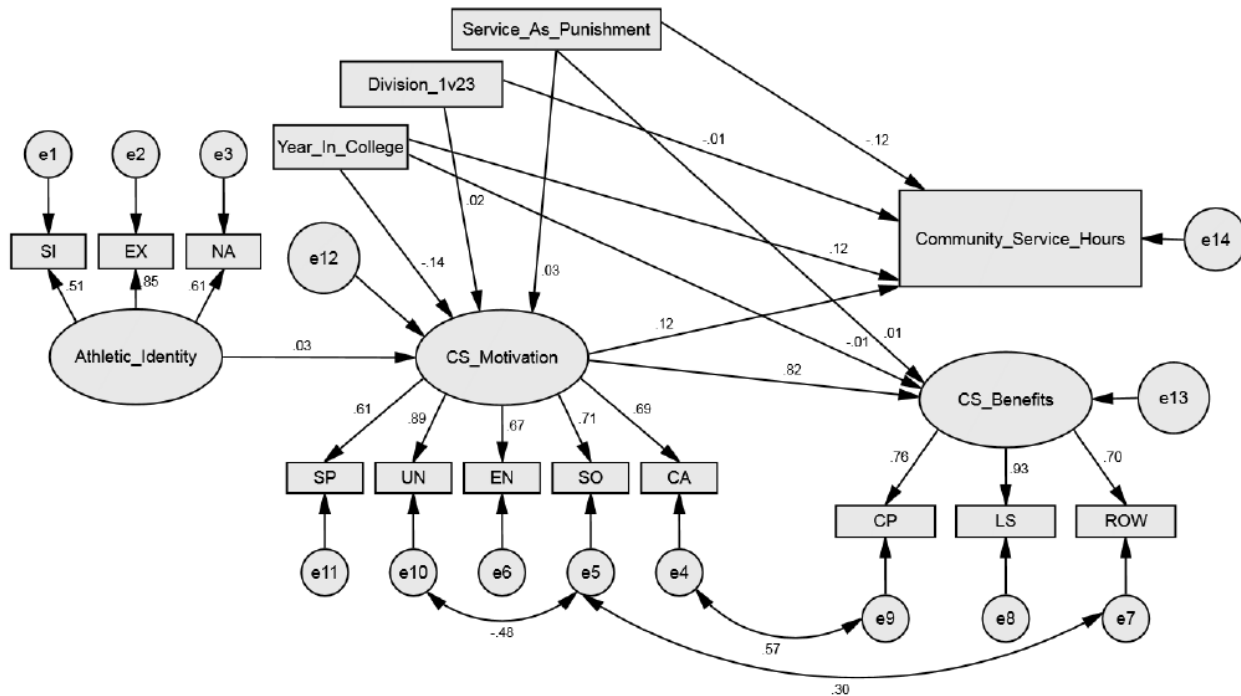


Figure 2. Structural model

Our first set of hypotheses examined the relationship between latent constructs and our three exogenous variables (division within the governing body, year in college, and community service). The first hypothesis predicted no significant difference between the athlete’s year in college and their (a) community service motivation, (b) community service hours, and (c) community service benefits. This hypothesis was partially supported, with year in college yielding a significant positive relationship with community service hours (standardized path coefficient = .12, critical ratio of 2.83, $p < .01$). The relationship between year in college and community service benefits had a standardized path coefficient of -.01 and was not statistically significant ($p = .81$), while the relationship between year in college and community service motivations yielded a negative, significant relationship (standardized path coefficient = -.14, critical ratio of -3.11, $p < .01$).

The second hypothesis anticipated a significant, positive relationship between NCAA Division II and III athletes and (a) community service motivation and (b) community service hours, comparative to NCAA Division I athletes. This hypothesis was not supported, as community service motivation and community service hours were not significantly different between athletes in different divisions (Division 1v2: standardized path coefficient = .01, critical ratio of .29, $p = .77$ – Division 1v3: standardized path coefficient = .02, critical ratio of .49, $p = .63$) and community service hours (Division 1v2: standardized path coefficient = -.03, critical ratio of -.73, $p = .46$ – Division 1v3: standardized path coefficient = .02, critical ratio of .50, $p = .62$).

Our third hypothesis examined the relationship between community service as punishment and each of our latent constructs, expecting a significant, negative relationship between the path coefficients. Our hypothesis was partially supported, as a negative, significant path coefficient of -.12 was reported between service as punishment and community service

hours (critical ratio of -2.84 , $p < .01$). The remaining relationships with community service motivation (standardized path coefficient = $.03$, critical ratio of $.64$) and community service benefits (standardized path coefficient = $.01$, critical ratio of $.46$) were not statistically significant.

Mediating Effects of Community Service Motivation

The next set of hypotheses focused on the mediating relationship of community service motivation between athletic identity and both community service hours and community service benefits. Recommendations of testing mediating effects between latent constructs states that the direct relationship (between athletic identity and community service motivation) must be first tested for significance (Baron & Kenny, 1986). If this relationship is not significant, mediation cannot exist.

Athletic identity was expected to have a direct, negative relationship with community service motivation. Hypothesis 4 was not supported, as the standardized path coefficient ($.03$, critical ratio of $.65$) was not statistically significant ($p = .51$). With the lack of a significant relationship between athletic identity and community service motivation, it was not recommended to explore the mediated relationships outlined in hypothesis 5, leading us to identifying them as not supported.

Discussion

Structural equation analysis of the Athlete Community Service Motivation Model connects and extends the literature surrounding athlete community service, athletic identity, and student involvement in a number of ways. These relationships, in addition to the exogenous variables of (1) division within the governing body, (2) year in college, and (3) community service as punishment, will be explored throughout this section. First, the relationship between the athlete's year in college and their motivation to perform community service was examined.

Athlete Year and Community Service Motivation

There was a significant positive relationship between an athlete's year in college and the number of his/her community service hours, and a significant negative relationship between an athlete's year in college and community service motivation. Thus, as athletes become more senior in their academic rank and on their teams, their motivation to serve in the community decreases, yet the number of hours increases. This relationship may also be impacted by athletes being required to perform community service as a form of punishment. The increased number of hours worked is consistent with studies of traditional college students who report increased community service the farther along they are within their academic programs (Astin, 1999). This association has been previously tied to student involvement theory under the premise of university students needing to become more comfortable with participating in an activity before they actually participate (Astin, 1993). The findings of decreased motivation to perform community service was a surprise, and a new finding within the scholarship. This may imply feelings of obligation for student-athletes to volunteer even after their interest in the activity has waned.

Required Community Service and Motivation

The unique connection with motivation explored in the current study deals with the use of community service as punishment and decreased motivation to perform community service. A possible explanation could be grounded in the literature, which suggests community service can be used as a form of punishment, requiring athletes to volunteer as a form of penance (Huml et al., 2014). How often student-athletes are required to perform community service is difficult to measure due to protections provided by the Family Educational Rights and Privacy Act (FERPA; Huml & Moorman, 2017). Another potential explanation for the decrease in motivation and increase in hours could support literature which documents the tremendous amounts of “obligatory volunteerism” that is often expected of high-level athletes. NCAA athletes spend approximately 34 hours per week on their sport during the season and even more when out of season (NCAA, 2016). “Countable athletic related activities” (CARA), include required activities involving athletes or a coaching staff, but there are often “optional” activities that are highly encouraged by coaches or administrators. Coaches and administrators often rely on upper-level students to set an example for their teammates. These athletes are often the team stars who can make the strongest impact in the community. It is possible these upper-level athletes are pressured to complete community service, but at the expense of decreasing the intrinsic motivation that may have previously driven the service.

Unfortunately, in this hypothesized explanation of obligatory volunteerism, there is the lack of educational growth or increase in benefits from early community service experiences to those as an upper-level student. Student involvement theory stresses that the student learning and personal development associated with any educational program is directly proportional to the quality and quantity of student involvement in that program (Astin, 1984). With the quantity of community service hours increasing for upper-level students, it may be possible the quality of the experience is sub-par. Athletes may feel that appearances at CSOs are menial tasks that are not connected to the impact of their service and may be seen as not worth their time, in addition to the pressures of lack of time availability due to sport responsibilities. This would support Weight et al.’s (2015) call to be more intentional in the recognition and development of athlete-centric educational activities. Additional involvement in educational activities outside of the classroom such as community service for athletes may be very valuable, but only when in concert with desired outcomes and a schedule that allows for meaningful involvement (Astin, 1984; Astin & Sax, 1998; MacNeela & Gannon, 2014).

Division within the Governing Body and Athlete Community Service

Given the strong institutionalization of community service in both NCAA Division II and III governing bodies, it was hypothesized there would be a positive relationship between NCAA Division II and III athletes and (a) community service motivation and (b) community service hours, compared to NCAA Division I athletes. NCAA Divisions II and III have yearly events designed to increase interest and participation of collegiate athlete volunteering (e.g., NCAA, n.d.). This hypothesis was not supported as there were no significant divisional differences.

Institutions at varying NCAA divisions have different missions. Given the mixed results in research on whether athletic department mission statements have an impact on collegiate athlete community service (Andrassy & Bruening, 2011), this research explored the possibility that broader organizational mission statements toward service orientation might have a stronger

effect. This effect, however, was not evident in the data. Despite the overt community service philosophies evident in Division II and III in comparison to Division I, there were no significant differences in motivation, rewards, or hours.

Community Service as Punishment and Athlete Service Motivation, Hours, and Benefits

A significant, negative relationship between service as punishment and community service hours was found, yet there were no significant relationships between service as punishment and benefits or motivation. Previous research has identified community service being used as a form of punishment following rule violations as documented in college athlete handbooks (Huml et al., 2014). This follows the model set by many government agencies which require community service (or community restitution as a form of restorative justice) as a form of penance for previous wrong-doings in addition to or instead of other forms of punishment including probation, fines, or incarceration (Duff, 2001).

The institutional culture of viewing service as a punishment rather than an educational opportunity could explain why athletes perform fewer service hours performed at institutions with these policies. It would seem there would be a negative relationship between motivation and benefits of athletes within departments with regulations utilizing community service as punishment. However, given the infrequency of the issuance of this type of punishment to an athlete population, despite the existence of it in organizational handbooks, it is likely the athletes were unaware of these policies and may not have been individually affected by the organizational use of service as punishment.

Theoretical Implications

This research helps advance the literature as it connects a variety of constructs that to date have been disparate bodies of knowledge. The exploration of these relationships through structural equation modeling provides a foundation for additional research in a variety of disciplines.

Athletic Identity and Community Service

The researchers expected athletic identity to have a direct, negative relationship with community service motivation based on literature demonstrating strong negative associations between athletic identity and academic metrics (Beron & Piquero, 2016; Eckard, 2010). Student involvement in community service has been viewed as a mark of a highly engaged student, with strong positive relationships between educational benefits and community service (e.g. Astin & Sax, 1998; Svensson et al., 2014). Thus, it was posited that athletic identity would be negatively associated with motivation to perform community service. This hypothesis was not supported, yielding an important advancement in the literature examining the interaction between athletic identity and educational-based metrics outside the classroom (Antshel, VanderDrift, & Pauline, 2016).

Perhaps because of the unique nature of community service as an educational outlet, community service involvement might provide a rewarding educational avenue for athletes struggling to find educational fulfillment in the traditional classroom setting. Whereas literature has consistently demonstrated the negative impact of athletic identity on a variety of academic

metrics, community service motivation was not significantly affected by athletic identity. This may provide a foundation for future research on the types of educational activities most rewarding for athletes with high athletic-identity. There may be a link between applied learning methods (consistent with the athletics environment) and athletes with high athletic identity. This link could provide insight into the ways in which students who often struggle can be engaged. Athletic identity salience might be improved, helping college athletes achieve a greater balance between academics and athletics (Miller & Kerr, 2002; Riley & Burke, 1995; Stryker & Serpe, 1994).

Student Involvement and Community Service

With previous scholars raising concerns about the educational environment being provided to collegiate athletes (e.g. Eckard, 2010), and the strong relationship between community service and education (Beron & Piquero, 2016; Eckard, 2010), it was posited that utilizing student involvement theory as a theoretical lens could provide insight into the educational opportunities of athlete community service. Astin (1984) believed that administrators focusing on involvement instead of outcomes would improve student development at their institutions. Given the unique position of modern NCAA athletes and their extensive time commitments to athletics (NCAA, 2016), it has been posited that student involvement in athletics is a strong avenue toward the development and enrichment of educational activities (Huml et al., 2017; Svensson et al., 2014; Weight et al., 2014). Exploring additional educational activities (e.g. community service) through an involvement lens, however, may not be the most appropriate given the already tremendous amount of involvement of this population. This is an important extension of the literature applying student involvement theory. Tenants of the theory that outline how to maximize educational experiences through involvement, however, could be very helpful in the development of meaningful community service opportunities. As administrators grapple with which educational opportunities to present their student populations, quality and intentionality should be emphasized, particularly in the populations with increasingly finite amounts of time.

Limitations and Research Recommendations

This research is contextually bound to college athletes and limited in application to other college students. Our findings are theoretically sound and fitting within a unique perspective from collegiate athletes, but recognize the limitations when applying these findings to other student populations. Also, this study reduced the total items within both the VFI and ISE, therefore limiting our findings beyond the chosen subscales. These choices were made in order to focus on community service interests most frequently mentioned by collegiate athletes and concerns about poor factor loading scores established on subscales removed from the current study but do limit the application of results moving forward. Lastly, our study did not collect results in a pre-test/post-test fashion, therefore limiting some results based on community service motivations and benefits. Participants were prompted during the survey to reflect back on what decisions motivated them to perform community service and what benefits were reaped from their involvement in community service experiences while in college. These sections were also presented to participants in sequential browser windows to provide further distinction between the concepts.

For future studies, our findings suggest further research is warranted on the application of student involvement theory for collegiate athletes. Coupled with these findings, plus others, concerns have been raised whether the learning environment meant to maximize the development of college students is the best approach for achieving the same for collegiate athletes (Weight et al., 2014). While the findings in this study are impactful for better understanding the collegiate athlete experience and can help guide decision-making for athletic administrators, further study is warranted. Second, these findings provided some of the first results of athletic identity not creating a negative educational experience. Further research is necessary to see if other educational activities or outcomes are also more resistant to the negative effect of athletic identity. Lastly, these findings may be the precursor of athletes possessing a different involvement experience than the general student population. A future study examining differences between athletes and the general student population is warranted to further examine the differences.

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Table 1

Demographic Characteristics of Participants (n = 546)

Characteristic	<i>n</i>	%
Community Service Hours (Hours per Semester)		
0	82	15
1-5	154	28
6-10	143	26
11-20	103	19
21-50	56	10
>51	8	1
Community Service as Punishment		
Yes	26	5
No	520	95
Coach or AD Choosing Service Activity		
Never	89	16
Rarely	76	14
Sometimes	216	40
Often	109	20
All of the Time	56	10
Gender		
Female	385	70
Male	161	30
Race		
American Indian/Native Alaskan	2	< 1
Black/African American	32	6
Asian	10	2
Hispanic/Latino/Latina	18	4
Native Hawaiian/Pacific Islander	3	1
White/Caucasian	443	81
Multi-Racial	31	5
Other	7	1
Year in College		
First	211	39
Second	105	19
Third	119	22
Fourth	91	17
Fifth	19	4
NCAA Division		
Division I	217	40
Division II	228	42
Division III	101	19

Table 2

Intercorrelations for Subscales of AIMS (Athletic Identity), VFI (Volunteer Motivation), and ISE (Volunteer Benefits) Subscales

Items											
AIMS - Social Identity	--										
AIMS - Exclusivity	.43*	--									
AIMS - Negative Affectivity	.31*	.52*	--								
ISE - Career	.09*	.06	.07	--							
ISE - Social	.03	.05	.04	.48*	--						
ISE - Enhancement	.03	.02	.15*	.43*	.53*	--					
VFI - Sport Connect	.17*	.16*	.10*	.49*	.46*	.38*	--				
VFI - Relations with Others	.05	.01	-.01	.41*	.56*	.45*	.39*	--			
VFI - Career Possibilities	.03	.03	.03	.69*	.43*	.39*	.42*	.48*	--		
VFI - Understanding	.05	-.06	.03	.61*	.49*	.57*	.52*	.58*	.54*	--	
VFI - Learning Skills	.02	.00	.01	.51*	.50*	.51*	.44*	.64*	.71*	.69*	--

* $p < .05$

Table 3

Fit Statistics for Alternative Models

Model	<i>df</i>	χ^2	CFI	GFI	AGFI	RMSEA
1	41	349.75	.88	.90	.84	.12
2	40	198.18	.94	.94	.90	.09
3	39	160.45	.95	.95	.92	.08
4	38	114.43	.97	.96	.94	.06

Note. CFI = comparative fit index; GFI = goodness-of-fit index; AGFI = adjusted goodness-of-fit index; RMSEA = root mean square error of approximation. * $p < .01$

Table 4

Cronbach's alpha (α), Means, Factor Loadings (β), Standard Error (SE), Critical Ratio (CR), Construct Reliability (C.R.) and Average Variance Explained (AVE)

Factor	Mean	α	β	SE	CR	C.R.	AVE
<i>AIMS</i>						.70	.46
Social Identity	4.47	.67	.51	-	-		
Exclusivity	2.94	.77	.85	.24	8.32		
Negative Affectivity	3.30	.46	.61	.18	9.33		
<i>VFI</i>						.84	.52
Career	5.28	.78	.69	-	-		
Understanding	5.78	.86	.89	.05	17.92		
Enhancement	5.16	.87	.67	.06	14.68		
Social	4.68	.86	.71	.07	14.55		
Sport Connect	5.27	.78	.60	.07	13.37		
<i>ISE</i>						.84	.64
Relations with Others	5.19	.82	.70	-	-		
Learning Skills	5.22	.83	.93	.07	18.77		
Career Possibilities	4.79	.85	.76	.08	16.58		

Note. *AIMS* is a 5-point likert scale, while *VFI* and *ISE* are 7-point likert scales.