Athletic Identity and Moral Development: An examination of collegiate athletes and their moral foundations

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> Moral Foundation Theory provides a framework of understanding the underlying foundations of moral reasoning. More specifically, it is made up of five foundations that are 'intuitive ethics' representing values and norms that vary from person to person and influenced by developmental experiences. The purpose of this study was to investigate whether a relationship existed between athletic identity and the moral value preferences of collegiate athletes to shed light on the social impacts of athletic participation on college students. Two hundred and thirty-eight NCAA Division I intercollegiate, club sport, and intramural sport student-athletes completed measures of athletic identity and moral reasoning. Athletic identity was measured using the Athletic Identity Measurement Scale (AIMS) and the Moral Foundations Questionnaire (MFQ) served to evaluate participants' moral foundations. Although the primary hypothesis of a negative relationship between athletic identity and harm/care and fairness/reciprocity was not supported, analyses indicated that athletic identity was positively and significantly associated with ingroup/loyalty, authority/respect, and purity/sanctity values. Additional analyses indicated that gender and years of collegiate sporting experience moderated some of these relationships.

> KEY WORDS: Athletic Identity, Elite-athlete, Moral reasoning, Moral foundations, Sport culture, Student-athlete.

Introduction

Participation in collegiate athletics is believed to offer a wealth of benefits to college students, ranging from increased social interaction, to enhan-

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ced levels of motivation and self-confidence, increased levels of student engagement in academic- and campus-related activities (compared to non-athlete students), improved overall physical health, and the development of transferable life- and work-skills such as time-management and goal-setting (Coakley, 2011; Eitzen & Sage, 2008; Shaffer, & Wittes, 2006; Umbach, Palmer, Kuh, & Hannah, 2006; Williams, Sarraf, & Umbach, 2006). Beyond this, numerous scholars hold that collegiate athletic participation has the potential to positively impact psychosocial development by building character and integrity in athletes, promoting societal values and constraining negative behaviors like violence and excessive drinking (Coakley, 2011; Eitzen & Sage, 2008). Yet these findings are in direct opposition to research reporting negative associations between prolonged participation in elite-level athletics and positive educational and social-developmental outcomes (Jolly, 2008; Phoenix, Faulkner, & Sparkes, 2005; Potuto & O'Hanlon, 2007). In order to gain a better understanding of the nature of the relationship between collegiate athletic participation and overall development, prior research on this topic as well as the unique characteristics which distinguish collegiate student-athletes from their non-athlete peers must be considered.

Most scholars agree that lengthy participation in competitive sport often contributes to the manner in which an individual socially self-identifies. That is, it has been well established that athletes, especially at the elite-level, tend to develop what is known as an athletic identity (AI), or a strengthened selfassociation with their athletic role (Brewer, Van Raalte, & Linder, 1990). However, there is a noticeable divide in the literature respecting the effects of athletic identity and collegiate sport participation on other aspects of student development as well as overall individual well-being. Some scholars have found athletic identity to be positively associated with increased levels of selfesteem (Ronkainen, Kavoura, & Ryba, 2016), while others have highlighted negative impacts on academic performance, student satisfaction with overall college experience, and collegiate athletes' perceptions of their preparedness (or under preparedness) for college (Fave & Sharpe, 2008; Proios, 2013). Although research indicates that a dominant athletic identity appears to result in difficulty adjusting to various types of non-sport participation (Phoenix et al., 2005), studies also report that in terms of matriculation, collegiate athletes tend to graduate at higher rates than the general undergraduate student population (Rishe, 2003). Moreover, while the demanding nature of collegiate sport practices and game schedules often leads to a great deal of bodily injury and fatigue in college athletes (Watt & Moore, 2001; Wolverton, 2008), it is a popularly held opinion that participation in college sports is a privilege—especially at the intercollegiate level since only about 3% of college students nationwide are offered athletic scholarships (O'Shaughnessy, 2009). Clearly, more research is needed to determine the nature of the developmental impacts collegiate sport participation may have on student athletes.

In addition to identity formation, one area of social development that seems to have captivated sport scholars for decades is that of student-athletes' moral behavior. It has been suggested that the highly-competitive lifestyles collegiate athletes must lead in order to succeed in their sport invariably effects, and possibly inhibits, the advancement of their moral reasoning skills (Bonfiglio, 2011; Howard-Hamilton & Sina, 2001; Lyons & Turner, 2015). In fact, much of the research conducted on the moral development of athletes seems to report a negative relationship between participation in sport and positive character development (Fraleigh, 2003; Jones & McEwen, 2000; Loland, 2005; Ntoumanis & Standage, 2009; Proios, 2013; Whitman, 2008).

Doty (2006) suggested that sport is a reflection of the value trends that prevail in society, but also proclaimed that collegiate athletics are laden with rampant cheating, gross commercialism, illegal drug use, aggressive behavior and violence. Furthermore, some scholars suggest that these are just a few of the many inappropriate actions that have come to be accepted as the norm in popular sport culture (Doty, 2006; Wolverton, 2009). Rudd and Stoll (2004) found that collegiate athletes scored significantly lower on tests of moral reasoning than non-athlete college students. Additionally, studies have shown that continuous involvement in competitive sports is associated with legitimization of aggressive behavior in competitive sport settings (Conrov, Silva, Newcomer, Walker & Johnson, 2001; Visek & Watson, 2005), and that student-athletes often participate in what is known as 'moral disengagement' – a term coined by Bandura, Barbaranelli, Caprara, and Pastorelli (1996) during competition (Long, Pataleon, Bruant, & D'Arripe-Longueville, 2006). To put this another way, by provisionally deactivating negative selfsanctions, an athlete could theoretically engage (knowingly) in antisocial behaviors (i.e., violence), without experiencing remorse or self-reproach (Kiriakidis, 2011). With this in mind, the question remains as to what effect, if any, such regular engagement in permissible moral violations might have on student-athletes' intrinsic moral code.

A popular opinion in sport seems to be that anything done in the pursuit of victory is acceptable. Considering the extended amount of time collegiate athletes spend in highly-competitive atmospheres perfecting their athletic skills, as well as how closely-tied to athletic performance their social identity and overall self-worth appears to be (Martin, Balderson, Hawkins, Wilson, & Bruner, 2018; Phoenix et al., 2005), it seems crucial to investigate the moral

foundations that govern these individuals once the competitors leave the court. Does seeing oneself as an athlete first and foremost influence the moral code to which an individual holds themselves accountable? Or, is it possible that members of the competitive sport culture subscribe to a unique definition of morality?

If certain moral violations are consistently acquitted within competitive sport settings, and on the road to victory, rules of order act as nothing more than casualties of war, then it is beholden upon social-psychological and educational researchers to investigate the effects these practices may have on the overall insport socialization process of collegiate athletes. Correspondingly, the current study sought to examine whether a relationship existed between athletic identity and the moral value preferences of collegiate athletes in order to begin to shed light on the social impacts of prolonged participation in competitive sport.

Athletic Identity

Self-identity was initially defined by Erikson (1968) as the unique process that connects individuals' attitudes and behaviors to the social world that surrounds them. Not long after, the concept of multidimensional self-identities-or self-identities that help regulate how individuals see themselves in relation to different situations gained popularity in the literature (Shavelson & Bolus, 1982). Using an example from the present study, a single collegiate athlete could be working to balance multiple identities simultaneously—that of a student, perhaps an employee, a family member, and of course, an athlete. Depending upon the situations in which collegiate athletes like this find themselves, they may have to reference essential characteristics from one or more of these identities in order to determine how they ought to feel or behave (Armitage & Conner, 1999).

Duda (1998) later defined identity as a combination of roles, traits, and behaviors that describe an individual and allow them to establish self-esteem and self-worth. It is widely understood that collegiate athletes must work to manage multiple social roles—that of a student, an athlete, perhaps a friend, a son or daughter, a sibling, etc. (Jones & McEwin, 2008). Here, the athlete role is distinct from those managed by non-athlete students. Brewer et al. (1990) originally coined the term 'athletic identity' to describe the strength with which an individual identifies with his or her athletic role. Since then, others have expanded this definition to include degree of exclusivity and the extent to which an individual looks to others for acknowledgement of their role as an athlete (Cieslak, 2004).

As a construct, athletic identity is often measured with the Athlete Identity Measurement Scale (AIMS: Brewer et al., 1990). Although the AIMS can be broken into subscales – social identity, exclusivity, and negative affectivity – it is typically used as a one-dimensional construct representing an overall athletic identity score and is supported by high estimates of internal consistency (Houle, Brewer, & Kluck, 2010). AIMS studies have found athletic identity to be inversely related to career maturity (Murphy, Petitpas & Brewer, 1996), positively associated with poor academic performance (Yopyk & Prentice, 2005), and have linked athletic identity to negative social consequences like increased social isolation from non-athletes (Horton & Mack, 2000). It is evident from these findings that athletic identity appears to interact with multiple aspects of psychosocial development. Still, the question remains as to what type of relationship (if any) exists between athletic identity and the moral value preferences of collegiate (i.e., highly competitive) athletes.

Moral Foundations

Countless theorists have attempted to analyze what the ultimate moral behavior ought to look like. Where philosophers and theologists invoked ethics and divinity, psychologists waver between biology and environment. Some have posited hierarchal stage-theories of morality (Kohlberg, 1981; Gibbs, 2013), beginning with the most basic, rudimentary moral judgments and terminating with the transcendental, most evolved and 'highest' form of independent moral reasoning. For example, according to historical stage theorists like Kohlberg, antisocial behaviors like violence, cheating or performance-enhancing drug use that are regularly attributed to competitive athletes might be placed into a rudimentary stage of moral reasoning-one concerned primarily with the adoption of normative values and where societal rules alone dictate what behavior is acceptable or not.

Other moral theorists believe morality ought to be based more on individual perceptions rather than logical thought (Haidt, 2003). Still more scholars outline an outwardly-focused concept—one dependent on social interactions between individuals, where cultural institutions act to promote or restrain certain behaviors, ultimately resulting in a kind of living moral process or working moral system (Graham et al., 2012). In this view, morality is conceptualized as a system of values, norms and thought processes that interconnect with one another and work collectively to make social life run smoothly. Values can vary based on one's cultural origin. This line of thinking ser-

ves as foundation for the Moral Foundations Theory (MFT) (Graham et al., 2012).

According to MFT, it is entirely possible to recognize a wide array of distinct cultural societies – all with different social, cultural, or perhaps spiritual behaviors and traditions – as embodying moral systems. This holds true even if onlookers believe certain societies to be constructed in a normatively immoral way – such as patriarchies or theocracies (Graham et al., 2012). MFT is made up of five foundations that are considered to be 'intuitive ethics', including: 1) "care/harm" (i.e., concerns about the suffering of others and virtues of caring and compassion), 2) "fairness/reciprocity" (i.e., concerns about unfair treatment, inequality, and abstract notions of justice) 3) "loyalty/betrayal" (i.e., concerns involving self-control, duty and honor to one's in-group), 4) "authority/subversion" (i.e., concerns about obedience to authority figures in one's group), and 5) "purity/sanctity/degradation" (i.e., concerns related to spirituality, divinity, or being accountable to a higher order – though not necessarily tied to particular religion) (Graham et al., 2012).

In their 2012 study, Graham et al. found that self-identified political conservatives tended to favor ingroup/loyalty, authority/respect, and purity/sanctity values over care/harm and fairness/reciprocity, whereas self-identified liberals tended to favor care/harm and fairness/reciprocity over others. Another study using MFT to evaluate the moral decisions made by video game players during competition, found that participants tended to act towards the characters in the video game in a largely social manner – experiencing moral conflict while navigating the virtual battlefield with competitors (Krcmar & Cingel, 2016). Interestingly, Krcmar and Cingel's (2016) results indicated that many of the moral foundations (MFT) gamers held in everyday life (i.e., harm/care, ingroup/loyalty and purity/sanctity) did not translate to the moral decisions they made during game play. With this in mind, it is important to once again consider the lens through which sport-related violence, cheating or other 'unethical' behaviors regularly displayed by competitive athletes during competition are viewed.

Perhaps, instead of being morally inferior to non-athletes, as moral stage theories may suggest, competitive athletes are rather distinct from non-athletes in terms of cultural morality. Where non-athletes looking in may see competitive athletes committing one moral violation after another, it may actually be that competitive athletes possess a unique moral operating system — one where certain values are assigned more weight than others and where traditions and beliefs interact to form a moral process that by societally-normative standards, appears immoral. Along those lines, researchers must consider the

potential role an individual's social identity, specifically a strong athletic identity in this case, may play in their adoption of moral values and behaviors. If maintaining an athletic identity is associated with greater preference for certain moral foundations over others, this may provide support for the notion that the competitive sporting culture represents a society unto its own. Much like the distinct value preferences displayed by political conservatives and liberals in Graham et al.'s (2011) study, it could be that individuals strongly identifying with their athletic role possess a moral system that normative (non-athlete) society is unfamiliar with. This theoretical concept has formed the foundation for the present research.

Current Study

Although several scholars have supported the notion that prolonged participation in competitive athletic environments leads to the development of an athletic identity (Cieslak, 2004; Hurst, Hale, Smith, & Collins, 2000), little research has been devoted specifically to investigating this identity type in relation to the moral orientations of competitive athletes. It has been established that athletic identity often interacts with other aspects of social-psychological development, and research has identified links between extended sport participation and multiple (seemingly negative) moral behaviors like violence and cheating (Chen, Snyder & Magner, 2010; Conroy et al., 2001; Visek & Watson, 2005). Based on these findings and other research reporting negative impacts of sport participation on positive moral behavior, we hypothesized that a negative relationship would be observed between athletic identity and the harm/care and fairness/reciprocity foundations of the MFT.

Despite the negative outcomes attributed to participation in competitive athletics, there are some scholars who suggest that gender and the amount of time one spends in highly-competitive sport settings (i.e., years of sporting experience) may play a mitigating role in their overall moral development (Calmeiro, Stoll, & Davis, 2015). For example, it has been argued that in the historically male-dominated sport context, females tend to make different moral choices than males (Lyons & Turner, 2015). Therefore, in the present study, it was predicted that gender as well as the amount of time subjects had spent participating in collegiate sports would play moderating roles in the athletic identity and MFT relationship. Specifically, the researchers predicted that women would score higher on the harm/care and fairness/reciprocity foundations of the MFT, and that athletic identity would

share a weaker relationship with these variables for women than for men. With regard to time, it was hypothesized that athletes with more collective sporting experience (i.e., college seniors) would score lower on harm/care and fairness/reciprocity and that the athletic identity relationship with these variables would strengthen as years of collegiate athletic experience increased.

Methods

PARTICIPANTS

Two hundred and sixty-one student-athletes from a Midwestern university were recruited and participated in this study. After data screening, the final response rate was 238. Participants included NCAA Division I intercollegiate student-athletes (n=170) as well as club and intramural sport student-athletes (n=68) from over 18 different sports. A profile of the sample indicates that 55% were female and the majority of athletes were in their first (n=82) and second (n=62) year of athletic participation.

MEASURES

Athletic Identity Measurement Scale (AIMS). Athletic identity was measured using the 7-item abbreviated version of the Athletic Identity Measurement Scale (AIMS; Brewer & Cornelius, 2001). An example item is, "Sport is the most important part of my life." Participants were asked to rate items on a Likert scale ranging from 1 (Strongly Disagree) to 7 (Strongly Agree). Cronbach's alpha reliability estimate was .70 in the current study.

Moral Foundations Questionnaire (MFQ). The Moral Foundations Questionnaire (MFQ; Graham et al., 2011) is a 30-item measure with two sections that produces composite scores for five distinct foundations of morality: 1) Harm/care; 2) Fairness/reciprocity; 3) Ingroup/loyalty; 4) Authority/respect, and 5) Purity/sanctity. For the first part, participants were asked to rate how relevant items were to helping them decide whether something was right or wrong on a six-point Likert scale from 1 to 6. An example item is, "Whether or not someone suffered emotionally". Second, participants were asked to rate how much they agreed or disagreed with items on a six-point Likert scale from 1 to 6. An example item is, "Compassion for those who are suffering is the most crucial virtue." Cronbach's alpha reliability estimates ranged from .62 for authority/respect to .72 for purity/sanctity.

Instructed Response Questions and Data Screening. Prior to analysis, the data was screened for attention checks. Throughout the survey, three attention check questions (i.e., Please select "agree") were placed in order to verify that participants were responding in a valid, non-arbitrary manner. Twenty-three surveys that did not meet this screening criterion or did not have complete data were not included in the results.

Procedure

Participants were recruited in person during individual team practices and meetings and completed informed consent forms and an online survey sent to their university email via Qualtrics software. The survey included the AIMS, MFQ, three attention checks, and demographic questions (e.g., gender and experience). Participants who completed the survey online were entered into a drawing to win both individual and team prizes. All procedures and measures were approved by the participating university's Institutional Review Board as well as the Athletic Director and respective staff members of the university athletics department. All analyses were carried out with SPSS version 25 (IBM Corp, 2017)

Results

Descriptive statistics, Cronbach alpha reliability estimates, and correlations between all study variables are presented in Table 1. Based on past research, we predicted that athletic identity would be negatively related with the harm/care and fairness/reciprocity values of the MFQ. As seen in Table 1, athletic identity was not significantly correlated with these two foundations, so we did not have enough evidence to reject our null hypothesis. However, interestingly, a significant positive relationship was found between athletic identity and the ingroup/loyalty, authority/respect, and purity/sanctity foundations. Although our primary hypotheses were not supported, these results indicate that a strong athletic identity may be associated with a unique set of moral values (or interconnected moral system) after all.

Consistent with past literature, gender was found to be positively, and significantly correlated with both the harm/care and fairness/reciprocity foundations – with female athletes scoring higher than males on these foundations. Additional regression analyses were conducted by regressing each of the five moral foundations on gender, collective years of athletic experience (time), and athletic identity (see Steps 1 and 2 in Table 2). After controlling for

	Table I		
Descriptive Statistics and	Correlations	among Study	Variables

			Correlations							
	M	SD	1	2	3	4	5	6	7	8
1. Gender	.55	50								
2. Experience	2.22	1.13	03							
3. AIMS	5.50	.82	11	10	(.70)					
4. Harm	4.75	.72	.31*	18*	04	(.66)				
5. Fairness	4.73	.70	.20*	07	.12	.53*	(.65)			
6. Ingroup	4.88	.75	12	12	.27*	.12	.25*	(.62)		
7. Authority	4.91	.67	08	08	.27*	.12	.20*	.60*	(.62)	
8. Purity	4.14	.88	01	06	.19*	.24*	.26*	.41*	.50*	(.72)

Note: n = 238. Cronbach alpha internal consistency reliability estimates are presented on the diagonal. Gender coded such that males=0 and females =1. AIMS= Athletic Identity Measurement Scale, Harm= Harm/care foundation of the Moral Foundations Questionnaire (MFQ), Fairness= Fairness/reciprocity foundation of the MFQ, Ingroup= Ingroup/loyalty foundation of the MFQ, Authority= Authority/respect foundation of the MFQ, Purity= Purity/sanctity foundation of the MFQ. * p < .05 (two-tailed).

TABLE II Hierarchical Regression Results

	Harm							
	B ^{Step 1}	B ^{Step 2}	B ^{Step 3a}	B ^{Step 3b}	R^2	ΔR^2		
Step 1 Gender Experience	.31* 12*	.31* 12	.43 12	.32* .24	.11*	.11*		
Step 2 AI		.07	.08	.18	.12*	.01		
Step 3a AI * Gender			12	_	.12*	.00		
Step 3b AI * Exp.				37	.12*	.00		
		Fairness						
	B ^{Step 1}	B ^{Step 2}	B ^{Step 3a}	B ^{Step 3b}	R^2	ΔR^2		
Step 1 Gender	.20*	.21*	.57	.21*	.04*	.04*		
Experience Step 2	07	05	05	14	.06*	.02*		
ÅI Step 3a		.14*	.20*	.11	.06*	.00		
ÅI * Gender Step 3b AI * Exp.			36	.09	.06*	.00		
	Ingroup							
	B ^{Step 1}	B ^{Step 2}	B ^{Step 3a}	B ^{Step 3b}	R^2	ΔR^2		
Step 1 Gender	13*	10	48	09	.03*	.03*		
Experience Step 2	12	09	10	.78	.09*	.06*		
ÅI Step 3a		.25*	.19	.42*	.09*	.00		
ÅI * Gender Step 3b			.38	_	.11*	.02*		
ÅI * Exp.			_	90*				

Note: n = 238. Standardized regression coefficients are from the final step. Gender coded such that males=0 and females =1. AIMS= Athletic Identity Measurement Scale, Harm= Harm/care foundation of the Moral Foundations Questionnaire (MFQ), Fairness= Fairness/reciprocity foundation of the MFQ, Ingroup= Ingroup/loyalty foundation of the MFQ, Authority= Authority/respect foundation of the MFQ, Purity= Purity/sanctity foundation of the MFQ. * p < .05 (two-tailed, where appropriate).

gender and time, athletic identity was still unrelated to harm/care but was positively related to fairness/reciprocity; this result was contrary to what we had predicted. Also shown in Table 2, athletic identity was still positively related to the ingroup/loyalty and authority/respect moral foundations even after controlling for gender and experience.

Although the primary hypothesis was not supported, we still tested whether gender and time moderated the relationship between athletic identity and the MFQ foundations. Expanding our regression analyses, we tested the interaction between athletic identity and gender

	Authority						
	B ^{Step 1}	B ^{Step 2}	B ^{Step 3a}	B ^{Step 3b}	R^2	ΔR^2	
Step 1 Gender					.01	.01	
Gender	08	04	94*	04			
Experience	09	07	07	.53			
Step 2					.08*	.07*	
Step 2 AI		.26*	.11	.44*			
Step 3a					.10*	.02*	
Step 3a AI * Gender			.90*				
Step 3b					.09*	.01	
ÂI * Exp.			_	61			

TABLE II (Continued) Hierarchical Regression Results

	Purity					
	B ^{Step 1}	B ^{Step 2}	B ^{Step 3a}	B ^{Step 3b}	R^2	ΔR^2
Step 1					.00	.00
Gender	01	.01	37	.02		
Experience	05	04	04	.24		
Step 2					.04*	.04*
ĀI		.19*	.13	.28		
Step 3a					.04*	.00
AI * Gender			.39	_		
Step 3b					.04*	.00
ÅI * Exp.			_	28		

Note: n = 238. Standardized regression coefficients are from the final step. Gender coded such that males=0 and females =1. AIMS= Athletic Identity Measurement Scale, Harm= Harm/care foundation of the Moral Foundations Questionnaire (MFQ), Fairness= Fairness/reciprocity foundation of the MFQ, Ingroup= Ingroup/loyalty foundation of the MFQ, Authority= Authority/respect foundation of the MFQ, Purity= Purity/sanctity foundation of the MFQ. * p < .05 (two-tailed, where appropriate).

and athletic identity and collective years of athletic experience one at a time. Step 3a of Table 2 indicates that gender did not moderate athletic identity's relationship with either harm/care or fairness/reciprocity; although not hypothesized, gender did moderate the relationship between athletic identity and authority/respect. As seen in Figure 1, the relationship between athletic identity and authority/respect was stronger for women than for men. Similarly, time did not moderate the relationship between athletic identity and harm/care nor fairness/reciprocity; however, time did moderate the relationship between athletic identity and ingroup/loyalty (presented in Step 3b, Table 2) such that the relationship between athletic identity and ingroup/loyalty was stronger in athletes with less collegiate sporting experience than in athletes with more collegiate sporting experience (see Figure 2). While these results failed to support our moderation hypotheses, they did indicate that gender and experience play a role in understanding the relationship between athletic identity and moral foundations.

Discussion

The primary purpose of this study was to investigate the relationships between athletic identity and the moral value preferences of competitive

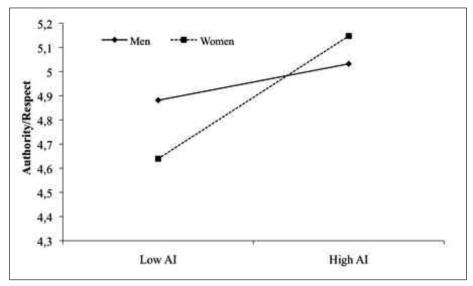


Fig. 1. - Interaction between AI and Gender in Predicting Authority/Respect Moral Foundation.

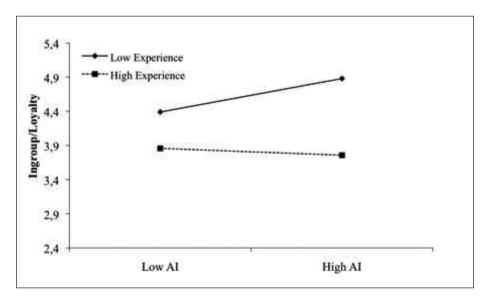


Fig. 2. - Interaction between AI and Experience in Predicting Ingroup/Loyalty Moral Foundation.

(collegiate) athletes. Although associations between athletic identity and various positive and negative social consequences have previously been found (Horton & Mack, 2000), the interactions between athletes' social identity and moral development had not been specifically investigated. Beyond this, athletic identity has never been examined as a predictive factor for moral value preferences.

This study contributed significantly to the literature in that it sheds new light on the moral orientations of competitive athletes, specifically with respect to a functional definition of morality (as opposed to more traditional stage theories), and by offering a new way to conceptualize athletic identity and its potential social impacts on individuals who possess it. Like other culturally exclusive groups, competitive athletes may simply be equipped with a unique interconnected moral value system, making their actions or behaviors appear strange and even 'immoral' to non-athlete group members.

We predicted that athletes with higher levels of athletic identity would score lower on the harm/care and fairness/reciprocity. This kind of adverse relationship may have had important implications considering these values have been acknowledged as universal features of morality within moral literature (Graham et al., 2012). Although this hypothesis was not supported, our results indicated that athletic identity was positively associated with fairness/reciprocity values when controlling for gender and collective years of collegiate sporting experience (time), which has important implications for athlete morality research.

Unquestionably, the three positive and significant associations that were found between athletic identity and ingroup/loyalty, authority/respect and purity/sanctity values are the most theoretically relevant findings of the present study – although not originally hypothesized. Findings indicated that the stronger an individual identified with their athletic role, the greater the value they placed on each of these three foundations. In their 2003 study, Bloom, Stevens, and Wickwire suggested that that enhanced team-building and team synergy is generally believed to improved overall team performance in sports. Because collegiate athletic teams represent a cohesive, collective group united in the pursuit of a single objective (i.e., victory) (Evans & Dion, 1991), the fact that the strongest relationship identified in this study existed between athletic identity and ingroup/loyalty is not altogether surprising.

Previous studies have illustrated that by the time they reach college, competitive athletes often have a great deal of experience operating under the direction (i.e., authority) of an athletic coach (Hodge & Lonsdale, 2011) and that coaches can actually be some of the most influential individuals in a young athlete's overall sporting experience (Bartholomew, Ntou-

manis & Thøgersen-Ntoumani, 2010). That said, considering the amount of time collegiate athletes spend participating in their sport and how closely related their athletic performance appears to be to their overall self-identity and self-worth, it would be easy to imagine to that coaches and other sport leaders may play a significant role in an athlete's psychosocial development as well. This could rationally explain why individuals with increased degrees of athletic identity in the present study displayed greater concern for authority/respect values.

Perhaps the most unexpected relationship observed in the data was the positive correlation identified between athletic identity and purity/sanctity values. Although more research is needed to explain this phenomenon, higher scores in this area could be a result of participants interpreting 'purity' as an indication of high levels of self-restraint or self-discipline associated with their strict regimen of exercise and nutrition (Tedesqui & Young, 2017), this being something competitive athletes are generally recognized for.

There is one final relationship of interest observed in our data. Graham et al. (2012) and Graham et al. (2011) used the MFQ to analyze the moral value preferences of opposing political parties – finding that liberals tend to place higher value on harm/care and fairness/reciprocity values, where conservatives favored ingroup/loyalty, authority/respect and purity/sanctity. Interestingly, the value preferences displayed by collegiate athletes (with strong athletic identity) in the present study mirrored those associated with political conservatives. In the past, moral stage theorists have posited that individuals who justify moral decisions based on group-level concerns – like authority, loyalty and tradition – ought to be considered conventional, or even morally inferior (Kohlberg, 1981). However, since moral stage theories have been widely discredited in the literature (see Elmer et al., 1983), and the present study focused on ascertaining moral preference as opposed to moral acuity, our results seem consistent with the notion that competitive athletes may simply maintain a unique system of culturally-exclusive values.

Limitations and Future Research

While the current study certainly supplements the athlete morality literature, it nevertheless, has its limitations. First, self-report measures were given at a single point in time. Researchers interested in exploring the relationship between athletic identity and moral orientation more deeply might consider conducting a replication study. Also, a longitudinal study may be useful in monitoring how athlete values change and develop over time.

Beyond this, the Cronbach alpha reliability estimates for the moral foundations were slightly lower than what were reported by Graham et al. (2012), which could attenuate the observed correlations with athletic identity.

Additionally, it is important to remember that while our theoretical background focused on the unique moral development of individuals who possess athletic identities, the current results cannot be taken as causal evidence of this. It is possible that individuals who rely more strongly on ingroup/loyalty foundations gravitate more toward team sports and thus are more likely to develop a strong sense of athletic identity (as opposed to athletic identify coming first). Future research utilizing a cross-lagged design could help better determine the direction of these relationships. Furthermore, although a significant relationship was found between athletic identity and MFQ foundations in the present study, the use of a cross-sectional survey design could have potentially resulted in common method variance, which could be responsible for exaggerating the relationships between constructs. Finally, only one method of evaluation was used for athletic identity (i.e., the AIMS) and moral orientation (i.e., the MFQ). By examining the same constructs using alternative measures, researchers can begin to develop a better understanding of how athletic identity and moral development interact.

Along those lines, it is also important to note the observed interactions. Although not hypothesized, athletic identity interacted with gender in explaining the authority/respect foundation, and also interacted with time in explaining the ingroup/loyalty foundation. Given the gender differences observed within the authority/respect foundations, this is where we expected this relationship to develop. The current data does not provide any insight into why athletic identity would be more strongly related to authority/respect for females than for males, but future research might want to explore this relationship further. It was especially interesting that the relationship between athletic identity and ingroup/loyalty was stronger for less experienced athletes than for more experienced athletes, suggesting that this relationship may change over time. Although the current data cannot support this conclusion, future research should continue to investigate whether ingroup/loyalty moral foundations become less prominent over time.

Conclusion

The present study addressed certain gaps in the literature by adding conceptually to the notion of a competitive athlete-specific value system. This was the first study to examine athletic identity as an individual difference impacting

the moral value preferences of college athletes. Results outlined strong, positive associations between athletic identity and ingroup/loyalty, authority/respect and purity/sanctity values, which effectively offers an opposing perspective to previous studies that have identified negative correlations between extended participation in competitive sports and advanced moral reasoning skills. This suggests that the moral concerns of competitive athletes may actually evolve differently than those of non-athletes. These results indicate that athletic identity could act as a predicting variable for moral value preferences and that social identity formation could interact with an individual's moral development. To conclude, this research is significant in that it supports the possibility that a unique, interconnected moral system exclusive to members of the competitive sporting culture may exist, and that the moral value preferences of collegiate athletes may in fact be impacted by their competitive sport participation.

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