

Athletic identity and discretionary effort at work

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Abstract

Purpose – The purpose of this study is to investigate whether athletic identity contributes to discretionary effort among employees. Athletic identities have long been associated with “giving 110 percent” by exerting high levels of discretionary effort. In response, a growing number of organizations have enacted recruiting programs to specifically seek out prospective employees among individuals who are likely to exhibit strong athletic identities. However, the belief that strong athletic identities will spill over to greater discretionary effort at work has not received systematic examination.

Design/methodology/approach – Drawing on a field study of over 1,000 working professionals across various countries and industries, the current study explored whether athletic identity was predictive of discretionary work effort through behavioral self-control and locus of control. Bootstrapping procedures that are robust to any normality distribution violations were implemented.

Findings – Results suggest that athletic identity indirectly influences employee discretionary work effort through higher behavioral self-control and a more internal locus of control. These effects were found even when controlling for actual weekly metabolic energy expenditure, age, gender and education.

Originality/value – This study supports the relationship between athletic identity and discretionary effort in the workplace, mediated by greater self-regulation and internal locus of control when compared to those with weaker athletic identities. Importantly, these results were found even while controlling for actual metabolic activity, suggesting that identifying as an athlete is associated with greater internal locus of control and behavioral regulation independent of actual current physical activity. The findings suggest support for human resource practices that prioritize recruiting individuals with strong athletic identities.

Keywords Locus of control, Self-regulation, Athletic identity, Discretionary work effort, Metabolic energy expenditure

Paper type Research paper

“I give 110 percent, and that’s in practice and every game and everything.”
Terry Rozier, U.S. professional basketball player

One of the popular (if somewhat outdated) clichés in athletic circles is the idea of giving “110%” (Tignor, 2010). This cliché reflects a persistent belief that an athletic identity is closely tied to a



mindset of exerting high levels of discretionary effort, above and beyond what might be required in a particular role. It is perhaps no surprise that a growing number of employers are seeking to attract individuals with a strong athletic identity, defined as individuals who connect their self-identity to sports and athletic endeavors (Edison, Christino, & Rizzone, 2021) because an athletic identity is so closely associated in the popular imagination with extraordinary exertion of effort.

Indeed, believing that former athletes are particularly likely to have strong athletic identities, several organizations have made seeking out former student-athletes a centerpiece of their recruiting efforts (Crawford, 2022). Recreational athletes (e.g. individuals who play occasional pick-up basketball or participate in 5 K fun runs) can also often exhibit a strong athletic identity, and even individuals who do not currently participate in sports or engage in regular physical activity sometimes identify strongly with the athletic lifestyle (Lamont-Mills & Christensen, 2006).

Implicit (and sometimes explicit) efforts to recruit individuals with strong athletic identities are underlying beliefs that the positive characteristics of individuals with an athletic identity will carry over into their work (Selingo, 2016). Although many of the more enthusiastic accounts of the benefits of an athletic identity are anecdotal, there is indirect evidence that individuals' athletic identities may be associated with positive workplace outcomes. For instance, athletic identity may correlate with a higher internal *locus* of control, which aligns well with the expectations of organizations seeking a more proactive workforce (Lubianka & Filipiak, 2022). At least in some industries, male athletes (who presumably often have stronger athletic identities) reported greater job satisfaction and went on to earn significantly more than their non-athlete peers (Shulman & Bowen, 2002; Weight, Bonfiglio, DeFreese, Kerr, & Osborne, 2018). Additionally, Ernst and Young's Women Athletes Global Leadership Network found that 96% of women who were senior managers or executives in their companies had previously or were currently participating in athletics (Glass, 2013). Particularly relevant to this study, researchers have focused on athletic identity and found that individuals with stronger athletic identities are often well-represented on corporate boards (Dong, Duan, Hou, & Liu, 2019).

The challenge is that a growing number of organizations are investing time and resources in recruiting strategies tailored toward attracting individuals with stronger athletic identities (Crawford, 2022), but researchers have not systematically explored important work-related outcomes associated with athletic identity. In this study, we ask does athletic identity positively influence employee work effort, and if so, how. We focus on workers' discretionary effort as a proximal outcome that often precedes job performance (Bolino & Turnley, 2003). Importantly, while many factors beyond a worker's control (e.g. at the collaborative or organizational level) can influence job performance, workers are fully in control over the extent of discretionary effort they give at work. Moreover, discretionary effort reflects an immediate outcome of worker motivation.

In this study, we explore two potential mediators between individuals' athletic identity and the likelihood of exerting greater discretionary effort at work: behavioral self-regulation and *locus* of control. We chose these two mediators with our specific interest in the crossover between athletic and work contexts. Behavioral self-regulation and internal *locus* of control have separately been suggested to influence outcomes in both athletic and work contexts (e.g. Galvin, Randel, Collins, & Johnson, 2018) and are thus especially useful in helping to explain spillover effects from an athletic identity to discretionary effort in the workplace.

Going the extra mile (or more)

Discretionary effort at work refers to intentionally exerting effort toward favorable work outcomes that exceed the expectations and requirements for in-role work performance (Curry, Gravina, Sleiman, & Richard, 2019). Among other findings, discretionary effort has been closely tied to employee motivation (Lion & Burch, 2018), organizational commitment (Sherk, 2019) and organizational citizenship behaviors (Gonzales, 2016). On the courts and fields of athletic

competition, individuals who identify as athletes are famous for voluntarily exerting extraordinary amounts of effort to achieve athletic goals (Geddes, 2007); however, there is a lack of direct evidence that discretionary effort associated with an athletic identity will spill over into the workplace.

The potential crossover between athletic identity and workplace outcomes is complicated by indirect evidence that suggests mixed findings. On the one hand, researchers have found that higher levels of physical activity outside the workplace translated into fewer decrements in the quantity of work performed, at least in part because of better individual health and fewer lost work days (Pronk et al., 2004). CEOs who regularly run marathons have been found to deliver higher risk-adjusted returns and generate greater firm value than their peers who do not engage in comparable athletic activities during non-work hours (Campbell & Zipay, 2019). On the other hand, comparable evidence suggests that rank-and-file employees who engage in regular physical activity outside of work may actually be less willing to exert extra effort at work (Pronk et al., 2004).

We suggest that the mixed findings in the existing literature may be at least partly a reflection of not systematically isolating the effects of individuals' subjective identification as an athlete (Bowness, McKendrick, & Tulle, 2021) on discretionary effort exerted at work. That is, individuals with an athletic identity may cultivate habits of mind that, for better or worse, may carry into other areas of life (Brewer & Petitpas, 2017). For instance, researchers have found that athletic identity is closely tied to contemporaneous and subsequent mental health issues (Brown, Webb, Robinson, & Cotgreave, 2018), body image challenges (Palermo & Rancourt, 2019) and difficulties with cultivating social connections (Lally, 2007).

More positively, at least two studies have reinforced the beliefs of employers that specifically highlight the potential benefits of a robust athletic identity in the workplace. In particular, researchers have found that athletic identity may be associated with greater motivation (Schutte & McNeil, 2018) and stronger career engagement (Bell, Prewitt, Bernhardt, & Culpepper, 2018). Motivation and engagement are often leading indicators of intentions to exert discretionary effort at work (Sharafizad & Redmond, 2020). Drawing on this logic, we hypothesize that athletic identity may also be associated with greater exertion of discretionary effort at work:

H1. Athletic identity will be positively related to discretionary work effort.

Links between athletic identity and work effort

Behavioral self-regulation

One of the chief benefits of participating in athletics is the opportunity to develop self-discipline, the ability to behaviorally self-regulate one's short-term desires in the service of broader, more distal goals (McCormick, Meijen, Anstiss, & Jones, 2019). Behavioral self-regulation is crucial to individuals' ability to resist distractions from goals and other temptations through a conscious effort (Milyavskaya, Inzlicht, Hope, & Koestner, 2015). For instance, the time requirements of team practices, individual workouts, film study and other demands during the work necessitate that student-athletes learn to manage their time carefully and overcome the temptation to procrastinate completing schoolwork (Pellegrini & Hesla, 2018). Similarly, recreational athletes such as weekend rock climbers tend to exhibit higher levels of conscientiousness, a personality trait associated with self-regulation (Steinmetz, Assmann, Hubert, & Saul, 2022).

Indeed, evidence suggests a connection between athletics and individuals' ability to exert self-control. For instance, behavioral self-regulation is implicated in athletes' mental toughness (e.g. to bounce back or persist in the face of adversity, Bédard Thom, Guay, & Trotter, 2021). The behavioral self-regulation that athletes cultivate enables them to remain motivated where others may experience emotional exhaustion or burnout (Jordalen, Lemyre, & Durand-Bush, 2016).

Of particular interest in this research, behavioral self-regulation has been found to relate to athletes' discretion over the effort they exert on the playing field (Tedesqui & Young, 2017).

We suggest that the behavioral self-regulation exhibited by individuals with stronger athletic identities is likely to spill over into greater discretionary effort in the workplace as well. While self-regulation has been shown to predict work motivation (Converse, Juarez, & Hennecke, 2019), a lack of self-regulation often comes at the expense of work performance (de Boer, de Ridder, de Vet, Grubliauskiene, & Dewitte, 2015). We hypothesize, then, that athletic identity will positively impact discretionary effort at work indirectly through behavioral self-control:

- H2.* Athletic identity will positively impact discretionary effort at work indirectly through behavioral self-regulation.

Locus of control

Locus of control describes individuals' beliefs about the extent to which they or external forces determine the outcomes of events in their lives. An external *locus* of control in sports might lead individuals to believe that the other team won by luck or bad officiating (Holden, Forester, Williford, & Reilly, 2019). In contrast, individuals with an internal *locus* of control would be more likely to attribute victory or loss to their own efforts, whether it is because of their own hard work or mistakes (Nwankwo, Okechi, & Kalu, 2017).

Employers frequently consider an internal *locus* of control to be a desirable trait in potential employees. For instance, individuals who are perceived to have a more internal *locus* of control tend to facilitate more positive impressions in job interviews (Silvester, Anderson-Gough, Anderson, & Mohamed, 2002). Longer-term, an internal *locus* of control is associated with greater vocational satisfaction (Hadi, Kersting, Klehe, Deckenbach, & Häusser, 2023). Additionally, employees with a more internal *locus* of control tend to exhibit greater motivation (Zigarmi, Galloway, & Roberts, 2018), as well as greater work engagement and greater overall life satisfaction (Sharma & Sharma, 2015).

Consistent evidence across both work and sports contexts suggests that an internal *locus* of control is associated with performance spillovers from athletics to the world of work (Holden *et al.*, 2019). Specifically, an internal *locus* of control is associated with athletes' engagement in their post-athletic careers (Fogarty & McGregor-Bayne, 2008) and predicts engagement in discretionary organizational citizenship behaviors (Turnipseed, 2018). Thus, we hypothesize athletic identity will positively impact discretionary work effort indirectly through *locus* of control:

- H3.* Athletic identity will positively impact discretionary work effort indirectly through locus of control.

Methods

Data sample

To explore the role of athletic identity on the discretionary effort exerted at work, we first collected data from 75 employed adults who were ultra-marathon participants. As these individuals were primarily identified as higher in athletic identity, to increase variance, we then collected data from a corporate training company's client base. We surveyed 1,728 of these employed adults from various industries and countries and received 1,004 usable surveys. By usable, we mean that the survey was fully filled out by the participant, not omitting any questions. This yielded a combined sample of 1,079 respondents. A robustness

check using a sample dummy variable indicated that our statistical results were not impacted by the combining of the two samples.

Measures

Athletic identity. To assess participants' subjective athletic identity (Bowness *et al.*, 2021), we asked participants to "Please select the category that best reflects how you view yourself." Responses ranged along a six-category continuum from, 1 "You do not exercise regularly – You tend to avoid physical fitness activities," i.e. You do not view athleticism as an important part of your identity to 6 "You train regularly and you view your athleticism as an important part of your identity." Although this measure is consistent with other conceptions of athletic identity (e.g. Bowness *et al.*, 2021; Cleland *et al.*, 2019), we recognize that it is problematic in that it conflates physical activity and self-perception of one's identity. To compensate for this, we controlled for individuals' actual metabolic energy expenditure.

Discretionary work effort. Discretionary work effort was measured using Nimon & Zigarmi (2015) measure of discretionary effort and performance. The measure has six items, and sample items include "I intend to achieve all my work goals." and "I intend to volunteer for things that may not be part of my job." Potential responses range from 1 (to no extent) to 5 (to the fullest extent). Items were averaged together to form a composite measure.

Behavioral self-regulation. We assessed behavioral self-control using the 13-item Brief Self-Control Scale developed by Tangney, Baumeister, & Boone (2004). Sample items include "I am good at resisting temptation" and "I often act without thinking through all the alternatives." Potential responses range from 1 (Not at all) to 5 (Very much). Items were averaged together to form a composite measure.

Locus of control. We measured locus of control using Spector's (1988) 16-item locus of control measure. Sample items include "Getting the job you want is mostly a matter of luck," and "A job is what you make of it." Potential responses range from 1 (Agree very much) to 6 (Disagree very much). Reverse coded items were accounted for and items were summed together to make the composite measure. Higher values signify higher external locus of control.

Control variable – metabolic energy expenditure/metabolic equivalents. Popular conceptions of athletic identity often conflate identifying as an athlete with physical exercise (e.g. Bowness *et al.*, 2021; Cleland *et al.*, 2019). Thus, to rule out current physical activity as an alternative explanation for discretionary effort at work and to isolate the effects of identifying oneself as an athlete on work effort, we controlled for respondents' current exercise load (volume plus duration) by surveying the amount of time they spent each week on exercise or other physical activities.

We took this activity load information and converted it into an exercise-specific measure from the physical activity/kinesiology domain called a metabolic equivalent (MET). MET "represents a simple, practical, and easily understood procedure for expressing the energy cost of physical activities as a multiple of the resting metabolic rate" (Jetté, Sidney, & Blümchen, 1990, p. 555). Total METs = Activity × Frequency (occurrences during the week) × Duration (per session).

Other control variables. We also controlled for individuals' age, gender and education level.

Results

Table 1 contains correlation coefficients and descriptive statistics. Note that data plots revealed that metabolic energy expenditure was extremely skewed. Accordingly, we performed a natural log transformation on metabolic energy expenditure. We tested all

Table 1.
Descriptive statistics
and correlations
between variables

	Mean	SD	1	2	3	4	5	6	7
1. Athletic identity	3.09	1.12							
2. Work effort	4.55	0.85	0.04						
3. Behavioral self-control	3.62	0.46	0.10	0.24					
4. Locus of control	37.17	10.44	-0.09	-0.37	-0.18				
5. Metabolic energy expenditure	6.81	1.01	0.52	0.04	0.07	-0.06			
6. Age	49.65	9.98	-0.06	0.12	0.10	-0.04	-0.06		
7. Gender	1.57	0.50	-0.13	-0.04	0.02	0.07	-0.11	-0.08	
8. Education	4.37	1.03	0.04	0.03	0.04	0.05	0.01	0.11	-0.11

Notes: Correlations with absolute values equal to or exceeding 0.06 are significant at $p < 0.05$. Correlations with absolute values equal to or exceeding 0.08 are significant at $p < 0.01$. Correlations were performed using listwise deletion. Higher values correspond with more external (rather than internal) locus of control. Gender was measured 1 = Male, 2 = Female. Education was measured as 1 less than high school to 6 Doctorate/Advanced professional degree

Source: Authors' own work

variables for multicollinearity by analyzing variance inflation factors; no evidence for multicollinearity was found. Linear regression analyses are contained in Table 2. To test for indirect effects the PROCESS macro was used (Hayes & Preacher, 2013). The estimates of direct and indirect effects are found in Table 3. Both standardized and unstandardized effects are included.

H1 predicted that athletic identity would have a positive, direct relationship on discretionary work effort. This hypothesis was not supported ($\beta = 0.04$; $p > 0.10$). *H2* predicted that athletic identity would positively influence work effort indirectly via behavioral self-control. *H3* predicted that athletic identity would positively influence discretionary work effort indirectly via *locus* of control. *H2* (standardized bootstrapped estimate = 0.02; $p < 0.05$) and *H3* (standardized bootstrapped estimate = 0.03; $p < 0.05$) were supported. Specifically, athletic identity predicted work effort, with significant indirect effects through behavioral self-regulation and *locus* of control.

Discussion

Our findings lend support to the popular belief that athletic identity is associated with exerting greater discretionary effort and that the exertion of effort spills over into other domains of life (i.e. the workplace). In particular, our findings suggest that individuals with stronger athletic identities engage in greater behavioral self-regulation and experience more internal *locus* of control. In turn, we found that behavioral self-regulation and an internal *locus* of control mediated the relationship between greater athletic identity and higher discretionary effort in the workplace.

Our findings have important theoretical implications for the intersection of research on sports and research on work organizations. While there is an abundance of anecdotal evidence supporting beliefs that athletic mindsets can translate well to the workplace (Altobello, 2017), those assumptions have rarely been empirically tested. Given that there are growing calls for studies that cross-fertilize knowledge between sports and work life (e.g. Fonti, Ross, & Aversa, 2023), we hope that this research will help to facilitate a line of inquiry that opens significant opportunities to explore spillover effects between sports and work (and vice versa). Our findings provide support for the belief that the positive characteristics of individuals who are likely to have higher athletic identities are likely to carry over into their work (Crawford, 2022).

Table 2.
Linear regression
analyses of athletic
identity on
behavioral self-
regulation, locus of
control and work
effort

	Behavioral self-control				Locus of control			
	B	SE	β	B	SE	β	B	SE
Constant	3.00**	0.15		3.02**	0.15		37.54**	3.35
Metabolic energy expenditure	0.04**	0.01	0.08**	0.02	0.02	0.04	-0.05†	0.37
Age	0.01**	0.00	0.10**	0.01**	0.01	0.11**	-0.04	0.03
Gender	0.04	0.03	0.04	0.04	0.03	0.05	0.07*	0.65
Education	0.01	0.01	0.03	0.01	0.01	0.03	0.06*	0.31
Athletic identity				0.04**	0.01	0.09**	-0.72*	0.33
F	4.98**			5.33**			3.80**	
R ²	0.02			0.02			0.02	
Work effort								
Constant	3.80**	0.27		3.81**	0.27		4.94**	0.27
Metabolic energy expenditure	0.01**	0.00	0.12**	0.02	0.03	0.03	0.02	0.03
Age	-0.04	0.05	-0.02	0.01**	0.00	0.12**	0.01**	0.01
Gender	0.01	0.03	0.01	-0.03	0.05	-0.02	-0.03	0.05
Education	0.04	0.03	0.04	0.01	0.03	0.01	0.00	0.02
Athletic identity				0.03	0.03	0.04	0.01	0.03
Mediator (behavioral self-control)							0.43**	0.06
Mediator (locus of control)							0.23**	
F	4.76**			4.01**			-0.03**	
R ²	0.02			0.02			32.04**	
							0.15	

Notes: †Significant at 0.10; *significant at 0.05; **significant at 0.01
Source: Authors' own work

	Indirect effects			Athletic identity on work effort			Direct effects		
	Unstandardized bootstrapped estimate	SE	95% CI (LL, UL)	Standardized bootstrapped estimate	Unstandardized bootstrapped estimate	SE	95% CI (LL, UL)	Standardized bootstrapped estimate	
Behavioral self-control	0.02*	0.01	0.01, 0.03	0.02*	0.01	0.03	−0.04, 0.06	0.01	
Locus of control	0.02*	0.01	0.01, 0.04	0.03*	0.01	0.03	−0.04, 0.05	0.01	
Notes: †Significant at 0.10; *significant at 0.05									
Source: Authors' own work									

Table 3.
Indirect and direct
effects of athletic
identity on work
effort

Limitations and future research

While our findings suggest that pro-work attributes and behaviors may very well transfer between the sport and work domains, we caution against unconditionally endorsing the idea that athletes always make better employees. Indeed, there is often surprising variance among current and former high-level athletes in the degree to which they adopt an athletic identity (Houle & Kluck, 2015). This study makes an important contribution, then, by isolating athletic identity as a predictor of discretionary work effort independent of individuals' prior athletic involvement.

Similarly, our findings should not be over-generalized such that the hiring managers become overly generous with their beliefs and apply a bias that unduly benefits athletes as a class without considering individual differences. Additionally, practitioners should be aware of unconscious biases and take care not to give preferential treatment based on their recollections of the impact of their own athletic experiences on their own careers.

More broadly, in making determinations about whether to invest substantial time and energy into strategically hiring athletes, organizations should be thoughtful about the centrality of discretionary work effort to specific job roles, as well as an organization's culture and strategy. Although discretionary work effort is often desirable, researchers have discovered that there are "dark sides" to discretionary organizational citizenship behaviors (Bolino, Klotz, Turnley, & Harvey, 2013) and even personality characteristics associated with going above and beyond at work (Jeong, Korsgaard, & Morrell, 2021).

Future studies will also benefit from studying work effort longitudinally to explore the ebbs and flows of athletic identity over the lifespan. For instance, researchers have found that athletic identity tends to be higher among current athletes than former athletes (Houle, Brewer, & Kluck, 2010). We suspect, then, that there may be important differences in the dynamics of athletic identity between high-level athletes, whose athletic participation often peaks earlier in life, and recreational athletes whose athletic involvement may peak more contemporaneously with their prime work years. Moreover, we invite further research challenging the assumption that discretionary effort is primarily an outcome of athletic experience.

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