

## The Impact of Need Satisfaction on College Athlete Burnout

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#### ABSTRACT

The purpose of this study is to examine the factors that may contribute to burnout in athletes by determining the direction and strength of a relationship between burnout, athlete identity and need satisfaction. Participants (N=60) consisted of 43 male (71.67%) and 17 female (28.33%) athletes. Individuals were aged 18-22 (M=19.40, SD=1.06). Correlation analysis and comparison of means were conducted. Results of this study suggested there was a significant and negative relationship between the autonomy and competence components of need satisfaction and burnout. To manage or prevent burnout, sports professionals should focus on supporting autonomy and competence rather than reinforcing athletic identity. Creating a team culture of group decision-making and abundant opportunities to demonstrate athletic ability could effectively combat developing burnout symptoms in athletes.

**Key Words:** autonomy, athlete identity, burnout, college sports, team culture

## INTRODUCTION

Burnout in an athlete is most evident when the individual voluntarily withdraws themselves from a sport or steps down from their current level of play. However, symptoms of burnout can linger in even the most dedicated and resilient athletes. Athlete burnout is characterized by emotional and physical exhaustion, reduced sense of personal accomplishment, and devaluation of sport (11). While many factors can play into the development and onset of burnout symptoms, the roles of athletic identity and need satisfaction have been researched to varying degrees.

Many connotations are attached to the word “athlete”, both positive and negative. Some athletes embrace the lifestyle fully. Others branch out and explore other means of individuality in addition to their status as an athlete. The degree to which a person adheres to and identifies with their athletic role is known as athletic identity (13). Understanding athletic identity begins with understanding the idea of self-concept. Self-concept is a multi-dimensional approach to the way that a person makes judgements about themselves (1). Instead of judging oneself as a whole and complete person, domain-specific judgements are made. For example, a person may feel that they excel when it comes to academics but are lacking in social skills. Athletic performance and status can be viewed as one of these domains. Individuals who place a high value on their judgement of self in reference to the domain of athletic ability have a high athletic identity.

Studies of the link between an athlete’s strength of athletic identity and the presence of burnout symptoms have produced inconclusive and conflicting results over the years. For example, a study by Gustafsson et al. (6) in 2018 showed that high athletic identity scorers were less likely to display a high burnout profile, while the Garinger et al. (4) study in 2018 showed a positive and direct effect of perfectionistic tendencies on burnout in athletes. Chang et al. (2) also demonstrated a link between athletic identity and emotional exhaustion – a key component of burnout – for individuals with a low psychological flexibility. Interestingly, Verkooijen et al. (12) concluded that strength of athletic identity did not have a

relationship with subjective well-being, but that some other factor was in play to produce the higher rates of burnout being shown in their participants. There must be some other variable that is producing such contradictory results between these studies.

The relationship between need satisfaction and burnout has been explored in research as well. The Self Determination Theory suggests that individuals view themselves through their perceptions of autonomy, relatedness, and competence (3). The degree to which an individual feels that these three components are met is called need satisfaction. All three need satisfaction components have been negatively correlated with athlete burnout symptoms (10). Additionally, athletes who drop out of sport have shown low levels of need satisfaction as a whole (7). Autonomy and competence measurements, specifically, have been shown to be significant predictors of burnout behaviors (8). Athletes who have autocratic or laissez-faire style coaches or are involved in aesthetic or weight-dependent sports have been marked in some research as high-risk for burnout (5). Both autocratic and laissez-faire coaching styles have a significant impact on the autonomy of the athletes. Additionally, competence may be more difficult to achieve in sports that are dependent upon aesthetic or weight factors that are out of the athlete's control.

A high level of need satisfaction has plainly been shown to have a negative relationship with athlete burnout. Athletic identity, however, has a relationship that is less defined. Does athletic identity have a significant relationship with burnout similar to the one that can be seen with need satisfaction? Answering this question may provide valuable insight to sports professionals seeking to prevent and manage burnout.

The purpose of this study was to examine some of the factors that may contribute to burnout in athletes by determining the direction and strength of a relationship between burnout, athletic identity, and need satisfaction. A study of this type is significant in part because the mental health of athletes is often overlooked, despite its increased focus in the news media. Athletes cannot perform at their highest and healthiest potential unless their psychological well-being is made a priority. In this study, athletic identity, need satisfaction, and burnout were observed in collegiate student athletes, with a goal of better understanding the psychological factors that could contribute to preventing and managing burnout.

## **METHODS**

This study took place at a regional university in the Midwest that competes at the NCAA Division I level. Following approval by the university's Institutional Review Board and athletics department, the population for recruitment consisted of varsity and competitive club athletes, ages 18 and older. There are 14 total varsity athletic teams at the university. Varsity athletics features 374 athletes total – of which 242 are male (64.70%), while 132 are female (35.29%) (9). The survey presented participants with the Athletic Identity Measurement Scale (AIMS), Basic Need Satisfaction in Sport Scale (BNSSS), and Athlete Burnout Questionnaire

(ABQ). To achieve consistency throughout the survey, the AIMS, BNSSS, and ABQ were all measured on one 7-point Likert scale with denotations from (1) Strongly Disagree to (7) Strongly Agree.

### *Participants*

Participants (N=60) consisted of 43 male (71.67%) and 17 female (28.33%) athletes. Individuals were aged 18-22 (M=19.40, SD=1.06). Freshmen (n=18), sophomores (n=18), juniors (n=16), seniors (n=7), and fifth year (n=1) students were represented. Participants identified as white or Caucasian (n=40), Black or African American (n=15), Asian (n=1), Hispanic (n=1), Mixed Race (n=2), and another unnamed race (n=1). These athletes represented 11 varsity sports (n=49) and 1 club sport (n=11). 13 athletes were experiencing a sport participation-limiting injury at the time of survey completion. 5 participants skipped questions in the BNSSS statement set, therefore those participants' BNSSS scores were excluded, leaving N=55. For all other variables, N=60. Correlation analysis and comparison of means were conducted to examine the factors that may contribute to burnout in athletes. This served to determine the direction and strength of the relationship between burnout, athletic identity, and need satisfaction in the sample of participants.

## **RESULTS**

A bivariate correlation analysis was conducted for the purpose of analyzing results. Pearson correlation and p-value significance can be found in Table 1. No significant correlation was found between athletic identity and autonomy (p=0.750), relatedness (p=0.149), competence (p=0.131), or burnout (p=0.317). Autonomy, relatedness, and competence each had statistically significant relationships of varying degrees when compared. There were positive correlations found between autonomy and relatedness (p=0.001), autonomy and competence (p=0.027), and relatedness and competence (p=0.008). A statistically significant negative correlation between burnout and autonomy was found (p=0.010). A statistically significant negative correlation was also found between burnout and competence (p=0.010).

**Table 1:** Bivariate Correlation Analysis

	Autonomy	Relatedness	Competence	Burnout
Athletic Identity	-0.044	0.197	0.206	-0.131
Autonomy		0.444**	0.297*	-0.344*
Relatedness			0.354**	-0.224
Competence				-0.343*

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Pearson correlations between variables are displayed above.

\*\* represents a significant correlation with a p-value <0.01 (2-tailed).

\* represents a significant correlation with a p-value <0.05 (2-tailed).

Lack of added symbol represents a correlation with a p-value >0.05 (2-tailed).

Using independent sample t-tests, mean athletic identity, need satisfaction, and burnout scores were compared between demographic groups. No significant differences were found between variable means in male versus female athletes, as well as injured versus non-injured athletes. However, a significant difference between the means of autonomy scores was found in varsity versus club athletes. The mean autonomy score in varsity athletes was 24.00, while mean autonomy score in club athletes was 29.30 ( $p < 0.05$ ). No other variable means produced statistically significant results between varsity and club athletes.

## **DISCUSSION**

The results of this study suggest that there was no significant relationship between athletic identity and burnout. Furthermore, the results of this study showed no significant relationship between athletic identity and any aspect of need satisfaction. This could reflect the internal versus external nature of the two variables. However, the results of this study did show a significant positive correlation among all three components of need satisfaction: autonomy, relatedness, and competence. If an athlete experiences a high need satisfaction in one component, it is likely that they will be satisfied in the other two components as well. This may be due to the culture created within a team. In other words, if a team is exceeding or failing in one component of need satisfaction, they may also be exceeding or failing in other components by association. For example, a coach that shows great concern for creating a sense of autonomy within a team is likely also going to be concerned about his or her athletes developing relationships with each other and feeling competent in their sport. The positive or negative culture of a team could be the cause of the direct relationship among the need satisfaction components of its athletes.

Overall, a significant negative relationship was found between burnout and the autonomy and competence components of need satisfaction. If an athlete feels autonomous and competent in their sport, they may be less likely to experience symptoms of burnout. Similar results were found in a study by Lonsdale et al. (8) when examining autonomy and competence were significant predictors of burnout. Self-determination theory has posited that autonomy and competence are important factors in the way that humans view themselves (3). If these two needs are being fulfilled through sport, it is reasonable to conclude that symptoms of exhaustion, reduced sense of personal accomplishment, and devaluation would be less likely to develop. Relatedness, however, was not determined to have a significant correlation with burnout. Lonsdale et al. (8) determined that relatedness was likely to have a more significant relationship with exhaustion than with burnout as a whole. In the present study, scores for the individual dimensions of burnout were not calculated. Because of this,

the same conclusions made about relatedness by Lonsdale et al. (8) cannot be made here, but perhaps could explain why relatedness did not have a significant relationship with overall burnout scores.

## APPLICATIONS IN SPORT

Since athletic identity was shown to have no significant relationship with burnout symptoms, sports professionals (coaches, athletic trainers, sports psychologists, and others) will not likely find success in attempting to manage burnout by strengthening or weakening athletic identity within a team. Encouraging athletes to dedicate all their time and energy to their sport will not manage burnout, and neither will encouraging athletes to spend more time focusing on their identity as a student, sibling, or socialite. Instead, sports professionals should focus on meeting the autonomy and competence needs of the athletes that they work with. This study, in combination with many others, suggests that an athlete whose basic needs are satisfied through sport is less likely to experience high rates of burnout. Creating a team culture of group decision-making and abundant opportunities to demonstrate athletic ability could be key in preventing and managing burnout.

Overall, this study served to provide an important examination of the relationships between athletic identity, need satisfaction, and burnout in athletes. These results suggest significant findings to sport professionals who seek to combat burnout within athletes, and also provide a meaningful insight and direction to future sport psychology research. Athletes cannot perform at their highest and healthiest level unless mental health is made a priority. The phenomenon of burnout is only one of many mental health issues that athletes must face, but it is a great place to start as researchers look towards the future of mental health in athletics.

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