

The Effects of Athletic Scholarships on Motivation in Sport

Nikola Medic
McMaster University

Diane E. Mack and Philip M. Wilson
Brock University

Janet L. Starkes
McMaster University

The purpose of this study was to examine the effects of athletic scholarships on the motives of collegiate athletes for sport. "Present" and "perceived future" motivation was assessed in a sample of 70 non-scholarship and 46 scholarship basketball players. Male scholarship athletes reported higher levels of introjected regulation than female non-scholarship athletes, and higher levels of external regulation compared to female scholarship athletes and all non-scholarship athletes. For non-scholarship athletes, the future possibility of obtaining full athletic scholarships resulted in increased external regulation, decreased intrinsic motivation to experience stimulation, and decreased intrinsic motivation to accomplish things. For scholarship athletes, the possibility of removing full athletic scholarships resulted in decreased intrinsic motivation to experience stimulation and decreased intrinsic motivation to accomplish things. Collectively, the results of the present investigation offer support for Deci and Ryan's (1985) cognitive evaluation theory and point to the potential negative effects of scholarships on athlete's motivation for sport.

Address Correspondence To: Nikola Medic, Department of Kinesiology, McMaster University, Hamilton, Ontario, Canada, L8S 4K1, Phone: (905) 525-9140 ext. 24625, E-mail: medicn@mcmaster.ca.

Research has shown that intrinsic motivation (IM) and extrinsic motivation (EM) are important concepts for understanding motivational processes in sport settings (Deci & Ryan, 2002; Vallerand & Rousseau, 2001). IM refers to "doing an activity for its inherent satisfactions and pleasures rather than for some separable consequence" (Ryan & Deci, 2000, p. 56). On the other hand, EM reflects behaviors that are performed not for their own sake, but to achieve some separate goal (e.g., receiving a reward, avoiding punishment, maintaining contingent self-worth). Finally, amotivation refers to the absence of IM or EM and is considered central to understanding motivated behavior (Deci & Ryan, 2002). As such, it is perceived that one's actions have no control over outcomes and that forces beyond one's individual control determine behavior (Deci & Ryan, 1985).

According to self-determination theory (Deci & Ryan, 1985; 2002), motivational processes are best understood as a continuum of internalizations ranging from volitional to highly controlling forms of regulation (Ryan & Deci, 2000). At one end, non-self-determined regulations in the form of EM operate to control behavior while, at the other extreme, self-determined intrinsic motives underpin behavior. These motives vary in the degree to which they reflect self-determined regulation of the behavior as they span the continuum between amotivation and IM. Four sources of EM have been noted in the sport motivation literature and include: external regulation, introjected regulation, identified regulation, and integrated regulation (Vallerand & Rousseau, 2001). Externally regulated behaviors reflect the least self-determined form of EM whereby behavior is perceived to be controlled by outside sources. The next point along the continuum is introjected regulation, which refers to behavior that is reinforced through internal pressures such as guilt or anxiety that coerce participation rather than volitionally supporting involvement. Identified and integrated regulation are the most self-determined forms of EM which entail participating in an activity autonomously due to the importance of the outcomes stemming from the behavior or because the activity itself is coherent with other aspects of the self and thereby reflects the person's identity (Deci & Ryan, 2002).

Three forms of IM have been identified by Vallerand and Rousseau (2001), each reflective of the most self-determined form of behavioral regulation. They include: (a) IM to know which regulates engagement in activity for the pleasure one receives from learning; (b) IM to accomplish which refers to the pleasure and satisfaction one feels while striving to accomplish particular tasks or goals; and (c) and IM to experience stimulation which occurs when one engages in a behavior because of the pleasurable sensations this act confers (Vallerand & Rousseau, 2001). Irrespective of the unitary (Deci & Ryan, 2002) or tripartite (Vallerand & Rousseau, 2001) conceptualization of IM, arguments put forth within the framework of SDT contend that self-determined motivation promotes adaptive cognitive, affective and behav-

ioral consequences including domain-specific indices of improved performance. Previous research has shown that more self-determined motives are positively associated with various cognitive, affective, and behavioral outcomes in sport settings (Gagne, Ryan, & Bargmann, 2003; Kowal & Fortier, 1999; Vallerand & Rousseau, 2001). Although research examining the motivation-performance link in sports remains scant (Vallerand & Rousseau, 2001), preliminary evidence indicates that identified and intrinsic motives predict behavioral engagement in swimming over time (Pelletier, Fortier, Vallerand, & Brière, 2001). Moreover, Marsh and Perry (2005) have demonstrated the importance of self-perceptions that serve a motivational function indicating that they account for approximately ten percent of the residual variance in sport performance after the contributions of past sport performances have been taken into account. Further evidence has supported the importance of SDT's motivational continuum with studies showing that less self-determined motives including external regulation, and at times introjected regulation, to be related to maladaptive consequences including high levels of anxiety, inattentiveness, and negative mood states in athletes (Deci & Ryan, 2002; Vallerand & Losier, 1994; Vallerand & Rousseau, 2001).

The effect of rewards on IM has generated substantial interest from both motivational researchers and sport psychologists alike. Early research findings in laboratory settings (e.g., Deci, 1971; 1972a, 1972b; Vallerand & Rousseau, 1991; Zeevi, Friedman, & Kruglanski, 1973) suggested that rewards negatively affected free-choice behavior, resulting in decreased IM. Two explanations were offered to explain these investigations. First, Lepper, Greene, and Nisbett (1973) proposed that offering rewards as an incentive for engaging in an already interesting activity decreases IM as people eventually begin to attribute their participation to external causes (i.e., reward). Second, rewards may reduce IM when perceived as a mechanism through which individual behavior is controlled. More recently, researchers have challenged the contention that rewards result in decreased IM, suggesting rewards may increase IM when the presence of the reward is perceived as a source of competency and autonomous action (Deci & Ryan, 1985; 2002). According to this perspective, rewards are not necessarily detrimental to intrinsic forms of motivation.

In an attempt to clarify the relationship between extrinsic rewards and IM, a series of meta-analytic investigations have been undertaken. Initial findings supported the belief that rewards exert a detrimental impact on IM (Rummel & Feinberg, 1988; Tang & Hall, 1995; Wiersma, 1992). Cameron and colleagues challenged these conclusions claiming that the negative effects of rewards are rare and that rewards are beneficial in motivating behavior under conditions of performance-contingency or when task interest is low (Cameron, Banko, & Pierce, 2001; Cameron & Pierce, 1994; Eisenberger & Cameron, 1996). Cameron and colleagues' meta-analyses were criticized for methodological and interpretational errors which stimulated further discussion of the role of rewards on motivation (Kohn, 1996; Ryan & Deci, 1996). Results

of two separate meta-analyses conducted by Deci, Koestner, and Ryan (1999a; 1999b) indicated that only verbal praise enhanced IM and that different reward characteristics significantly undermined IM (i.e., when a reward was tangible, expected, engagement-contingent, completion-contingent, and performance-contingent).

One area of debate is the influence of performance-contingent rewards on IM. Performance-contingent rewards are defined as rewards "given explicitly for doing well on a task or for performing up to a specified standard" (Ryan & Deci, 2000, p. 27) such as offering monetary incentives for performances that exceed a known standard. Deci and colleagues (1999a; 1999b; Ryan & Deci, 2000) claim that the most detrimental reward contingency involves giving rewards as a direct function of performance. Conversely, Cameron and colleagues (1994; 1996; 2001) claim that rewards that are tied to specific performance standards and to success exert a positive influence on IM. One application of performance-contingent rewards that is commonplace in intercollegiate sport in the United States of America is athletic scholarships.

Consistent with the experimental lab-based studies, research examining the influence of athletic scholarships on motivation has yielded equivocal results. Studies have demonstrated that athletes who hold an athletic scholarship report lower levels of IM (Ryan, 1977; Wagner, Lounsbury, & Fitzgerald, 1989). Conversely, Ryan (1980) reported increased IM only in athletes who competed in sports where resources (i.e., athletic scholarships) were limited in number. Amorose and Horn (2000) reported that IM was significantly higher in those with full athletic scholarships. To further complicate the literature, no differences in IM between scholarship and non-scholarship athletes have been reported (Amorose & Horn, 2001; Miller, 2000). While a number of plausible explanations exist for these divergent findings (e.g., theoretical interpretations, measurement of motivation, evolving structure of intercollegiate sport), male athletes consistently report higher levels of EM than female athletes. The finding that males endorse more extrinsically motivated participation is consistent with previous sport motivation research (Chantal, Guay, Dobreva-Martinova, & Vallerand, 1996; Pelletier, Fortier, Vallerand, Tusson, Briere, & Blais, 1995).

One limitation of the existing research examining motivation of scholarship and non-scholarship athletes is that the majority of studies have considered only IM. This is important for two reasons. First, research employing self-determination theory (Deci & Ryan, 2002) suggests that different types of motivation other than IM need to be considered to develop a fuller understanding of motivational processes. In accordance with the theory, instruments now exist that facilitate the measurement of both IM and the full range of EM in sport settings (Pelletier et al., 1995) which allows researchers to consider how different types of motivation may be influenced by performance-contingent rewards such as athletic scholarships. Second, research considering the motivational influence of scholarships has been limited to athletes in

the United States of America. Rather than sampling non-scholarship athletes that are "surrounded" by scholarship athletes, as was the case with previous studies, an alternate approach could be to evaluate university athletes from Canada. Since athletic scholarships are not available in Canada, non-scholarship athletes are the norm and represent an interesting cohort for comparison with U.S.-based collegiate athletes.

The purpose of this study was to examine how athletes' motivation is affected by athletic scholarships. This study employed two approaches to shed light on this issue. First, a comparison of sport motivation between scholarship (Division I basketball players from United States) and non-scholarship (Inter-University Sport basketball players from Canada) athletes was undertaken. Second, a within-group approach was utilized that involved manipulating athletic scholarship status through the use of scenarios to examine potential changes in sport motivation. Consistent with Deci et al. (1999a; 2000), it was hypothesized that scholarship athletes would report lower levels of IM than non-scholarship athletes. Previous literature (e.g., Chantal et al., 1996; Pelletier et al., 1995) has identified that male athletes report higher levels of EM than do female athletes. As such, it was hypothesized that male athletes would report more extrinsic reasons for participating in basketball compared to female athletes. Based on previous research (Deci, 1971; 1972a; 1972b; Deci et al., 1999; Kruglanski et al., 1973; Lepper et al., 1973; Ryan, 1977; Wagner et al., 1989), it was also hypothesized that IM would decrease for scholarship athletes should scholarships be perceived as unavailable and that external regulation would increase for non-scholarship athletes should scholarships be perceived as available.

Method

Participants

Participants were male ($n = 71$) and female ($n = 45$) intercollegiate basketball players. Non-scholarship athletes ($n = 70$) were sampled from four universities in Ontario (Canada) and scholarship athletes ($n = 46$) were sampled from seven different Division I schools in the United States of America. Participants ranged in age from 18 to 24 years old ($M = 20.57$; $SD = 1.33$) and reported playing basketball for 12.23 years ($SD = 4.13$). Self-reported demographic data indicated that non-scholarship athletes ($M = 16.67$; $SD = 4.66$) spent less time than scholarship athletes ($M = 19.46$; $SD = 5.20$) playing or practicing basketball on a weekly basis ($t(114) = 3.01$, $p < 0.01$). The response rate was 78.00% for non-scholarship athletes and 75.00% for scholarship athletes.

Measures

Demographic and Athlete History Information. Participants provided their age, basketball experience, gender, and scholarship status. The average number of hours the participant engaged in practicing skills related to basketball in the past year was assessed via a single item measure.

Present and Future Motivation. The Sport Motivation Scale (SMS; Pelletier et al., 1995) was used to assess participation motivation. The SMS consists of seven subscales that measure three types of IM (IM to know, IM to accomplish things, and IM to experience satisfaction), three types of EM (external, introjected, and identified regulation), and amotivation toward sport participation. Athletes' responses were assessed across a 7-point Likert scale anchored at the extremes by the response of "1" = "does not correspond at all" and the response of "7" = "corresponds exactly". For the purposes of specificity, the priming statement was modified from "why are you presently practicing your sport?" to "why are you presently practicing/playing basketball?". Pelletier et al. (1995) provided support for construct and discriminant validity as well as internal consistency and temporal stability for SMS scores. The subscale representing amotivation was excluded due to concerns identified around the validity of scores derived from this subscale of the SMS (Martens & Webber, 2002). Internal consistency reliability estimates of SMS subscales ranged from .72 to .85 for "present" motivation and .67 to .86 for "perceived future" motivation.¹

Experimental Manipulation

After completing items assessing demographic and sport motivation, participants were asked to consider their motivation for a situation whereby athletic scholarship status was altered. A full athletic scholarship was defined as a "method by which tuition, room and board, books, and all other necessary goods and services are provided to the student in return for his/her services as an athlete" (Harrigan, 2001, p. 140). Non-scholarship athletes' were asked to project how motivated they would be if full athletic scholarships became available, by completing the SMS (Pelletier et al., 1995). Scholarship athletes' were asked to project how motivated they would be if full athletic scholarships were no longer available, by completing the SMS. These measures represented athletes' "perceived future" motivation.

¹ Cronbach's alpha coefficients for "present" motivation were: $\alpha = .76$ for IM to know, $\alpha = .81$ for IM to accomplish things, $\alpha = .85$ for IM to experience stimulation, $\alpha = .73$ for identified regulation, $\alpha = .72$ for introjected regulation, and $\alpha = .77$ for external regulation. Cronbach's alpha coefficients for "perceived future" motivation were: $\alpha = .83$ for IM to know, $\alpha = .86$ for IM to accomplish things, $\alpha = .87$ for IM to experience stimulation, $\alpha = .67$ for identified regulation, $\alpha = .76$ for introjected regulation, and $\alpha = .83$ for external regulation.

Procedures

Following institutional ethics approval, head coaches of each basketball team were contacted to obtain consent for the researcher to approach their team. Upon permission, surveys were mailed to each head coach with scripted instructions for test administration. Instructions included were specific to who should administer the test (i.e., not the head coach) and where and when the survey should be administered. The scripted instructions were used on the basis of pragmatic grounds for the purposes of data collection and to reduce between-subjects effects associated with test administration (Crocker & Algina, 1986). Completion of the survey took approximately 20 minutes. Athletes returned completed questionnaires to the test administrator in a sealed envelope, who then returned the package to members of the research team using a self-addressed stamped envelope.

Results

Preliminary analyses

Data were screened for out of range responses and systematic patterns of missing data. Since none of the above concerns were detected, occasional missing values were replaced for continuous variables using the mean for that scholarship status group (Tabachnick & Fidell, 2001). Furthermore, individual item distributions were checked to ensure normal distribution (i.e., no univariate outliers). Descriptive information was calculated on relevant variables and assumptions of multivariate tests met according to conventional criteria. Concerns over multivariate normality were met objectively (e.g., Mahalanobis distance) and the correction factor in SPSS used to account for unequal cell sizes was applied. Mean subscale scores from the SMS were calculated separately for the "present" and "perceived future" types of motivation for non-scholarship and scholarship athletes.

Independent *t*-tests were conducted to examine whether differences existed as a function of one's scholarship status or gender on the following demographic variables: athlete's age, basketball experience (years), and the average amount of time spent playing basketball per week. Results indicated that scholarship athletes ($M = 11.22$; $SD = 3.06$) had more basketball experience than non-scholarship athletes ($M = 9.93$; $SD = 3.24$; $t(114) = 2.14$, $p < .05$; $ES = .41$). Consequently, basketball experience was used as a covariate when scholarship and non-scholarship athletes were compared.

Motivational Differences Across Scholarship Status and Gender

A multivariate analysis of covariance (MANCOVA) was conducted to determine the effect of scholarship status and gender on "present" motivation towards basketball. Dependent variables included the six SMS subscales; independent variables were scholarship status and gender; and basketball experience was entered as the covariate. An interaction effect was found for scholarship status and gender (Wilks' Lambda = 0.87; $F(4, 112) = 2.62, p < .05$). Subsequent ANOVAs revealed that scholarship males ($M = 4.76; SD = 1.32$) had higher levels of introjected regulation compared to scholarship females ($M = 3.26; SD = 1.28; F(3, 112) = 5.90, p < .01; ES = 1.15$). Scholarship males ($M = 4.83; SD = 1.01$) also reported higher external regulation compared to scholarship females ($M = 3.60; SD = 1.51; ES = .96$), non-scholarship males ($M = 3.75; SD = 1.25; ES = .95$), and non-scholarship females ($M = 3.62; SD = .92; F(3, 112) = 6.13, p < .01; ES = 1.25$). No other differences in "present" motivation were found.

Motivational Changes Linked to Manipulation

Two separate repeated measures MANOVAs, one for non-scholarship and one for scholarship groups, were conducted to examine differences in "present" and "perceived future" motivation following the manipulation (see Table 1). For non-scholarship athletes, a main effect for the manipulation was found (Wilks' Lambda = .66, $F(6, 63) = 5.58, p < .001$). ANOVA's revealed that "perceived future" IM to experience stimulation would decrease ($F(1, 68) = 7.64, p < .01; ES = .19$), IM to accomplish things would decrease ($F(1, 68) = 7.16, p < 0.01; ES = .24$), and the external regulation would increase ($F(1, 68) = 15.86, p < 0.001; ES = .33$) should athletic scholarships become available. Similar results were found following the manipulation with scholarship athletes (Wilks' Lambda = .72, $F(6, 39) = 2.64, p < .05$). Follow up univariate ANOVA's revealed that scholarship athletes' "perceived future" IM to experience stimulation ($F(1, 44) = 4.99, p < .05; ES = .20$) and IM to accomplish things ($F(1, 44) = 9.10, p < 0.01; ES = .35$) would decrease should athletic scholarships become unavailable.

Table 1. Descriptive Statistics and Effect Sizes of Changes in Motivation as a Result of the Manipulation

Subscale	"Present" Motivation <i>M (SD)</i>	"Perceived Future" Motivation <i>M (SD)</i>	<i>p</i>	<i>ES</i>
IM to Experience Stimulation				
Non-scholarship	5.26 (1.03)	5.05 (1.17)	.01	.19
Scholarship	5.31 (1.05)	5.08 (1.23)	.05	.20
IM to Accomplish				
Non-scholarship	5.10 (1.08)	4.83 (1.13)	.01	.24
Scholarship	5.29 (1.05)	4.88 (1.31)	.01	.35
IM to Know				
Non-scholarship	4.41 (1.21)	4.50 (1.23)	.26	.07
Scholarship	4.69 (1.30)	4.65 (1.33)	.80	.03
Identified Regulation				
Non-scholarship	4.59 (1.14)	4.63 (1.14)	.70	.04
Scholarship	4.78 (1.07)	4.65 (1.10)	.30	.12
Introjected Regulation				
Non-scholarship	4.08 (1.24)	4.20 (1.32)	.23	.09
Scholarship	4.08 (1.35)	4.07 (1.33)	.92	.007
External Regulation				
Non-scholarship	3.71 (1.15)	4.13 (1.35)	.01	.33
Scholarship	4.27 (1.39)	4.07 (1.46)	.14	.14

Note: *IM* = Intrinsic Motivation, *M* = Univariate Mean, *ES* = Standard effect size.

Discussion

The present investigation examined the effects of athletic scholarships on athletes' motivation for sport. The results of the present investigation indicated that motivational differences were dependent on athlete scholarship status and gender only for non-self-determined types of motivation. These results do not suggest that differences between genders do not exist, but rather that they seem to be dependent on an athlete's scholarship status. Specifically, scholarship males reported higher scores on the subscales of external regulation and introjected regulation which support the idea that extrinsic factors and internal pressures can exert a considerable motivational influence on basketball participation especially in male athletes. These findings were consistent with previous studies (Miller, 2000; Pelletier et al., 1995; Ryan, 1977; 1980; Wagner et al., 1989) suggesting that one reason why this may have occurred is because male scholarship basketball players likely experience a great deal of pressure to perform. Further, as athletic scholarships are common among Division I basketball players, they are expected. Athletes who expect to be awarded a scholarship may be less likely to perceive themselves as competent, perceive the scholarship as informational, and perceive themselves as the cause of their behavior. Another possibility is that a general selection bias of male scholarship athletes exists such that male athletes that are awarded a full athletic scholarship initially have higher levels of non-self determined motivation. This observation may be a characteristic of the individual or a result of socialization to the scholarship milieu and represents an interesting area for further inquiry.

Scholarship status was manipulated through scenarios. It was hypothesized that IM would decrease for scholarship athletes should scholarships become unavailable and that external regulation would increase for non-scholarship athletes should scholarships become available. When non-scholarship athletes were asked how motivated they would be if full athletic scholarships were available, they reported a decrease across two measures of IM (i.e., IM to experience stimulation and IM to accomplish things) and an increase in external regulation. When scholarship athletes were asked how motivated they would be if full athletic scholarships were unavailable, they also reported decreases across two measures of IM (i.e., IM to experience stimulation and IM to accomplish things). Results from this study are consistent with meta-analytical results offered by Deci et al. (1999a). Consistent with theoretical predictions, non-scholarship athletes may perceive that the introduction of scholarships would lower their capacity to be determinants of their behavior since the pressure to perform well would likely increase and since playing for the money rather than inherent enjoyment would prevail over time. Scholarship athletes may have perceived that the removal of athletic scholarships would lower their capacity to have choices, as their academic expenses would then

become their responsibility resulting in their autonomy being limited. This suggests that full athletic scholarships can exert control over scholarship athletes' behavior, and can also be perceived as potential controllers of non-scholarship athletes' behavior, rather than the method that can provide incentive for an athlete's effort and performance.

While these findings are interesting and novel, a number of limitations are evident with the present study. First, the results of the present study were limited to a cross-sectional study design and the use of scenarios to assess "perceived future" motivation. Second, even though the SMS is a dispositional instrument, context variability may be an issue given that data collection was not uniform across each team's competitive season with some teams completing surveys towards the end (i.e., during play-offs) as opposed to at the culmination of their season. Third, the data were collected from athletes competing in Canadian and American collegiate sport systems which could exert a cultural influence on the way in which sport is experienced and valued by the athletes and subsequently influence participant responses.² Fourth, the link between motives varying in self-determination and performance was not addressed in the present study. Lastly, the results from this study are limited to the sport of basketball and young (i.e., college-aged) athletes.

Considering the aforementioned limitations, a number of plausible future research directions can be offered to advance the study of rewards and sport motivation. Future research should consider a more diverse group of athletes that will extend generalizability of the present data by offering an opportunity to cross-validate the findings. Sampling high school athletes may be important as their perceptions of athletic scholarships will help advance our understanding of the motivational process in this age group. A longitudinal study could monitor motivational stability and variables that are likely to impact changes in motivational orientation of high school and intercollegiate athletes who receive athletic scholarship versus those that do not. The longitudinal approach could examine the accuracy of motivational projection such that "perceived future" motivation could be measured and compared over time. This approach could identify whether scholarship athletes are initially more extrinsically motivated, and if so, whether this occurs prior to getting a full athletic scholarship or throughout their athletic careers. Also, studies could extend the work of Amorose and Horn (2000; 2001) to

² We would like to acknowledge a reviewer for pointing this out to us after reading our initial submission. The notion of cultural differences is an important issue and one worthy of additional inquiry especially within the framework of self-determination theory (Deci & Ryan 2002) where cultural relativism and normative convention remain important research agendas worthy of examination. To date, however, cross-cultural issues including the generalizability of Deci and Ryan's (2002) contentions have been overlooked by sport psychology research interested in understanding motivation from the perspective of self-determination theory. One plausible starting point emanating from the present study would be to include a sub-sample of non-scholarship athletes from American universities for comparison purposes.

examine different coaching styles and behaviors that have been shown to influence the motivational context in which athletes' development takes place. Finally, it would be useful to extend the present study by linking scholarship status and motivation for sport with performance that has yet to be fully explored in applications of SDT to sport psychology research (Vallerand & Rousseau, 2001). Such attempts may wish to combine the use of longitudinal designs across the course of a competitive season with multiple performance indicators that motivation may influence such as persistence behavior (e.g., attrition, training practices), statistical performance variations across a competitive season (e.g., win:loss records), and athlete- and coach-rated evaluations of competitive performances.

In conclusion, the results from the present study are interesting because of a unique approach taken to obtain deeper insight regarding the effectiveness of athletic scholarships as a motivating technique across athletes drawn from Canadian and American university sport systems. The results of this study provide support for cognitive evaluation theory and correspond to Deci et al.'s (1999a) recommendation that performance-contingent rewards have a negative effect on a person's IM. This study demonstrated that motives rated as most important by athletes would decrease regardless of whether full athletic scholarships were introduced to non-scholarship athletes or whether they were removed from scholarship athletes. Furthermore, being motivated by extrinsic factors and internal feelings of pressure such as guilt and anxiety was associated with the receipt of a full athletic scholarship, especially among males. One practical implication of these findings may be that the Canadian Inter-University Sport and the National Collegiate Athletic Association may need to be cautious in altering current practices dictating the distribution of athletic scholarships if the principle aim is to enhance a student-athlete's motivation. This recommendation is based solely on the potential for scholarships to develop less self-determined motivational orientations of the athletes, and as such may not apply to institutions that prioritize or give more emphasis to other variables such as an individual's performance, and/or economic efficiency of their sport program. In addition to the practical implications, this study suggests that Deci and Ryan's (2002) self-determination theory is a useful framework for understanding the influence of performance-contingent rewards on sport motivation and future research embracing this perspective appears worthwhile for enhancing our understanding of the motivational dynamics associated with sport involvement.

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