

Applied Psychology Review (APR)

Volume 2 Issue 1, Spring 2023

ISSN(P): 2959-1597 ISSN(E): 2959-1600

Homepage: <https://journals.umt.edu.pk/index.php/apr>



Article QR



Title: Reining in Self-Leadership within Academia and Athletics: A Self-Determination Perspective

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DOI: <https://doi.org/10.32350/apr.21.01>

History: Received: December 15, 2022, Revised: March 12, 2023, Accepted: March 27, 2023, Published: June 16, 2023

Citation: Seidel, L., Sullivan, R., Baker, A., & Blanchard, C. (2023). Reining in self-leadership within academia and athletics: A self-determination perspective. *Applied Psychology Review*, 2 (1), 1-24. <https://doi.org/10.32350/apr.21.01>

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Conflict of Interest: Author(s) declared no conflict of interest



A publication of
Department of Knowledge & Research Support Services
University of Management and Technology, Lahore, Pakistan

Reining in Self-Leadership within Academia and Athletics: A Self-Determination Perspective

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Abstract

The purpose of this paper is to examine self-leadership and its antecedents through a self-determination theory framework in order to identify and understand the key mediators that contribute to the development of self-leadership. Two studies were used to test the tenability of our proposed model across two domains. Study 1 examined self-leadership amongst a sample of undergraduate students. Study 2 examined a similar model amongst equine athletes from across Canada. Self-report questionnaires were employed to collect all data. Based on the conclusions, we suggest that autonomous motivation, rational decision-making and emotional regulation are important aptitudes for the development of efficient self-leadership. Ultimately, the research expands the literature on both self-determination theory and self-leadership by offering a unique multiple mediation models for predicting self-leadership development.

Keywords: self-leadership, motivation, emotional regulation, decision-making

Introduction

Self-leadership is a self-influenced process through which people recognize their own direction and motivation required to perform optimally in different life contexts (Manz et al., [2016](#); Neck & Houghton, [2006](#); Stewart et al., [2019](#)). Through the application of cognitive and behavioural strategies that facilitate self-leadership, individuals are able to make improvements to their personal effectiveness and excellence. Such strategies are universal skills, making them applicable across contexts. Strategies for self-leadership include self-observation, goal setting or self-reward, natural reward strategies, evaluating and challenging irrational beliefs, mental imagery, and positive self-talk (Houghton & Neck, [2002](#)). Thus, given the value of these skills, self-leadership is fundamental to

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ideal functioning and to elevating performance in domains such as school, work, sport, and recreational activities (Neck & Houghton, [2006](#)).

Furthermore, self-leadership is associated with a wealth of positive outcomes including improved emotional regulation (Quick et al., [2014](#)), increased work engagement, enhanced performance (van Dorssen-Boog et al., [2021](#)), commitment, creativity (Shafi et al., 2020), positive affect (Wang et al., [2019](#)), trust, team potency (Mazzetti & Schaufeli, [2022](#)), psychological empowerment, well-being, and overall quality of life (Neck & Houghton, [2006](#)).

Self-determination theory (SDT; Deci & Ryan, [1985](#); Ryan & Deci, [2017](#)) is a global theory of human motivation that examines how biological, social and cultural conditions support or thwart the inherent capacity for psychological growth, engagement and wellness. The theory posits that autonomous motivation orientation is the foundation for increasing cognitive and behavioural performance (Legault & Inzlicht, [2013](#)). Ryan and Deci ([1985](#); [2002](#)) state that autonomous motivation helps people recognize their authentic self and generates behaviours and aptitudes that stem from personal choices, and are characterized by enthusiasm, excitement, and joy (Roth et al., [2009](#)). Hence, autonomously motivated individuals acquire skills and behaviours which often stem from a general interest or passion and curiosity. On the other hand, controlled motivation is expressed and experienced as behaviours and aptitudes that are less than ideal and are often triggered by sources external to the self, such as punishments or rewards. Therefore, controlled motivation drives a person for short term goals, but can ultimately lead to poorer choices, actions and performances.

Autonomously motivated people are not driven by external rewards because they are more concerned with the nature of the action itself. They participate and perform behaviours for their own sake or as an expression of one's values, rather than for the pursuit of external rewards (Morris et al., [2022](#)). When an individual is entirely autonomously motivated, their behaviours are in line with their attitudes, feelings and views; there is congruence between the self and actions. Overall, SDT postulates that people high in autonomous motivation are more mindful (Leigh & Anderson, [2013](#)) and have higher self-regulatory capacity (Weinstein & Hodgins, [2009](#)) compared to those who are more control-oriented. However, research has yet to explore the role of motivation orientation

and its repercussions on mindfulness, self-regulation and decision-making collectively, and how these antecedents impact self-leadership.

Indeed, limited research connects motivation and cognitive aptitudes including mindfulness, decision-making and emotional regulation. First, it is well known that more mindful individuals demonstrate more autonomously motivated behaviour (Hutmacher et al., [2022](#); Leigh & Anderson, [2013](#)). Here, we proposed that the opposite may be true; motivation is predicted to be a crucial foundation to mindfulness, which in turn affects emotional regulation and decision making, which ultimately influences and helps foster self-leadership.

Mindfulness is a cognitive aptitude that can contribute to enriched self-leadership and more conscious actions, behaviours, and introspection (Furtner et al., [2018](#)). Mindfulness is considered a state of heightened cognizance and attention to personal experience and reality (Brown & Ryan, [2003](#)). Mindful individuals actively think about what they are doing in the present moment and why they do what they do (Brown & Ryan, [2003](#)). McCarthy ([2011](#)) describes mindfulness as a mechanism for people to take responsibility for their actions without judgement and focus on the present in order to prevent a lack of control.

Rooted in SDT, Leroy and colleagues ([2013](#)) suggest that motivation enhances engagement in activity by increasing an individual's focus and attention, as well as by centring internal awareness (i.e., exhibiting mindfulness). It is proposed that mindfulness collectively with motivation holds an important position within the realm of sports. It is well acknowledged that mindfulness can aid increased performance through the alleviation of anxiety symptoms and negative thoughts (Baltzell & Akhtar, [2014](#)) while increasing states of flow (Marty-Dugas et al., [2023](#)). Performance anxiety is a common concern among athletes, and given the value of mindfulness in relieving anxiety. It has been successful in elevating the performance success among competitive shooters (John et al., [2011](#)). Enhanced mindfulness has been found to co-occur with other factors that positively relate to performance, most notably, flow. Research has commonly shown flow to be linked to enhanced sports performance and mindfulness (Bakker et al., [2011](#); Bernier et al., [2009](#)). Mindfulness has been associated with the intrinsic values component of autonomy orientation (Brown & Kasser, [2005](#)). Furthermore, Leigh and Anderson ([2013](#)) suggest that autonomous functioning is associated with mindful

engagement in activities among undergraduate students. It is suggested that low cognitive defensiveness and openness to experience, key aspects of mindfulness, are associated with autonomous motivation. Hutmacher et al. (2022) found that mindfulness predicted autonomous motivation among students.

Given that research demonstrates the importance of motivation and mindfulness in different realms of life, it is clear that these two concepts tap into the development of self-leadership. However, given the complex nature of self-leadership, this study observed alternative components that may be required to help achieve optimal self-leadership. Therefore, in the current research, the model was extended to include decision making and emotional regulation to highlight the elements which foster the topmost levels of self-leadership. The aim of this study was to uncover the factors that help people excel in self-leadership. Provided that research is warranted to explore these two dimensions of the self, they have been included in the current model.

Decision-making is defined as the cognitive process of gathering and analyzing information that produces an idea, solution or behaviour from a range of possibilities. Decision-making can be examined through the use of analytical processes, while intuition and emotion can also play key roles in the choices people make and the forms of behaviour they carry out, thereby demonstrating the density of decision-making (De Martino et al., 2006). Within the self-leadership framework, decision-making style and quality determine effectiveness. It is proposed that high-quality and rational decisions emerge from an individual's ability to motivate themselves (Dellaposta, 2016). In addition, self-leadership is construed by the decisions individuals make across time in specific situations and contexts.

Decision-making style is often discussed within career development and the vocational arena (Scott & Bruce, 1995), providing implications for leadership, management and employee behaviour. Driver et al. (1993) proposed that decision-making style is a learned habit and individuals typically have a primary and secondary style. They suggested that differences among decision-making styles stem from the amount of available information and the number of available alternatives. Rational decision-making has been identified as a style necessary for self-leadership and is defined as the “comprehensive search for information,

inventory of alternatives and logical evaluation of alternatives” (Thunholm, [2005](#), p. 933).

The twenty-first-century workforce has been regularly referred to as the “knowledge-based workforce”, which requires individuals to make quick yet coherent decisions (Malmir & Asissadeh, [2013](#)). This requirement of quick decisions, self-guidance, and the divergence from previous leadership styles calls for new attention toward decision-making abilities. Making rational decisions can often be difficult, especially when there is heightened urgency and/or a lack of time to collect information; this is where individuals must rely on their intuition (Luqman et al., [2012](#)). Moreover, DiLiello and Houghton ([2006](#)) propose that organizations willing to encourage autonomous motivation and rational decision-making as an approach to self-leadership may experience increased productivity. The ability to make rational decisions is therefore an intuitive and learned skill. It can foster self-leadership because it requires critical thinking and reflection, thereby governing how individuals talk themselves through problems and decisions. The study herein specifically examines rational decision-making as a mediator of the association between motivation and self-leadership.

Emotional regulation is a cognitive aptitude that is defined as the process by which individuals influence the emotions they experience, when they have them, and how such emotions are experienced and expressed (Gross, [1998](#)). While the existing self-leadership literature only touches lightly on emotion (Yun et al., [2006](#)), it is still an important component of self-leadership that warrants further exploration.

Emotional regulation is persistently found to be a central mechanism in motivation and mindfulness literature (Hülsheger et al., [2013](#)). In fact, two motivational orientations (autonomous and controlled motivation) are identified as the two primary ways of self-regulating behaviours and emotions (Weinstein & Hodgins, [2009](#)). An autonomous motivation orientation is by definition, regulating one’s behaviour via integrated goals and values, and incorporating a sense of choice and endorsement of one’s own behaviour (Ryan & Deci, [2000](#)). Weinstein and Hodgins ([2009](#)) suggest that inherent autonomous motivation facilitates non-defensive behaviours and leads individuals to process thoughts and emotions effectively.

Emotional regulation and self-leadership are largely interconnected, with many people feeling that they are chips off the same “self-regulation block”. However, looking more closely, emotional regulation works with emotions and feelings. Despite recent attempts to integrate emotions with self-leadership (Manz et al., [2016](#)), self-leadership concentrates primarily on the behavioural and cognitive aspects of self-regulation (Boss & Sims, [2008](#)). Manz and colleagues ([2016](#)) suggest that when incorporating emotions with self-leadership, there will be greater effectiveness in emotion regulation. Furthermore, there will be more experiences of happiness, interest and joy resulting in enhanced information processing and problem solving. In contrast, we uniquely highlight the importance of emotional regulation since this is especially routine in highly demanding contexts such as education and sport. In fact, possessing the ability to properly manage one’s circumstances and impulses that could possibly impede goal attainment is essentially a good self-regulator (Legault & Inzlicht, [2013](#)). Self-leadership has been associated with goal pursuit, suggesting the need for individuals to regulate their personal needs and feelings (Ntshingila et al., [2021](#)) thus, regulating one’s emotional states at a given moment.

Neck and Houghton ([2006](#)) propose that the constructive thought patterns of self-leadership positively influence self-regulation processes. Self-talk, for example, is a cognitive strategy of self-leadership (Neck & Houghton, [2006](#)) through which individuals can change their beliefs and manage their emotional reactions to events. Boss and Sims ([2008](#)) suggest using emotion regulation and self-leadership to aid in experiencing failure and moving toward recovery, thus suggesting that individuals who are skilful in regulating emotions and practised self-leadership create their own emergence from failure and resume an equilibrium state of recovery. Effective self-leadership is often associated with competent emotional regulation, suggesting that it is essential for dealing with negative emotions and for reducing undesirable outcomes (Goldsby et al., [2021](#); Haver et al., [2013](#)). Given that mindful individuals are more attuned to their emotions and bodies, it is expected that they would naturally have better emotional regulation. We therefore predict that mindfulness and emotional regulation play important mediating roles in the relationship between motivation orientation and self-leadership development.

Given the value and benefits of self-leadership across life domains, we conducted two studies to test the role of specific cognitive aptitudes in shaping and promoting the development of self-leadership in order to increase our understanding of its antecedents and to target better training and counselling. The two studies herein explore the roles of four key cognitive aptitudes (e.g., motivation, mindfulness, decision-making style and emotional regulation) in fostering self-leadership in order to understand and expand the use of a new model in applied circumstances. Given that self-regulation is a basic component of self-leadership (Furtner et al., [2010](#)), it is hypothesized that emotional regulation would be closely related as well. Specifically, we propose a relatively new model integrating SDT (Deci & Ryan, [1985](#)) to understand how fundamental human motivation shapes cognitive aptitudes, which in turn, influence the development of self-leadership in school among a sample of university students (Study 1) and in sport among a sample of equestrian athletes (Study 2). The first study was conducted to examine the antecedents required to cultivate self-leadership within an undergraduate student sample, while the second study builds upon the first and applies a similar model within a highly disciplined sports population of equestrian athletes. Overall, self-leadership is conceptualized as a *learned* attribute, which makes it imperative to explore in greater depth so that impending intervention and application can reach a larger population.

Study 1

Study 1 examined a sample of undergraduate students at a Canadian university. A multiple mediation model was used to test whether mindfulness and rational decision-making mediated the effects of autonomous motivation on self-leadership.

Method

Participants

Data was collected from 170 Canadian undergraduate students, aged 18-28. The majority were young adults ($M = 22.59$, $SD = 13.22$). The sample consisted of 131 (77%) women and 39 (23%) men.

Procedure

Recruitment of participants was conducted online through a Canadian University System of Participation in Research platform. Participants received credit toward their class for participating. Participants were invited to participate in “The Student Sport Experience Study Questionnaire”, an online, anonymous questionnaire.

Measures

Validated scales were employed to measure general motivation orientation, individual mindfulness, decision-making and self-leadership.

Global Motivation Scale (GMS). The GMS (Guay et al., [1999](#)) was employed to identify motivation orientation. Six types of motivation (intrinsic, integrated, identified, introjected and external) were assessed via the GMS. Each motivation orientation has a 3-question subscale in which participants respond on a seven-point Likert scale, rating their agreement with the statement (1= *Does not correspond accordingly*; 7 = *Corresponds completely*). A GMS score was calculated for each participant by totalling the scores using The Self Determination Index. Satisfactory internal consistency values across the seven subscales were demonstrated with Cronbach’s α values ranging from .75 to .91 (Guay et al., [2006](#)).

The Kentucky Inventory of Mindfulness Scales (KIMS). The KIMS (Baer et al., [2004](#)) specifically identified observing mindfulness and acting with awareness. This scale consists of 39 items, divided into four subscales. Each subscale assesses one of four mindfulness skills: observing, describing, acting with awareness and accepting. Items are rated on a five-point Likert scale ranging from 1 (*Never/Rarely true*) to 5 (*Almost always/Always true*). Items are tallied on each scale and reflect a direct presence or absence of the skill. Good internal consistency values were demonstrated with Cronbach’s α ranging from .76 to .91.

General Decision Making Style (GDMS). The GDMS (Scott & Bruce, [1995](#)) was used to measure decision-making style. This measure consists of 25 items with 5 subscales. It assesses how individuals approach decision-making situations. For the purpose of this research, we are interested in rational decision-making thus, the rational decision making subscale was used. Cronbach’s α showed good internal consistency with $\alpha=.82$.

The Revised Self-Leadership Questionnaire (RSLQ). The RSLQ (Houghton & Neck, [2002](#)) assessed behaviour-focused strategies and constructive thought patterns. The RSLQ consists of 35 items in nine distinct subscales. Each subscale represents the three primary self-leadership dimensions. Five subscales represent the behaviour-focused dimension. Good internal consistency values were demonstrated with Cronbach's α ranging from .84 to .92.

Results

Correlational Analyses

Bivariate correlations and descriptive statistics for all variables are presented in Table 1. As predicted, significant positive correlations emerged between all constructs of interest: Autonomous motivation, mindful awareness, rational decision-making and self-leadership.

Table 1

Bivariate Relations and Descriptive Statistics (N = 170)

Variable	1	2	3	4
1. Autonomous Motivation	-	.42**	.53**	.61**
2. Mindful Observing		-	.25**	.44*
3. Rational Decision Making			-	.55**
4. Self-Leadership				-
<i>M</i>	4.99	3.71	5.13	5.00
<i>SD</i>	.095	0.78	1.13	0.89

Note. ** Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed).

Mediation Analysis

The hypothesized mediating role of mindfulness and rational decision-making in the relationship between autonomous motivation and self-leadership was tested using SPSS macro PROCESS (Hayes, [2013](#)). Traditional regression analyses and bootstrap analyses using $k = 5000$ iterations were conducted to assess the serial multiple mediation model (see Figure 1). The results from these analyses are reported in Table 2.

Table 2

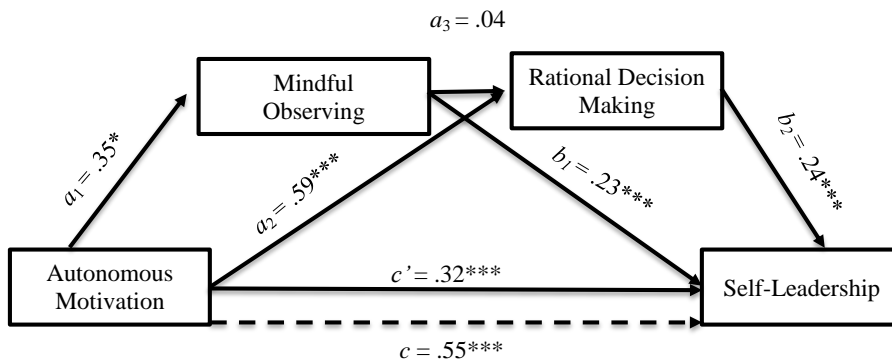
Indirect Effects of Autonomous Motivation on Self-Leadership through Mindful Observing and Rational Decision Making (N = 170)

	Point Estimate	Product of Coefficients	Bootstrapping BCa 95% CI	
		SE Indirect Effects	LL	UL
Autonomous Motivation	.32	.06	.20	.45
Mindful Observing	.08	.03	.03	.15
Rational Decision Making	.14	.04	.08	.23
Both Mediators	.00	.01	-.01	.02
TOTAL	.55	.06	.44	.66

Note. BCa, bias corrected and accelerated; CI = Confidence interval; LL = lower limit, UL = Upper limit; 5000 bootstrap samples.

Figure 1

Serial Multiple Mediations Model of the Effect of Autonomous Motivation on Self-Leadership Directly and Indirectly through Mindful Observing and Rational Decision Making



Note. Dotted line, path c , represents the effect of autonomous motivation on self-leadership when mindful awareness and emotion regulation are not included as mediators.

As expected, the model showed a significant direct effect of autonomous motivation on self-leadership ($c' = .32$, $p < .001$) and a

significant indirect effect through mindfulness with a point estimate of .08, 95% bias-corrected and accelerated (BCa) CI [.08, .03] and a significant indirect effect through rational decision-making with a point estimate of .14, 95% BCa CI [.04, .08]. As predicted, significant direct effects of autonomous motivation on mindfulness ($a_1 = .35, p < .01$) and rational decision-making ($a_2 = .59, p < .000$) emerged. Significant direct effects of mindfulness on self-leadership ($b_1 = .23, p < .000$) also emerged, as did significant direct effects of rational decision-making on self-leadership ($b_2 = .24, p < .001$).

In order to understand how autonomous motivation affects self-leadership, we tested a serial multiple mediation model. With the proposed model, it was possible to not only test the direct and indirect effects of autonomous motivation on self-leadership; but also the specific indirect effect of autonomous motivation on self-leadership through mindful awareness and rational decision-making sequentially. Overall, autonomous motivation explained a significant proportion of variance in self-leadership both directly and indirectly through mindful awareness and rational decision-making, and through mindful awareness and rational decision-making, individually.

Since we found that mindful awareness and rational decision-making were important processes in the connection between autonomous motivation and self-leadership, we wanted to further the generalizability of our findings. Thus, we tested our model using a sample in a different life domain.

Study 2

For the second study, Canadian equestrian athletes were recruited in order to test a similar model among highly competitive sports players. A multiple mediation model was used to test whether mindfulness and emotional regulation mediated the effects of autonomous motivation on self-leadership.

Method

Participants

Data was collected from 106 individuals, aged 10 to 55 years, the majority being young adults ($M = 22.59, SD = 13.22$). Participants all

identified as female. All athletes reported riding horses on a regular basis at the time of the study.

Procedure

Recruitment of participants was conducted online through equine forums as well as through local horse stable contacts. Participants were invited to participate in “The Equestrian Sport Study Questionnaire”, an online, anonymous questionnaire. Validated scales were distributed to the athletes through an online survey database. Athletes completed a general demographics questionnaire as well as measures of the constructs of interest and submitted them via the online survey platform.

Measures

The same validated scales from Study 1 were used for Study 2 with the exception of the General Decision Making Style (GDMS; Scott & Bruce, [1995](#)).

Results

A total of 234 surveys were distributed to equine athletes across Canada. The response rate was relatively good at approximately 48.7%. Specifically, 114 athletes completed the questionnaire. Fourteen participants had over 50% missing data and were therefore excluded from the analyses. Following their exclusions, a missing value analysis revealed that less than 4% of data was missing completely at random. Missing data was dealt with by imputing methods using the Expectation Maximization (EM) technique. Therefore, the sample consisted of 106 equestrian athletes.

Correlational Analyses

Bivariate correlations and descriptive statistics for all variables are presented in Table 3. As predicted, significant positive correlations emerged between the following constructs of interest: Autonomous motivation, emotional regulation and self-leadership.

Table 3

Bivariate Relations and Descriptive Statistics (N = 106)

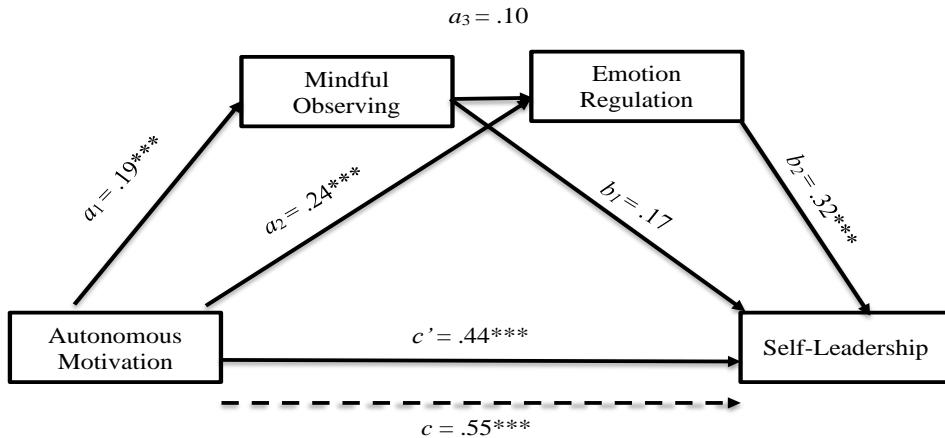
Variable	1	2	3	4
1. Autonomous Motivation	-	.25**	.30**	.57**
2. Mindful Observing		-	.15	.29**

Variable	1	2	3	4
3. Emotion Regulation			-	.44**
4. Self-Leadership				-
<i>M</i>	5.24	4.19	4.95	4.87
<i>SD</i>	1.02	0.98	0.87	0.99

Note. ** Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed).

Figure 2

Serial Multiple Mediations Model of the Effect of Autonomous Motivation on Self-Leadership Directly and Indirectly Through Mindful Observing and Emotion Regulation



Note. Dotted line, path *c*, represents the effect of autonomous motivation on self-leadership when mindful awareness and emotion regulation are not included as mediators.

Mediation Analyses

The results from these analyses are reported in Table 4. Consistent with previous research, the model showed a significant direct effect of autonomous motivation on self-leadership ($c' = .44, p < .000$). As predicted, significant direct effects of autonomous motivation on mindful observing ($a_1 = .19, p = .000$) and emotional regulation ($a_2 = .24, p = .000$) emerged. However, mindful observing was not significantly related to emotional regulation ($a_3 = 0.10, p = .37$). Furthermore, a significant direct effect of emotional regulation on self-leadership ($b_2 = .32, p < .000$) surfaced. Mindful observing, however, was marginally significantly

related to self-leadership ($b_1 = .17, p = .09$). To interpret our main hypotheses, the results revealed an insignificant indirect effect through mindful observing (point estimate = .03, 95% BCa CI [-.00, .10]) and a significant indirect effect through emotional regulation (point estimate = .08, 95% BCa CI [.02, .15]). Overall, autonomous motivation explained a significant proportion of variance in self-leadership both directly and indirectly through emotional regulation.

Table 4

Indirect Effects of Autonomous Motivation on Self-Leadership through Mindful Observing and Emotion Regulation (N = 106)

	Point Estimate	Product of Coefficients	Bootstrapping BCa 95% CI	
		SE	LL	UL
Autonomous Motivation	.44	.08	.28	.60
Mindful Observing	.03	.03	-.00	.10
Emotion Regulation	.08	.04	.02	.15
Both Mediators	.01	.01	-.01	.03
TOTAL	.55	.07	.40	.71

Note. BCa = bias corrected and accelerated; CI = Confidence interval; LL = Lower limit, UL = Upper limit; 5000 bootstrap samples.

Discussion

The results of Study 1 revealed that the proposed model showed a significant direct effect of autonomous motivation on self-leadership. In addition, mindfulness and rational decision-making mediated the relationship between autonomous motivation and self-leadership. However, there was no sequential mediation through mindfulness and rational decision-making, thereby indicating that the combined presence of both mediators may not be essential for self-leadership development, while each mediator on their own plays an important role. It could be argued that as long as an individual has either a high degree of mindfulness or rational decision-making abilities, their self-leadership may not be hindered.

Results of Study 2 also revealed a significant direct effect of autonomous motivation on self-leadership, thereby validating the role of motivation on self-leadership in a highly disciplined sports context. As

hypothesized, a significant indirect effect emerged through emotional regulation. Similar to Study 1, there was no significant sequential mediation found through both mindfulness and emotional regulation. We expect that the relationship between the mediators is more complex than originally anticipated. Perhaps the small sample size diminished the effect of the mediation, as it is recognized in the literature that mindfulness is an important contributing factor to self-leadership.

In general, both studies explored the role of motivation orientation on mindfulness and either decision-making or emotional regulation to identify and understand the impact these key predictors have on self-leadership. The ultimate goal is to distinguish improved training and counselling strategies for refining self-leadership, a necessary attribute for performing optimally in different life contexts. As seen across undergraduate students, motivation orientation strongly forecasts self-leadership through decision-making. It is evident that students benefit from autonomy-supportive learning environments, especially at the undergraduate level. Bum and Lee (2018) discovered students with self-leadership have increased autonomous motivation, which leads to actively choosing and preparing for careers and more engagement with goal achievement. Yun et al. (2006) discovered that an individual's desire to exercise self-leadership was contingent on their need for autonomy. Previous literature has demonstrated emotion regulation as a mediator between mindfulness and perceived stress (Prakash et al., 2015). Thus, these findings suggest that the individuals with more autonomous motivation will have greater emotional regulation which will enable them to effectively deal with stress and continue to experience full self-leadership potential.

Study 2 provides an exclusive look into an elite sport, offering a rare insight into the distinctive nature of the equestrian world and the overall effects on self-leadership. Due to self-leadership stemming from within the individual, the study of such leadership style and its development offers a different perspective outside of the traditional coach-athlete relationship effects. Examining the growth of self-leadership in the context of sports may offer insight into the value of sports participation for the purpose of developing non-technical skills.

Study 2 also provides insight into an exclusive sport context demonstrating that emotional regulation mediates the relationship between

autonomous motivation and self-leadership. Hence, as predicted, an autonomous motivation orientation is essential to improve emotional regulation, which, in turn, fosters self-leadership. Legault and Inzlicht (2013) suggest cultivating the right kind of motivation, that is, autonomous motivation which can aid in increasing self-regulation and its overall success. Given the inner facets required by an individual for the successful development of self-leadership, it makes sense that the ability to emotionally regulate would be an important antecedent.

Both studies do not go without limitations. Study 1 was predominantly women undergraduate students, which makes it difficult to generalize the results across men and populations beyond university students. In addition, the age group was limited making results challenging to apply across various age groups. Study 2 was entirely female which leaves out an important portion of the equestrian world. Future research should explore athletes in different sports contexts that include men and women to understand any sex or gender differences. The level of coaching across athletes was expected to vary in terms of experience and frequency. Both studies were entirely self-report questionnaires, which may result in discrepancies such as inflated or deflated responses due to the social desirability effect (Petróczi & Nepusz, 2011). Due to the cross-sectional nature of the data, we can conclude that common method variance may affect the validity of our findings (Podsakoff et al., 2003).

The studies herein provide the preliminary groundwork for understanding self-leadership. We suggest that future research ought to be conducted to build on the roles of motivation orientation and emotional regulation in the development of self-leadership. Furthermore, these predictor variables should be studied in different life contexts such as the workplace, team sports and elementary/secondary school settings to learn how self-leadership arises and is influenced in different circumstances. There has been a considerable amount of research on the development of youth leadership through a sports context; however, there seems to be a lack of research on self-leadership development across athletes. Schulenkorf (2017) calls for future research in sport for development specifically within self-leadership. There are strong links between coaching and athlete development, showing positive developmental outcomes within a youth sports context through the coach-athlete relationship (Vella et al., 2013). Future research should also explore

different facets of mindfulness because although our model revealed some insignificant results, the correlations indicate that our model may not have captured its relevance statistically. Finally, we encourage future research to examine additional characteristics and antecedents as mediators between the relationship of motivation orientation and self-leadership, such as interpersonal factors or personality traits.

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