

Investigate Relationship between Grit, Coach Leadership Style with Sports Motivation and Athlete Satisfaction While Training After COVID-19

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ABSTRACT

Purpose: The study aims at identifying the relationship between grit, coach leadership style, sports motivation and athlete's satisfaction. **Methods:** Correlational studies are used to see the relationship between grit, coach leadership style, sports motivation and athlete's satisfaction. Participants involved in this study are athletes in rowing (n=30). Grit, coach leadership style, sports motivation and athlete's satisfaction was assessed by Questionnaire. Nonparametric calculation through Spearman's Rank Correlation was used to test the relationship between the variables. **Results:** This study showed several results. First, there was a positive relationship between grit with sports motivation and athlete's satisfaction ($p < 0.05$). Second, there was a positive relationship between coach leadership style with sports motivation and athlete's satisfaction ($p < 0.05$). **Conclusions:** Thus, our research highlights the importance of a trainer's grit and leadership style to create a positive relationship with sports motivation and satisfaction in athletes in carrying out training activities.

Keywords: coach leader, athlete psychological, competitive sports

INTRODUCTION

The COVID-19 pandemic left a lot of losses in competitive sports (e.g., rowing) activities especially towards athletes. Several data show that the COVID-19 had given several negative impacts namely the decline in athletes' psychological aspects (Purc-Stephenson et al., 2022) and student-athletes had to maintain their training at home. It is unclear what personal and contextual factors facilitated student-athletes' ability to maintain their training routines at home when social distancing and

lockdown (SD/L, such as motivation to exercise (Lautenbach et al., 2021), many athletes felt dissatisfied towards sports activities during the COVID-19 era.

Sports motivation is an aspect affected by the presence of COVID-19 (Leyton-Román, Vega & Jiménez-Castuera, 2021; Poczta, Almeida, Paczyńska-Jędrycka & Kruszyńska, 2022), and currently has been claimed did not indicate any enhancement in athlete. Basically motivation is an encouragement to be more active in carrying out sports activity which can be come from internal or external factors (De Francisco, Arce, Sánchez-Romero, Vílchez, 2018; Batista et al., 2019; Kovács et al., 2022)we are more likely to maintain our commitment to sport into adulthood and even throughout our lives. In our research, we used the PERSIST 2019 database, which contains data from students at higher education institutions in Hungary, Slovakia, Romania, Ukraine, and Serbia. We used factor analysis to isolate four sports motivation factors (intrinsic, introjected, extrinsic, and amotivation. Data has documented that sports motivation has an important role to trigger athlete to be more often conducting sports exercises (Clancy, Herring & Campbell, 2017a; Moradi, Bahrami & Dana, 2020; Demirci & Eraslan, 2020), becomes the main strength to involve in competition (Yukhymenko-Lescroart, 2021), and as a parameter for athlete to achieve high performance (Junior et al., 2021; Roiek et al., 2023). According to Bowman-Smart, Hilary, Savulescu & Julian (2021), states that motivation is an important component for determining the success of an athlete in competitive sports in the future. In addition, Scoffier-mériaux, d'ArriPe-Longueville, Woodman, Lentilon-Kaestner & Corrion (2020), reported that athletes with high motivation could show sportsmanship behavior and avoid doping.

In recent years, many people put attention on athlete's satisfaction which has been extensively researched during and after the COVID-19 pandemic crisis (Xitao et al., 2021). Data shows that COVID-19 has forced all athletes to stay at home and could not carry out sports activities in public places within groups, and added with the isolation policy issued by the government. This is the main cause of athlete satisfaction in exercising decreased drastically (Mehrsafar et al., 2021; Shpakou et al., 2022). Athlete satisfaction can be interpreted as a feeling of pleasure or satisfaction when they are involved in training or sports (Fouraki, Stavrou, Apostolidis & Psychountaki, 2020). According to Jin, Kim, Love, Jin & Zhao (2022), athletes feel satisfied if the coach presents a meaningful physical exercise to them (Jawoosh et al., 2022). On the contrary, if the training program presented tends to be monotonous and boring, the athlete will feel dissatisfied or disappointed. A previous study reported that athlete's satisfaction was the key to success in increasing their physical performance to a higher level (Mohamed Shapie, Zenal, Parnabas & Abdullah, 2016; Onal, 2022). Ivantchev & Stoyanova (2019), explained that satisfaction is an important factor to support athletes in achieving success in sports activities. In addition, athlete satisfaction is a parameter for them to stay in the sports camp or leave it (Reza, Behnam, Ozra & Abbas, 2016)fulfilled as a field study. The statistical population included all athletes invited and presented in the national camps of wrestling (free and Greco Roman wrestling. Grit and coach leadership style are claimed to have a close relationship to trigger a higher or lower sports motivation and satisfaction among athletes.

Grit is claimed to be an important factor in sports training activities, because a higher grit help athletes to survive with a variety of problems (Luthans, Luthans & Chaffin, 2019). According to Cruz et al (2021), Grit is an individual personality in managing and carrying out actions persistently to achieve

high performance. Another theory explains that grit is basically a passion or endurance behavior to deal with difficulties to achieve goals (Bliss & Jacobson, 2020). Previous research has reported the benefits of the development of grit which can improve the degree of health and physical fitness (Cosgrove, Chen & Castelli, 2018), even assists someone in increasing motivation in mastering sports skills (Ueno, Suyama & Oshio, 2018). An athlete with a well fostered grit has a great spirit, perseverance or fighting spirit in long term, so that it can be used to achieve goals optimally. On the contrary, a lower grit could cause athletes to fail in his career (Frontini, Monteiro, Rodrigues, Matos & Antunes, 2022).

Coach leadership style when it becomes an interesting research topic among researchers in the last few years and is claimed to have an important role in training activities (Jin, Kim, Love, Jin & Zhao, 2022). Coach leadership style can be interpreted as a leadership style of a coach in training his athletes. For example, the style of giving instructions to athletes to carry out physical training tasks or skills in certain sports (Jawoosh et al., 2022). In addition, Fouraki, Stavrou, Apostolidis & Psychountaki (2020), explained that the coach leadership style was related to how a coach showed his behavior when in training athletes such as authoritarian, democratic, angry or relaxed. Many previous studies found that the coach leadership style played an important role in the training process, because it could help athletes in developing performance related to their psychological, tactics, techniques and physical (Bum & Shin, 2015; Jin, Kim, Love, Jin & Zhao, 2022). El-saleh & Althawabeyeh (El-saleh & Althawabeyeh, 2020), reported that the coach leadership style was important to influence the psychological of the athletes and became the key to the team's success in winning the competition.

Although research on grit, coach leadership style, sports motivation and athlete's satisfaction have been well documented in previous studies, but there were only focused on evaluating per variable (Jawoosh et al., 2022; Jin, Kim, Love, Jin & Zhao, 2022), and it was limited studied about these variables simultaneously. In addition, there are still limited researchers who analyze grit, coach leadership style, sports motivation and athlete's satisfaction in rowing athletes, so there is an urgent need to study these aspects. Our research tried to present a novelty in revealing grit, coach leadership style, sports motivation and satisfaction of athletes from rowing. In addition, the other novelty in this study was to reveal the relationship of each variable through non-properic analysis with Spearman's Correlation Coefficients. This study contributes to important information to athletes and trainers about the importance of fostering and developing aspects of grit and coach leadership style, sports motivation and satisfaction. This study aims to investigated the relationship between the grit and coach leadership style variables, sports motivation and athlete's satisfaction.

METHOD

Participants involved in this study are athletes in rowing (male, n=30, age: Mean=15.60 ± Standard deviation = 0.6, height: Mean =162.60 ± Standard deviation = 4.9, weight: Mean = 57.53 ± Standard deviation = 5.6). All participants came from Karawang city (Indonesia) and they were selected randomly. Before the research was carried out, all participants were required to sign a letter which stated their willingness to become a participant and participate in all activities in this study. Participants involved in this study were given a reward of 15 USD as a gratitude.

Measures

Grit. Instrument for assessing the level of grit is a grit scale that has been widely used in previous studies (Martínez-Moreno et al., 2021). The grit scale has 8 question items from 2 subscales namely

Consistency of Interest (COI) consisting of four question items, for example „I often set goals but choose to pursue others“ and Perseverance of Effort (POE) which also has four questions, For example „I am a hardworking athlete“ (Rumbold et al., 2022). This instrument is assessed using a Likert scale from point 1 (not reflecting me at all) up to 7 (extremely reflecting me) (Frontini, Monteiro, Rodrigues, Matos & Antunes, 2022; Martínez-Moreno et al., 2021). In this study, validation was conducted and obtained COI with the Cronbach's Alpha value was 0.94, while POE value was 0.95.

Coach leadership style. This study used to assess the leadership behavior of the coach through Leadership Scale for Sport (LSS). This instrument has 40 items of questions from five subscales, namely: training and instructions (13 items), democratic behavior (9 items), authority behavior (5 items), social support (8 items) and positive feedback (5 items) (Jawoosh et al., 2022). This question item was answered with a Likert scale from 1 (strongly disagree) up to 7 (strongly agree) (Jin, Kim, Love, Jin & Zhao, 2022).

Sports motivation. This study adopted Sport Motivation Scale-II (SMS-II) to evaluate the motivation level to exercise among athletes. This instrument has 18 items of questions from 6 subscales, namely: intrinsic (3 items), integrated (3 items), identified (3 items), intrujeksi (3 items), external (3 items) and motivation (3 items). These questions can be answered with a Likert scale from the value of 1 (does not correspond at all) to 7 (Correspond complelely) (Junior et al., 2021).

Athlete's satisfaction. Athlete Satisfaction Questionnaire (ASQ) was used in this study to assess the athletes' satisfaction. This instrument has 14 question items from 4 subcales namely satisfaction with training and instruction (3 items), satisfaction with personal treatment (5 items), satisfaction with team performance (3 items) and satisfaction with individual performance (3 items). The question items in ASQ were answered with the Likert scale from the value of 1 (very dissatisfied) up to 7 (very satisfied). The athlete who got the highest score shows the highest level of satisfaction (Jawoosh et al., 2022).

Procedure

This research was conducted in February 2023 at Singperbangsa University Karawang with number: 278/SP2H/UN64.10/LL/2023 and this research followed the rules and guidelines of the World Medical Association Code of Ethics (Helsinki Declaration for Humans). On February 17, 2023 the trainer participants filled out the grit and coach leadership style questionnaire from 08.00–09.00 in the morning. Whereas on February 18, 2023 the athlete participants filled out the sports motivation and athlete's satisfaction questionnaires from 09.00–10.00 in the morning. The filling process was closely monitored by the research team, to ensure that the results could be obtained objectively.

Statistical analysis

To determine the relationship between each grit and coach leadership style variable, sports motivation, athlete's satisfaction, this study used IBM SPSS version 25.0 to process data. Descriptive statsitics were presented in mean and standard deviation ($X \pm S$). In this study, the data was not normally distributed, non -parametric calculations were used to find out whether there was a relationship between the variables. This study used Spearman's Rank Correlation Coefficient (r).

RESULTS

In this study, the normality test was declared abnormal ($p < 0.05$). Table 1 shows the descriptive statistical testing results ($X \pm S$). Based on the Spearman's Rank Correlation Coefficient testing restuls, there was a positive relationship between grit and sports motivation ($p < 0.05$) (Table 2),

grit with athlete’s satisfaction ($p<0.05$) (Table 3). While Table 4 shows the same results, there was a positive relationship between coach leadership style with sports motivation ($p<0.05$) and coach leadership style with athlete’s satisfaction ($p<0.05$) (Table 5).

Table 1. Means and SD of each variable

Variable	X±S
Grit	
Consistency of Interest	23.70±2.61
Perseverance of Effort	23.85±4.06
Coach leadership style	
Training and Instructions	22.25±4.84
Democratic Behavior	20.45±4.89
Authority Behavior	14.90±4.43
Social Support	18.20±4.73
Positive Feedback	17.70±5.43
Sports motivation	
Intrinsic	16.25±3.41
Integrated	15.05±3.63
Identification	14.95±3.47
Introjection	14.20±4.06
External	16.05±4.22
Amotivation	15.50±3.99
Athlete’s satisfaction	
Satisfaction with training and instruction	16.00±3.46
Satisfaction with personal treatment	21.90±9.17
Satisfaction with team performance	17.20±2.66
Satisfaction with individual performance	16.65±4.84

Table 2. Spearman’s correlation between Grit and Sports Motivation

	Correlation p-values	Grit-Consistency of Interest	Grit-Perseverance of Effort
Sports Motivation			
Intrinsic	r	0.666**	0.725**
	p	0.001	0.000
Integrated	r	0.590**	0.744**
	p	0.006	0.000
Identification	r	0.573**	0.429*
	p	0.008	0.048
Introjection	r	0.515*	0.476*
	p	0.020	0.034
External	r	0.701**	0.461*
	p	0.001	0.041
Amotivation	r	0.737**	0.467*
	p	0.000	0.038

** $p<0.05$, * $p<0.01$

Table 3. Spearman’s correlation between Grit and Athlete’s Satisfaction

	Correlation p-values	Grit-Consistency of Interest	Grit-Perseverance of Effort
Athlete’s Satisfaction			
Satisfaction with training and instruction	r	0.538*	0.554*
	p	0.014	0.011
Satisfaction with personal treatment	r	0.753**	0.804**
	p	0.000	0.000
Satisfaction with team performance	r	0.665**	0.770**
	p	0.001	0.000
Satisfaction with individual performance	r	0.843**	0.621**
	p	0.000	0.002

**p<0.05, * p<0.01

Table 4. Spearman’s correlation between Coach Leadership Style and Sports Motivation

	Correlation p-values	Training and Instruction	Democratic Behavior	Authority Behavior	Social Support	Positive Feedback
Sports Motivation						
Intrinsic	r	0.627**	0.701**	0.525*	0.586**	0.553**
	p	0.003	0.001	0.017	0.007	0.011
Integrated	r	0.458**	0.557*	0.529*	0.527*	0.496*
	p	0.045	0.011	0.016	0.017	0.026
Identification	r	0.470**	0.522*	0.476*	0.434*	0.447*
	p	0.041	0.018	0.034	0.030	0.048
Introjection	r	0.612**	0.516*	0.439*	0.446*	0.562*
	p	0.004	0.016	0.031	0.027	0.010
External	r	0.620**	0.480*	0.564*	0.664**	0.526*
	p	0.003	0.032	0.010	0.001	0.017
Amotivasi	r	0.484**	0.470*	0.675**	0.578**	0.900**
	p	0.037	0.036	0.000	0.008	0.000

**p<0.05, * p<0.01

Table 5. Spearman’s correlation between Coach Leadership Style and Athlete’s Satisfaction

	Correlation p-values	Training and Instruction	Democratic Behavior	Authority Behavior	Social Support	Positive Feedback
Athlete’s Satisfaction						
Satisfaction with training and instruction	r	0.556*	0.655**	0.459*	0.431*	0.488*
	p	0.011	0.002	0.044	0.046	0.026
Satisfaction with personal treatment	r	0.478*	0.429*	0.542*	0.818**	0.509*
	p	0.029	0.047	0.016	0.000	0.022
Satisfaction with team performance	r	0.472*	0.497*	0.675**	0.641**	0.517*
	p	0.034	0.026	0.000	0.000	0.021

	Correlation p-values	Training and Instruction	Democratic Behavior	Authority Behavior	Social Support	Positive Feedback
Satisfaction with individual performance	r	0.588**	0.526*	0.554*	0.557*	0.744**
	p	0.007	0.018	0.012	0.011	0.000

**p<0.05, * p<0.01

DISCUSSION

Our research aims to reveal the relationship between grit with coach leadership style, sports motivation, and satisfaction in athletes.

First, the grit variable has a positive relationship with sports motivation in athletes. That is because, grit is an important aspect to create persistence, active or never give up attitude among athletes when facing various difficulties in training activities (Ueno, Suyama & Oshio, 2018; (Rumbold, Dunn & Olusoga, 2022). The previous studies results reported that a higher grit level would increase motivation (Eskreis-winkler, Shulman, Beal & Duckworth, 2014; Santana-monagas & Núñez, 2022), and good participation in sports activities (Schmidt, Fleckenstein, Retelsdorf, Eskreis-Winkler, 2019; Marentes-castillo, Castillo, Tomás, Zamarripa & Alvarez, 2022). The grit was used in sports to overcome all the difficulties or ideas experienced by athletes, to enhance motivation in achieving higher goals (Hein, Kalajas-Tilga, Koka, Raudsepp & Tilga, 2019)df = 31; CFI = .958; RMSEA = .053. Other studies reported similar results, grit can trigger a higher interest and motivation (Santana-monagas & Núñez, 2022), a never give up personality or diligent to conduct sports exercises (Cruz et al., 2021) or in physical activity (Cosgrove et al., 2018). According to Whitfield & Wilby (2021), grit and motivation have a close relationship to obtain optimal long term goals.

Second, the grit variable has a close relationship with athletes' satisfaction. Grit could promote fighting spirit to achieve goal, and also to help people reach a much higher level of satisfaction, for example getting a brilliant achievement (Tang, Te Wang, Guo & Salmela-Aro, 2019). The previous studies results show that a person with a high grit level is the main force to achieve high satisfaction in his life (Liu, Yu, Ye & Yang, 2022). This was also explained Li, Fang, Wang, Sun & Cheng (2018), that grit was an important factor and triggered the emergence of satisfaction in a person. Basically, grit can help an athlete to encounter severe challenges in his life, including in sports activities (Rumbold et al., 2022), although athletes experience difficulties and failures, an athlete will never give up and keep trying until success (Moen & Olsen, 2020). The findings in this study are in line with previous studies that reported a positive relationship between grit with the level of athlete's satisfaction in conducting sports activities (An, Sato & Harada 2021). On the other hand, research explains that grit is an important component in achieving the success and achievement, so that the athlete's satisfaction will increase significantly (Guelmami et al., 2022; but no tools have been developed considering specific contexts such as physical education and sport. Objectives: The objective of this study is to develop and test a measurement scale to assess Grit in the context of physical education and sport. Methods: Two exploratory (Phase 1) Jin, Kim, Love, Jin & Zhao, 2022).

Third, coach leadership style variable has a positive relationship with sports motivation. That is because the leadership style of a coach when training athletes will be a determinant for their level of motivation in participating exercise activities. Various and fun leadership styles can trigger high motivation. On the contrary, the boring and without variation leadership style cause athletes to get bored and loss motivation for training (Guelmami et al., 2022)but no tools have been developed considering specific contexts such as physical education and sport. Objectives: The objective of this study is to develop and test a measurement scale to assess Grit in the context of physical education and sport. Methods: Two exploratory (Phase 1. Previous research reported that democratic leadership styles have a positive relationship and can affect the level of motivation among athletes (Jin, Kim, Love, Jin & Zhao, 2022). Other research also supports the findings in this study which explains that the coach's leadership style has a strong relationship with athlete motivation (Nasiruddin, Fauzee, Sin & Omar, 2020).

Lastly, the coach leadership style variable has a relationship with satisfaction in athletes. That is because, the leadership style possessed by the coach could attract athletes' attention, so that it causes them more satisfied in carrying out every training activity. On the contrary, if athletes uninterest with the coach's leadership style, it has an impact on the decline of satisfaction or performance level. This is also in line with the previous studies, which show that the leadership style has a high correlation with the satisfaction of soccer players (Calvo & Topa, 2019). Recent studies explained that the selection of appropriate leadership styles in training athletes was an important factor to trigger the emergence of athlete's satisfaction, and it predicted that the performance of athletes had also increased (Jawoosh et al., 2022). Fouraki, Stavrou, Apostolidis & Psychountaki (Fouraki, Stavrou, Apostolidis & Psychountaki, 2020), evaluated 206 team sports athletes and the findings showed that the coach leadership style was positively correlated with the satisfaction of athletes.

The uniqueness and novelty in these findings is the positive relationship of grit and coach leadership style variables with sports motivation and satisfaction of athletes in rowing.

CONCLUSION

Based on the explanation of the results and discussion, it can be concluded that it is proven positively there is a relationship between the grit variable and coach leadership style with sports motivation and satisfaction athletes in rowing. This study contributes to provide information for coaches and athletes about the importance of fostering and improving the quality of grit and coach leadership style which have a relationship with the level of sports motivation and satisfaction in athletes. Nevertheless, this study has limitations, which only involved athletes from Karawang city (Indonesia). Therefore, it is recommended that future research involved athletes from several regions. Further studies need to be carried out in comparing grit and coach leadership style with sports motivation and satisfaction of female athletes, so that later it can be observed the difference between male and female athletes in grit and coach leadership style, sports motivation and satisfaction.

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