

The Influence of Coaches' Leading Behavior on Young Athletes' Psychological Pressure and Psychological Adaptation

Yansen Li¹, Yulin Yang¹, Jing Yu^{2*}

Abstract

This study investigates the relationship between psychological strain, psychological adaptation, and coaches in young athletes. Using athletes and coaches from various local and provincial diving teams and among these, training dimensionality changes in the N-dimensional low group were significantly greater in the low and middle groups than in the middle and high groups. N-dimensional changes were significantly less in the low and middle groups than in the middle and high groups. There is a significant difference between athletes in the N-dimensional low group and those in the intermediate group on the social support dimension. The E-dimension high and low groupings, the changing pattern of movement, and the association between education and autocratic conduct vary significantly. When coaches enhance their social support behaviours, they can compensate for external problems such as losing satisfaction with the athlete's training game. For the low E-dimension group, the association between exercise and education is poorer if the authoritarian behavior is high. For the high E-dimension group, if the authoritarian conduct is high, the relationship between exercise and education is better.

Keywords: Coach leadership behavior; Young athletes; Psychological pressure

Introduction

Amateur sports school athletes (as a distinct group of young people, their mental health, whether positive or negative) will affect their involvement in amateur training and competitions and their everyday life and studies. Psychological strain and psychological adaptation of young athletes are two critical aspects to consider when assessing their mental health (Arraya et al., 2015).

Psychological adaptation has long been seen as a mental condition inextricably linked to mental health and psychological phenomena. The term "adaptation" refers to the body's response to changes in its surroundings. It is individuals who adapt to changing environmental conditions, the process of reaching equilibrium with the environment. Adaptation encompasses both physical and psychological aspects. The focus here is on psychological adaptation, which we see as a component of mental health (Hanly et al., 2022).

The term "psychological pressure" refers to when an individual is confronted with an unfavourable scenario, the adaptive reaction to the body's internal state and emotions that results, followed by emotional and physical arousal. It has gained increasing attention from sports workers due to the development of youth mental health education, psychological strain, and psychological adaptability of young athletes. The influence of coaches is the most significant element affecting the mental health of

young athletes (Cronin et al., 2022; González-García et al., 2022; Kato et al., 2019).

The coach's capacity for mental health teaching, particularly the coach's leadership style, and its effect on the mental health of young athletes have also garnered increasing attention. Coaches have the most contact with players. They are also the team's direct organiser and behaviour leader. For young athletes, who are still in the process of physical and mental development and growth, every coach's move has a significant impact on them (Hodges & Lohse, 2022; Kittler et al., 2022; Rosser & Wood, 2022). Young athletes' psychological development is still immature. They confront the pressures of training, competition, and academic issues such as cultural examinations and further studies (Ono et al., 2022; Rey et al., 2022; Stephen et al., 2022).

According to the interdependence theory, a definition of the relationship between coaches and athletes has been proposed. It is believed that the relationship between coaches and athletes refers to a situation in which the cognition, emotions, and behaviours of coaches and athletes are unintentionally connected. Strid et al. (2018) explore the interaction between coaches and athletes. From a legal, educational, and ethical standpoint, the relationship between coaches and athletes is an equal relationship between social citizens and a relationship between educator and educated. It is also a caring and

¹ Physical Education College of ZhouKou Normal University, Henan, 466000, China

² College of Sports Science, Shenyang Normal University, Liaoning, 110000, China

Corresponding Author's Email: yujing_bj@126.com

considerate relationship between elders and children. These relationships are complex, diverse, and inseparable (De Muynck et al., 2021; Fournier et al., 2021). From the perspective of contract theory, Brubaker and Beverly (2020) separate it into two levels: system and ethics, and for the relationship between master and apprentice, to analyse and examine, underlines the importance of the rule of law and values.

Using current research, the author examines the relationship between young athletes' psychological pressure, psychological adaptation, and coaches' leadership behaviour. After analysing the differences in coaches' sports leadership behaviour using local and provincial diving teams and athletes and coaches from the Chinese diving team, it is clear that, to maintain a high level of satisfaction for athletes during training and competition, athletes with low N-dimensional scores, as long as the coaches' training and guiding behaviours are not excessively small, can achieve better results at an intermediate or higher level. In contrast, athletes with high N-dimensional scores require more training and guiding behaviours, have a high training guide behaviour dimension score. Athletes with low N-dimensional scores require more training and guiding behaviours. As illustrated in Figure 2, high social support behaviours of coaches brings satisfaction in athletes with their training and competition. For the N-dimensional low group, where coaches' social support behaviours are not low, this can result in athletes having a higher level of training and competition satisfaction. The difference between the middle and high social support groups is not significant. As illustrated in Figure 3, the athlete-coach relationship are better if the coach's social support behaviours are greater. The athlete's P-dimension low grouping relationship between sports and education has a lesser degree of change than the P-dimension high grouping relationship. A low P-dimension score indicates that the athlete has a higher level of mental wellness. As illustrated in Figure 4, internal dissatisfaction with coach leadership frequently goes unnoticed. If coaches adopt more authoritarian behaviours, athletes may feel a great deal of resistance in their hearts. Still, there is no catharsis, resulting in increased psychological pressure and further affecting the relationship between movement and education.

Method

Types of coaches' leadership

Democratic leadership

Coaches are athlete-centric, and coaches and athletes interact, communicate, and appreciate one another. While coaches are guided by their own beliefs, paying attention

to the players' words in real-time is vital. Combine the two perspectives and establish an agreement with the athletes. For the athlete's on-the-spot mentality, coaches' democratic leadership style results in positive development and promotion.

Leadership that is authoritative

The assertive style of leadership is egocentric. It is to communicate with players infrequently and do anything you want regardless of the athlete's psychological state. Coaches have a structure of authority that comprises compensation authority, coercive authority, expert authority, and exemplary authority. Authoritative leadership will exacerbate athletes' psychological strain.

Laissez-faire leadership

Athletes are at the centre of laissez-faire leadership. However, unlike the democratic model, the laissez-faire model is not about communicating and conversing well with athletes. Rather, it allows athletes to do whatever they want, and coaches do not impose too many restrictions. The coaches speak and act independently of them and pay no regard to them. Laissez-faire leadership has a similar effect on athletes' on-the-spot psychology as authoritarian leadership does. Likewise, it will enhance athletes' psychological stress (Paluch et al., 2018).

Research objects

The author's research subjects are provincial diving teams and athletes and coaches from the Chinese diving team. Using several training camps and diving competitions and entrusting others to distribute questionnaires, the author distributed a large number of online and physical questionnaires. However, due to subject's non-cooperation, inability to match athletes and coaches' information, and etc. only 274 athletes and coaches responded. There are 59 coaches, 40 male and 19 female, ranging from 24 to 63 years.

The gender disparity in the author's study is not significant. The average age of the athletes is approximately 15-16 years. Because diving has the stricter body shape and weight requirements, athletes who have completed the developmental phase typically have fewer variables. Additionally, the training period is longer, and the technical movement is perfect; or the athlete is younger, has reached the minimum age for Olympic participation, and can capitalise on his or her youth to achieve good results. Thus, the primary groups for training and selection are 12-14 years old and above. The athletes who participated in the study are at least second-level athletes. Athletes who do not have a specific sports team to focus their training and have a lower experience level were rejected as research subjects.

There are fewer female coaches. Communication with coaches revealed that female coaches have fewer options than men because diving is a typically female sport. Consequently, when female coaches guide male players, for the difficult movements that are unique to individual male athletes, in the early days, female coaches typically did not skip during training as athletes, resulting in a lack of practical guidance experience. Additionally, because coaching requires a high level of physical strength and time commitment, female coaches frequently encounter difficulties in their work. For example, in diving training, female coaches must pull the protective belt, and in strength training, when they must protect, female coaches are severely lacking in weight and strength and must seek assistance from other male coaches. As a result, there are fewer female coaches in the actual diving coach group.

Results and analysis

Comparing personality factors in coaches' sports leadership behaviour reveals the N dimension in the athlete's personality factor, which corresponds to the training guidance behaviour dimension in coaches' sports leadership behaviour and the social support dimension. There is a significant interaction between the athlete's training and competition satisfaction, the P dimension in the athlete's personality factor, and the social support behaviour dimension in t.

For the N dimension of athletes' personality, dimension of training with coaches, carry out variance analysis on the factors of training game satisfaction, do a simple effect analysis, and the results are shown in Figure 1.

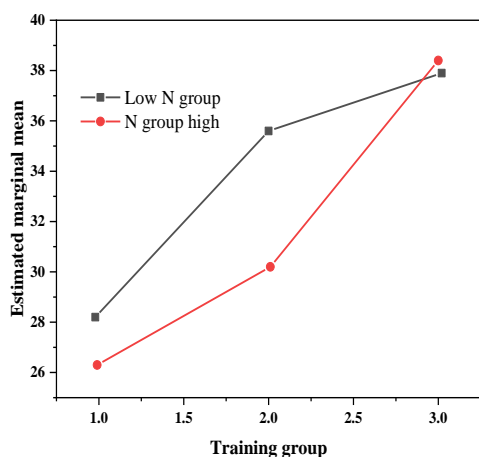


Figure .1 The average graph of the athlete's N dimension and the coach's leadership style training dimension

As illustrated in Figure 1, the two groups of N-dimensional scores are trained on distinct training dimensions. The average change in game satisfaction is greater for the N-

dimensional low group. There is low training dimension and the middle group than for the N-dimensional high group, the low training dimension, and the middle group. The training dimension is low for the N-dimensional high group, and the middle group changes are less than for the middle and high group. This data situation explains why athletes with low N-dimensional scores are satisfied with maintaining a high level of training and competition. Athletes with low N-dimensional scores (as long as the coaches' training and guiding behaviours are not excessively small) can achieve better intermediate or higher-level results. The coaches require additional training and guidance behaviours for athletes with high N-dimensional scores and a high training guide behaviour dimension score. This phenomenon may be because the N score is low; for athletes with strong emotional stability, coaches exhibiting appropriate training and guidance behaviours are sufficient to provide them with a more positive feeling. However, placing too much emphasis on the promotion of training and guidance behaviours is not beneficial; for athletes with high N scores and strong mood swings, if coaches exhibit less training and guidance behaviours, on the one hand, this may result in them experiencing greater mood swings. On the other hand, it may result in them experiencing greater mood swings. For the N dimension of athletes' personality, support the dimension with the coach, carry out variance analysis on the factors of training game satisfaction, do a simple effect analysis, and the results are shown in Figure 2.

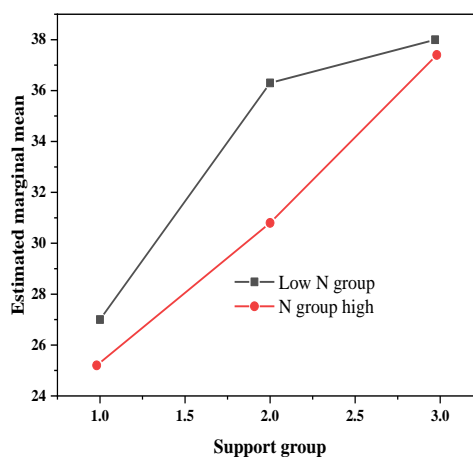


Figure .2 The mean value of the N dimension of athletes and the support dimension of coaches' leadership style

As illustrated in Figure 2, the high and low N dimensions are divided into groups, and training is based on the groups' differences in social support dimensions and changes in game satisfaction. Athletes in the N-dimensional low group experience a significant difference

in social support between the low and middle groups, while the high group experiences a relatively small difference in social support. Athletes in the N-dimensional high group are satisfied with their performance. This data demonstrates that athletes' training and competition satisfaction are typically higher when coaches exhibit more social support behavior. When coaches exhibit social support behaviour that is not in the low group, athletes' training and competition satisfaction can be increased. The difference between the middle and high social support groups is not significant. This phenomenon may be due to emotionally stable athletes. You need to improve your training and competition satisfaction comes from the coach's social support behaviour, which is about the mid-score level. Emotionally unstable athletes are frequently affected by various additional factors, which results in the same situation. Evaluation of satisfaction with training games is lower than for emotionally stable athletes. Thus, when coaches increase social support behaviours, they can compensate for a decreased evaluation of satisfaction with training games.

The P dimension of the athlete's personality, support the dimension with the coach, carry out analysis of variance on the factors related to operation and education, do a simple effect analysis, and the results are shown in Figure 3.

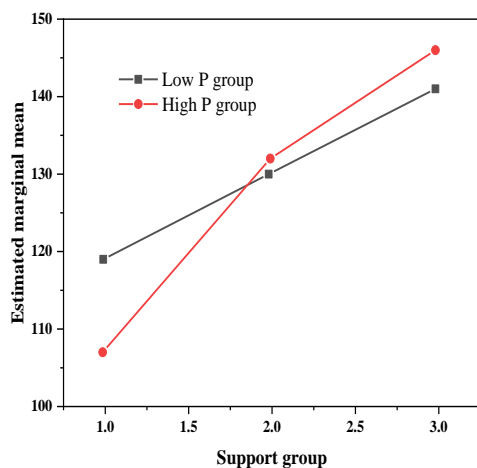


Figure .3 The mean value of the P dimension of athletes and the support dimension of coaches' leadership style

As illustrated in Figure 3, the relationship between athletes and coaches is better because coaches' social support behaviors is high. The range of changes in the athletes' sports-education relationship is less in the low P-dimension group than in the high P-dimension group. When the P-dimension score is low, athletes have a higher level of mental health, and thus the evaluation of the relationship between movement and education is more accurate. When the P-dimension score is high, athletes'

mental health is low, coaches have fewer social support behaviours, and athletes are more likely to engage in negative behaviours such as rebellion and resistance, which affects the relationship between movement and education. Typically, athletes with high P-dimension scores have a lower degree of liking and acceptance from others than athletes with low P-dimension scores. However, suppose the coach can provide adequate social support to athletes with high P-dimension scores. These athletes will develop a greater appreciation for and reliance on coaches, further enhancing the athlete's evaluation of the relationship between sports and education ((Bahinipati & Patnaik, 2015).

The E dimension of the athlete's personality, with the autocratic dimension of coaches, carries out variance analysis on the factors related to operation and education, does a simple effect analysis, and the results are shown in Figure 4.

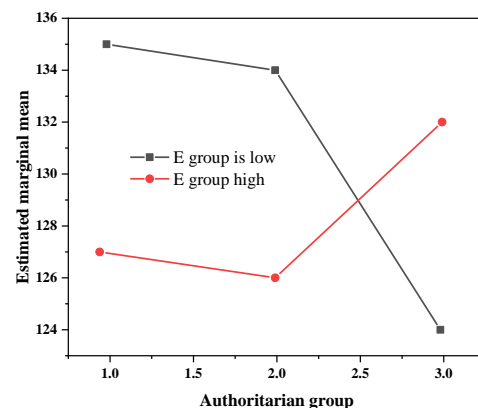


Figure .4 The mean graph of the Athlete's E dimension and the autocratic dimension of the coach's leadership style

As illustrated in Figure 4, the E-dimension high and low groupings, the movement and education relationships within each dimension of autocratic behaviour, and the trajectory of change are quite distinct. If the E dimension's grouping is lower and the authoritarian behaviour is high, the relationship between movement and education will worsen. If the E dimension's grouping is higher and authoritarian behaviour is high, the relationship between movement and education will be better. Athletes with low E-dimension scores prefer quietness, their personalities are introverted, and they are frequently engaged in inner activities. For coaches, inner dissatisfaction is frequently concealed. If coaches adopt more authoritarian behaviours, athletes may have a great deal of resistance in their hearts but do

not receive catharsis, resulting in increased psychological pressure and further affecting the relationship between movement and education. Athletes with higher E-dimension scores have a more flamboyant personality. They are more outgoing, the coach's authoritarian behaviour is low, which often equates to being neglected and laissez-faire. There are more authoritarian behaviours, which may cause conflicts and contradictions. Still, extroverted athletes can frequently generate a great deal of communication with coaches, promoting cooperation between coaches and athletes.

Conclusion

The author discusses coaches' leadership styles, their effect on psychological pressure and psychological adaptation in young athletes. The author attempts to establish the personal personality characteristics of diving athletes and the coach's corresponding sports leadership style concerning the relationship between athletes and coaches and the relationship between athletes' training and competition satisfaction. After analysis, it can be concluded that, to maintain a high level of satisfaction for athletes during training and competition, athletes with low N-dimensional scores (as long as the coaches' training and guidance behaviours are not excessively small) can achieve better results at an intermediate or higher level. While athletes with high N-dimensional scores require more training and guidance behaviours and a high training guide behaviour dimension score. If the coaches' social support behaviours is high, the athlete's satisfaction with training and competition will be high. For N-dimensional low grouping, where coaches' social support behaviours are not included, this can result in athletes experiencing greater training and competition satisfaction. The difference between the middle and high social support groups is not significant. If social support behaviours of coaches is high, the positive relationship between athletes and coaches will be good. The range of changes in athletes' sports-education relationships is less in the low P-dimension group than in the high P-dimension group. A low P-dimension score indicates that the athlete has a higher level of mental wellness.

Regarding inner dissatisfaction with the coach's leadership, it frequently goes unnoticed. If coaches adopt more authoritarian behaviours, athletes may feel a great deal of resistance in their hearts. Still, they did not receive catharsis, resulting in increased psychological pressure, further complicating the relationship between movement and education. The issue of athletes' mental health is extremely complex, with numerous influencing aspects. If the relationship between coaches' behaviour and athletes'

mental health is to be explained, additional research will be required in the future.

Implications

Academic Implications

This study adds to the body of knowledge by examining the significant influence of coaches' leading conduct on young athletes' psychological pressure and psychological adoption. It is a fact that no previous study has studied the influence of coaches' leadership behaviour on young athletes, particularly those from China. Simultaneously, this study accurately defines variables to expand their meaning, and the relationship between variables is also stated understandably. However, this study fills in and answers the theoretical gap by providing rational knowledge for future researchers. This theoretical gap is effectively addressed by identifying all the variables and their relationships to comprehend the study thoroughly. It is also true that the literature on the interaction between coaches and athletes in China has been sparse, with previous research focusing exclusively on coaches as instructors. Additionally, this contribution to the literature is significant since it gives data on athletes' conduct, including their psychological condition and technique of goal attainment.

Practical Implications

This study justifies the practical use of coaches' leading behaviours on young athletes' psychological pressure by demonstrating that if coaches' leading behaviours are improved and adopted by trainers, young athletes will remain attracted to the coach's direction and profit from it. Similarly, the issue with young athletes' careers is that they are constantly concerned with instructions. They deal with instructors who are not effectively training them but treat them poorly and persuade them to do things their way. However, this treatment method is ineffective since it exposes athletes to psychological pressure and psychological adoption, yet they remain uninterested in coaches' teaching, and their behaviour is invariably negative. On the other side, if coaches' leading behaviour is positive and they wish to assist the athlete, they must communicate with them and provide direction in an adaptable manner that will assist them in following the instructions.

Additionally, it is highlighted that athletes who develop a close relationship with their instructors and benefit from their coaches' welcoming manner learn a great deal. On the other hand, when players receive only instructions from their coaches and are not eager to obey them, but view them as the strong instructor, a negative approach develops in athletes. This type of negative psychology is

extremely dangerous for them. In this sense, the coaches bear a greater obligation to create strong mutual connections with the athletes to provide the finest training and motivate them to achieve their goals. Thus, this study demonstrates that the relationship between coaches and athletes is contingent upon the athlete's behaviour. The athletes receive more positive energy from them as instructors exhibit more leadership behaviour. Importantly, to establish a good relationship between athletes and coaches, practical workshops for coach training must be conducted to familiarise coaches with the leading behaviours adopted when training their athletes. In terms of athletes' roles should understand and respect their coaches to obtain the necessary knowledge and instruction to accomplish their goals. This study emphasizes the importance of coaches developing leading behaviours during training sessions with athletes to encourage them and avoid all of the hurdles that inhibit psychological adoption and behaviour by athletes. Indeed, instructors who teach their athletes positively and attractively attain their aim, which they attribute to their instructor. The majority of athletes subjected to negative coaching

behaviour have difficulty receiving training from them. At the same time, they face psychological difficulties in their developing careers. The majority of them fail to succeed because they are not receiving a positive and motivating attitude from their coaches.

Future Direction

This study emphasises the importance of future research focusing on the function of coaches as appealing and friendly instructors to athletes to understand better relationship between friendly instructors and friendly players in China. It is indicated based on the study's findings that leadership conduct is one of the most significant variables influencing athletes' ability to reach their goals. Therefore, if future researchers can establish a link between coaches and their training of Chinese athletes, a more reasonable and practical approach to coach training will become more prevalent.

Acknowledgements

The work was supported by the National Social Science Found of China (Grant: 21BTY096).

References

- Arraya, M., Pellissier, R., & Preto, I. (2015). Team goal-setting involves more than only goal-setting. *Sport, Business and Management*, 5(2), 157-174. <https://doi.org/10.1108/SBM-11-2012-0046>
- Bahinipati, C. S., & Patnaik, U. (2015). The damages from climatic extremes in India: do disaster-specific and generic adaptation measures matter? *Environmental Economics and Policy Studies*, 17(1), 157-177. <https://doi.org/10.1007/s10018-014-0094-x>
- Brubaker, J. R., & Beverly, E. A. (2020). Burnout, perceived stress, sleep quality, and smartphone use: a survey of osteopathic medical students. *Journal of Osteopathic Medicine*, 120(1), 6-17. <https://doi.org/10.7556/jaoa.2020.004>
- Cronin, L., Ellison, P., Allen, J., Huntley, E., Johnson, L., Kosteli, M. C., . . . Marchant, D. (2022). A self-determination theory based investigation of life skills development in youth sport. *Journal of Sports Sciences*, 1-13. <https://doi.org/10.1080/02640414.2022.2028507>
- De Muynck, G.-J., Morbée, S., Soenens, B., Haerens, L., Vermeulen, O., Vande Broek, G., & Vansteenkiste, M. (2021). Do both coaches and parents contribute to youth soccer players' motivation and engagement? An examination of their unique (de) motivating roles. *International Journal of Sport and Exercise Psychology*, 19(5), 761-779. <https://doi.org/10.1080/1612197X.2020.1739111>
- Fournier, C., Parent, S., & Paradis, H. (2021). The relationship between psychological violence by coaches and conformity of young athletes to the sport ethic norms. *European Journal for Sport and Society*, 1-19. <https://doi.org/10.1080/16138171.2021.1878436>
- González-García, H., Martinent, G., & Nicolas, M. (2022). A Temporal Study on Coach Behavior Profiles: Relationships With Athletes Coping and Affects Within Sport Competition. *Journal of Sport and Exercise Psychology*, 1(aop), 1-9. <https://doi.org/10.1123/jsep.2021-0071>
- Hanly, G., Campbell, E., Bartlem, K., Dray, J., Fehily, C., Bradley, T., . . . Wolfenden, L. (2022). Effectiveness of referral to a population-level telephone coaching service for improving health risk behaviours in people with a mental health condition: study protocol for a randomised controlled trial. *Trials*, 23(1), 1-12. <https://doi.org/10.1186/s13063-021-05971-6>
- Hodges, N. J., & Lohse, K. R. (2022). An extended challenge-based framework for practice design in sports coaching. *Journal of Sports Sciences*, 1-15. <https://doi.org/10.1080/02640414.2021.2015917>
- Kato, M., Hu, A., Kimura, S., Yamaguchi, T., & Kobayashi, H. (2019). The Influence of Oral Malodor on Psychological Stress. *Health*, 11(5), 501-510. <https://doi.org/10.4236/health.2019.115043>

- Kittler, C., Arnold, M., & Jekauc, D. (2022). Effects of a Mindfulness-Based Intervention on Sustained and Selective Attention in Young Top-Level Athletes in a School Training Setting: A Randomized Control Trial Study. *The Sport Psychologist*, 1(aop), 1-12. <https://doi.org/10.1123/tsp.2021-0053>
- Ono, K., Akasaka, K., Otsudo, T., Hasebe, Y., Hattori, H., Mizoguchi, Y., . . . Fujimoto, M. (2022). Determining a preventive strategy for ankle sprain injury through a questionnaire survey of coaches of junior high school basketball teams. *Journal of Physical Therapy Science*, 34(1), 26-30. <https://doi.org/10.1589/jpts.34.26>
- Paluch, A. E., Shook, R. P., Hand, G. A., O'Connor, D. P., Wilcox, S., Drenowatz, C., . . . Blair, S. N. (2018). The influence of life events and psychological stress on objectively measured physical activity: A 12-month longitudinal study. *Journal of Physical Activity and Health*, 15(5), 374-382. <https://doi.org/10.1123/jpah.2017-0304>
- Rey, R. T., Cranmer, G. A., Browning, B., & Sanderson, J. (2022). Sport Knowledge: The Effects of Division I Coach Communication on Student-Athlete Learning Indicators. *International Journal of Sport Communication*, 1(aop), 1-10. <https://doi.org/10.1123/ijsc.2021-0062>
- Rosser, E. A., & Wood, C. (2022). *Leading and Managing in Contemporary Health and Social Care, E-Book*. Elsevier Health Sciences. <https://books.google.com/books?id=nbxZEAAAQBAJ>
- Stephen, S. A., Habeeb, C. M., & Arthur, C. A. (2022). Congruence of efficacy beliefs on the coach-athlete relationship and athlete anxiety: Athlete self-efficacy and coach estimation of athlete self-efficacy. *Psychology of Sport and Exercise*, 58, 102062. <https://doi.org/10.1016/j.psychsport.2021.102062>
- Strid, C., Andersson, C., & Öjehagen, A. (2018). The influence of hazardous drinking on psychological functioning, stress and sleep during and after treatment in patients with mental health problems: a secondary analysis of a randomised controlled intervention study. *BMJ open*, 8(3), e019128. <http://dx.doi.org/10.1136/bmjopen-2017-019128>