

The competence of a coach in sports: How does it correlate with athlete motivation?

Immanuel Mu'ammal^{1abcde}*^(D), Abdurrohman Muzakki^{1bde}^(D), Erie Awalil Fakhri^{2bc}, Edi Setiawan^{3d}^(D)

Universitas Muhammadiyah Malang, Indonesia¹ Universitas Brawijaya Malang, Indonesia² Universitas Suryakancana, Indonesia³

Received 15 September 2022; Accepted 22 November 2022; Published 11 December 2022 Ed 2022; 7(3): 396-404

ABSTRACT

Sports coaches hold integral roles in sports organizations. As important figures for athletes, coaches are responsible for maintaining athletes' motivation which will drive their performances in matches. To motivate athletes, coaches must possess good competence which reflect their quality as coaches. This study analyzes the effect of coach competency on athlete motivation. Coach competency in this study is represented by four indicators: motivation competency, game-strategy competency, technique competency, and character-building competency. Each and every indicator's effect on athlete motivation was investigated. The instrument in this study used a questionnaire with 42 question items. This study is an explanatory research conducted on 114 student basketball athletes in Indonesia as respondents. Data analysis was conducted using SEM-PLS on the WARP-PLS 7 software. The results of this research show that overall, motivation competency, technique competency, character building competency, and game-strategy competency which represents the coach competency variable have a positive effect on athlete motivation (p<0.05), while motivation competency has no effect on athlete motivation (p>0.05). Game strategy competency, technique competency, and character building competency has positive effects on athlete motivation (p < 0.05). This research contributes to increasing scientific knowledge among coaches and athletes about the importance of competence for the motivational aspect. The limitation in this study is that the sample used only comes from basketball athletes so it is not yet known whether there is a similar relationship between the competence and motivation of other sports coaches. Therefore, future research can examine the relationship between the competence and motivation of coaches in sports such as football, volleyball, and handball.

Keywords: Sport coach; coach competency; athlete motivation

⁹https://doi.org/10.25299/sportarea.2022.vol7(3).10540



Copyright © 2022 Immanuel Mu'ammal, Abdurrohman Muzakki, Erie Awalil Fakhri, Edi Setiawan

Corresponding Author: Immanuel Mu'ammal, Department of Management, Faculty of Economics and Business, Universitas Muhammadiyah Malang, Malang, Indonesia Email: immanuelmuammal@umm.ac.id

How to Cite: Mu'ammal, I., Muzakki, A., Fakhri, E. A., & Setiawan, E. (2022). The competence of a coach in sports: How does it correlate with athlete motivation? *Journal Sport Area*, 7(3), 396-404. https://doi.org/10.25299/sportarea.2022.vol7(3).10540

Authors' Contribution: a – Study Design; b – Data Collection; c – Statistical Analysis; d – Manuscript Preparation; e – Funds Collection

INTRODUCTION

Nowadays, sports have developed into an industry which presents abundant career opportunities. Sports coaching is one of them. Coaches are the main stakeholders in promoting their trainees to a higher level in a sport (Trevor & Vidya, 2021). When sports and games become organized activities, the role of the coach is

needed to develop the performance and skills of athletes. The coach's responsibility is to develop athlete coaching programs and improve athlete performance (Gould et al., 2007). When coaches recognize the demands of the most important tasks in their role and assess their abilities against these demands, they also have the potential to identify appropriate training needs. This is important in order to develop and build competency as a coach (Moen & Fikse, 2011). A good and responsible coach is a coach who supports the mental, physical, tactical and technical development of athletes to achieve the athlete's peak goals (Manzoor, 2018). A good coach can be defined as a competent coach and some literature show that coaches play an important role in motivating athletes (Mageau & Vallerand, 2003).

Qualified coaches are those who have the ability to train based on the level of knowledge, attitude and technical ability according to the field (Sucipto et al., 2017). Parameters such as support in achieving career goals, knowledge of technical components, relational skills, talent search abilities, and coaching styles lead to the ability and level of competency of the coach (Trevor & Vidya, 2021). Competent coaches show different approaches and styles of coaching to their athletes by using motivation, game strategies, character building of athletes, and applying effective techniques in sports training. With the knowledge possessed, a coach can produce methods of coaching athletes as a guide to act or behave appropriately around athletes (Chiu et al., 2014). Competent coaches are often involved in an intellectual stimulation as an effective measure in developing game strategies and techniques. Specifically, coaches who have high innovation will reflect higher level of creativity and are considered more effective in helping athletes prepare for various competitive situations and maintain focus during competition (Kassim, 2018). Coaching competency was assessed using a Spanish adaptation of the Athletes' Perceptions of Coaching Competency Scale II-High School Teams (González-Ponce et al., 2018), which consists of 4 indicators, namely Motivation Competency, Game Strategy Competency, Character Building Competency, and Technique Competency.

Motivating competency refers to the evaluation by athletes of their coach's ability to influence their mood and psychological skills. To achieve peak performance in sports competitions, coaches and athletes should not base their prospects on physical training on sports skills alone, but must integrate both mental and physical aspects (Ohuruogu et al., 2016). The coach is someone who has the most crucial role to ensure athletes are at the highest motivation (Nasiruddin et al., 2020). The coach's job is to motivate athletes well and describe the values of the sport, therefore it is important to have a proper and thorough understanding of the ideal motivational strategy. Coaches can foster positive & enjoyable experiences for athletes and provide expressive guidance on skill acquisition opportunities, and intrinsically motivate ongoing sports experiences (Trevor & Vidya, 2021). Motivated athletes are those who have confidence in their coach. In addition, coaches must have a plan to motivate their athletes because coaches have an important influence on the performance, motivation, and well-being of an athlete in sports (Kucukibis & Gul, 2019). Using a positive and holistic approach to coaching as a strategy to build positive relationships will motivate and encourage athletes to perform at the highest level (Bloom et al., 2014). Increasing athlete motivation is basically about changing attitudes, developing positive thinking patterns that improve the athlete's own abilities. A coach who has a role as a leader in sports will have a considerable influence on how motivated the athlete or team feels.

Game strategy competency is related to the evaluation of the head coach's strategic abilities during competition. Strategy refers to the general game plan whereas tactics is related to the strategy to be implemented. To maximize team performance in sports, technical features of the skills and strategies of coaches and athletes must be practiced in situations such as games (Kaya, 2014). Coaches need to explain game strategies to athletes and understand the possibility of athletes going against certain rules or demands to encourage intrinsic motivation and extrinsic motivation that are determined by their athletes (Mageau & Vallerand, 2003). Coaches in a professional, amateur, or school level, must understand how to develop effective sports game tactics to help athletes make good decisions (Kaya, 2014).

Technique competency is the evaluation of the head coach's abilities in instructing athletes and assessing their abilities during training (Anthony & Labadan, 2021). Teaching technical and tactical skills is a viable method to help athletic training students develop these skills (Hawkins et al., 2015). The study concluded that coaches are committed to their complex tasks to athletes through providing motivation and effective coaches can handle both responsibilities for transferring sports skills through technical training as well as character

building (Anthony & Labadan, 2021). To progress in their field, athletes need feedback from a qualified coach. Feedback, however, can be productive or destructive. Athletes use feedback to acquire sport skills and knowledge to become "champions" (Johnson et al., 2011). Other reasons to participate in youth sports include being with friends, learning new skills, being active, and achieving success. Thus, meeting the needs of each athlete requires a variety of coaching methods and styles to create an atmosphere that not only fulfils these needs, but also increases motivation and assists in skill development (Lockwood & Perlman, 2008).

Character building competency indicates an evaluation of the head coach's ability to influence the personal development and positive attitudes of athletes (Myers et al., 2011). The coach not only teaches the technical skills of the athlete, but also develops the person as a whole. Coaches must teach and instil life skills such as leadership, teamwork, and character building in their athletes (Bloom et al., 2014). Character is a person's nature in responding morally to various situations. The stages in developing character include moral knowledge, moral feelings, and moral actions (Lickona, 2001). The findings from Ferris et al. (2016) emphasize the importance of gaining an understanding of coach's perspectives on character-based education programs, and in particular about the information they value and apply in their coaching practice. Character development is important for achieving sporting success (Edwards & Chiera, 2021).

Motivation is the driving force behind the success of athletes. If an athlete's interpersonal relationships affect their self-efficacy and motivation negatively, their performance will decrease (Holt, 2013). The coach has many responsibilities both on and off the pitch. Generally, coaches are required to plan exercises, inspect equipment, serve as athletic coaches and manage the well-being of all athletes on the team. The most important task for the coach is to try in finding ways to motivate his players (Chiu et al., 2014). The model from Horn (2002) indicates that coaching effectiveness, athlete perception, and evaluation of coach behaviour mediate the influence of coach behavior on athletes' self-perceptions (self-efficacy) and attitudes (satisfaction with coaches), which also directly affect athlete motivation and performance. Motivation has long been associated with sports engagement (Teo et al., 2015). Motivation is often described as a force that drives a person's exercise intensity and commitment to sports and physical activity (Chin et al., 2021). Motivation theory provides definitions of terms and prior knowledge of different authors, and the second part of this paper provides the most commonly used techniques: goal setting, cognitive restructuring, and imagination and how to apply them. When it comes to motivation in sports, some of the most important concepts and interventions to motivate athletes presented in this paper can be analysed in the psychological training of athletes (Durović et al., 2020). Encouraging a high level of self-determination can help to increase the level of involvement of athletes and protect them from fatigue and withdrawal from sports (Graña et al., 2021).

Based on findings from conducted research, competence of coaches moderates the relationship between motivation athletes (Weathington et al., 2010). It can be said that the competence possessed by the coach has an influence on the athlete's motivation. A study also shows that if a coach is able to increase his level of competence, it will greatly affect the motivation of athletes (Mertens et al., 2018). However, in the current era, the motivational aspect among athletes has decreased gradually (Aru Fantiro et al., 2022), so this is a global problem that must be immediately sought for the causative factor. In addition, the limited research on the relationship between competence and motivation among athletes is the center of attention in this study. Therefore, our study aims to examine the relationship between competence and motivation.

METHOD

This study uses a quantitative approach to the results obtained from samples that represent the population studied. A quantitative approach was used to describe the trends, behaviours, or opinions of a population by examining samples from the population. This research focuses on the relationship of coach competency that can be represented by motivation competency, technique competency character building competency, and game-strategy competency on athlete motivation. The population consisted of 120 basketball athletes in Malang (Indonesia) and only 114 athletes who responded and were willing to be involved in this study. The technique for selecting the population for the sample used random sampling.

The data in this study was collected in March 2022 through questionnaires which consist of 42 statements. Data analysis was performed using SEM-PLS with WARP-PLS 7.0 software. Validity is measured using the

combined output criteria of loadings and cross loadings. If the loading factor value is more than 0.40 and the p-value is significantly less than 0.05 (<0.05) then the indicator or item is declared valid. Measurement of reliability was based on composite reliability and Cronbach's alpha (Pelletier, 2013; Komarc et al., 2020). Both must be above 0.70 as a reliability requirement (Solihin & Ratmono, 2021).

RESULTS AND DISCUSSION

The construct validity can be provided through the estimation of standardized factor loading in each indicator. Table 1 shows that the outer loadings of all variables are above 0.40 and the P-Value value of all variables is below 0.05, which means that all variables are declared valid.

Table 1. Validity Test

	Table 1. Validity Test	Validity Test		
Variables	Items	Outer Loadings	P-Value	Note
Motivation	Help athletes maintain confidence in themselves? (X1.1)	0.073	< 0.001	VALID
competency	Mentally prepare his/her athletes for game strategies? (X1.2)	0.073	< 0.001	VALID
(X1)	Build the self-esteem of his/her athletes? (X1.3)	0.074	< 0.001	VALID
	Motivate his/her athletes? (X1.4)	0.074	< 0.001	VALID
	Build team cohesion? (X1.5)	0.074	< 0.001	VALID
	Build the self-confidence of his/her athletes? (X1.6)	0.073	< 0.001	VALID
	Build team confidence? (X1.7)	0.074	< 0.001	VALID
Game-strategy	Recognize opposing team's strengths during competition? (X2.1)	0.073	< 0.001	VALID
competency	Understand competitive strategies? (x2.2)	0.074	< 0.001	VALID
(X2)	Adapt to different game situations? (x2.3)	0.074	< 0.001	VALID
	Recognize opposing team's weakness during competition? (x2.4)	0.073	< 0.001	VALID
	Make critical decisions during competition? (x2.5)	0.073	< 0.001	VALID
	Maximize his/her team's strengths during competition? (x2.6)	0.073	< 0.001	VALID
	Adjust his/her game strategy to fit his/her team's talent? (x2.7)	0.073	< 0.001	VALID
Character-building	Instill an attitude of good moral character? (x4.1)	0.073	< 0.001	VALID
competency	Instill an attitude of fair play among his/her athletes? (x4.2)	0.073	< 0.001	VALID
(X3)	Promote good sportsmanship? (x4.3)	0.073	< 0.001	VALID
	Instill an attitude of respect for others? (x4.4)	0.074	< 0.001	VALID
Technique	Demonstrate the skills of his/her sport? (x5.1)	0.073	< 0.001	VALID
competency	Coach individual athletes on technique? (x5.2)	0.074	< 0.001	VALID
(X4)	Develop athletes' abilities? (x5.3)	0.074	< 0.001	VALID
	Recognize talent in athletes? (x5.4)	0.074	< 0.001	VALID
	Detect skill errors? (x5.5)	0.073	< 0.001	VALID
	Teach the skills of his/her sport? (x5.6)	0.073	< 0.001	VALID
Athlete Motivation	Because it gives me pleasure to learn more about my sport. (Y1.1)	0.073	< 0.001	VALID
	Because I find it enjoyable to discover new performance strategies. (Y1.2)	0.073	< 0.001	VALID
	Because it is very interesting to learn how I can improve. (Y1.3)	0.074	< 0.001	VALID
	Because practicing sports reflects the essence of whom I am. (Y2.1)	0.073	< 0.001	VALID
	Because participating in sport is an integral part of my life. (Y2.2)	0.073	< 0.001	VALID
	Because through sport, I am living in line with my deepest principles. (Y2.3)	0.073	< 0.001	VALID
	Because I have chosen this sport as a way to develop myself. (Y3.1)	0.073	< 0.001	VALID
	Because I found it is a good way to develop aspects of myself that I value. (Y3.2)	0.074	< 0.001	VALID
	Because it is one of the best ways I have chosen to develop other aspects of myself. (Y3.3)	0.073	< 0.001	VALID
	Because I would feel bad about myself if I did not take the time to do it. (Y4.1)	0.073	< 0.001	VALID
	Because I feel better about myself when I do. (Y4.2)	0.073	< 0.001	VALID
	Because I would not feel worthwhile if I did not. (Y4.3)	0.073	< 0.001	VALID
	Because people I care about would be upset with me if I didn't.	0.073	<0.001	VALID
	(Y5.1) Because I think others would disapprove of me if I did not. (Y5.2)	0.074	< 0.001	VALID

Journal Sport Area - 7(3), 2022, 396 - 404 Immanuel Mu'ammal et al.,

Variables	Items	Validity Test		
		Outer Loadings	P-Value	Note
	Because people around me reward me when I do. (Y5.3)	0.074	< 0.001	VALID
	I used to have good reasons for doing sports, but now I am asking myself if I should continue. (Y6.1)	0.073	< 0.001	VALID
	So that others will praise me for what I do. (Y6.2)	0.073	< 0.001	VALID
	It is not clear to me anymore; I don't really think my place is in sport. (Y6.3)	0.073	< 0.001	VALID

	Realibi	Realibility Test		
Variables	Cronbach's Alpha	Composite Realibilty	Note	
Motivation Competency (X1)	0.982	0.985	Reliable	
Game-strategy competency (X2)	0.985	0.987	Reliable	
Technique competency (X3)	0.983	0.988	Reliable	
Character-building competency (X4)	0.977	0.982	Reliabl	
Athlete Motivation	0.994	0.994	Reliable	

Reliability is used to measure each indicator or measure the consistency of each indicator. Table 2 depicts the results of reliability constructs in this study are fulfilled. The results show that the composite reliability and Cronbach's alpha of each construct has a value of more than 0.70.

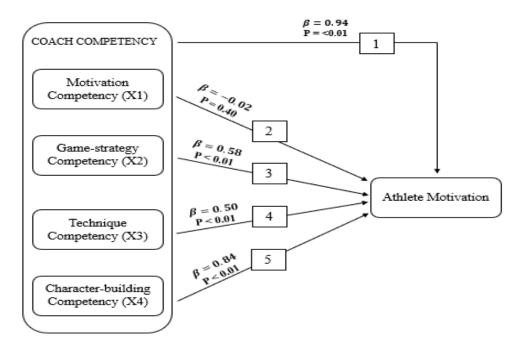


Figure 1. Relationship Between Coach Competency and Athlete Motivation

Figure 1 indicates that overall motivation competency, technique competency character building competency, and game-strategy competency which represent the coach competency variable have a positive effect on athlete motivation, with p value < 0.01 and = 0.94. This is in line with Muskanan (2015) who states that competence is the most dominant variable and has a strong relationship with its influence on athletes achievement motivation. Competence support provided by coach is expected to increase athletes' intrinsic motivation (Mertens et al., 2018).

It is also known from Figure 1 that the Motivation Competency has a value of p = 0.40 and = -0.02 which indicates that motivation competence has no effect on Athlete Motivation. These results are inconsistent with

the results of research from Chiu et al. (2014) which found that among coach competencies, motivating competence was found to be a significant contributor to athlete's sports motivation. The results of this study are also different from Nabilla et al. (2021) who found that the coach competence has a significant effect on athlete motivation.

The relationship between game strategy competency and athlete motivation is p < 0.01 and = 0.58 which indicates that game strategy competency has an effect on athlete motivation. This result supports the statement from Nasiruddin et al. (2020) which states that coaches have a crucial role to play in developing strategies to improve the quality of the games. Coaches should think of ways to increase the motivation of the players either before, during, or after the games (Dyakova et al., 2017).

The relationship between technique competency and athlete motivation has a p value of < 0.01 and = 0.50 indicating that technique competency has an influence on athlete motivation. One aspect that keeps athletes motivated is the mastery of new techniques (Coakley, 2007). This shows that the coach's ability to teach skills will make athletes motivated. Meanwhile, the relationship between character building competency and athlete motivation is p 0.01 and = 0.84. which shows that character building competency has an effect on athlete motivation. Coaches must have the ability to motivate athletes to pursue their excellence (Omar-Fauzee et al., 2012). Therefore, the coach must create an environment on the playing field that supports the ideal understanding of ethics, moral reasoning, character and sportsmanship (Stoner, 2004).

CONCLUSION

The results showed that the coach competency, as represented by motivation competency, game-strategy competency, technique competency, and character-building competency had a positive influence on athlete motivation. However, the results of the study also show that motivation competency has no effect on athlete motivation. This research was conducted during the COVID-19 pandemic where the intensity of athletes' training tends to be low. This somewhat affects the motivation of athletes so that no matter how well the coach motivates the athlete, it is very possible that the athlete does not show significant motivation. The COVID-19 pandemic makes the challenge even more difficult for coaches to maintain athlete motivation. Therefore, the competency of the coaches must be continuously improved in accordance with the times.

Coaches can develop psychologically motivated athletes with positive self-esteem by enhancing selfesteem and a sense of belonging and by limiting comparisons of judgment to the success of other athletes. Coaches can also increase autonomy in their athletes by encouraging self-monitoring, performance reflection, and honest evaluation of physical and emotional well-being. An athlete's motivation plays a fundamental role in perceived performance and ability. Motivation comes from internal and external sources which contribute to all athletes' development and performance. In many ways, the coach plays a very important nurturing role by responding to the emotional and physical needs of an athlete. The surrounding climate dictated by the coach, whether it is critical or motivational, affects the athlete's psychosocial well-being.

This research contributes to increase scientific knowledge among coaches and athletes about the importance of competence for the motivational aspect. The limitation in this study is that the sample used only comes from basketball athletes so it is not yet known whether there is a similar relationship between the competence and motivation of other sports coaches. Therefore, future research can examine the relationship between the competence and motivation of coaches in sports such as football, volleyball, handball or something else.

REFERENCES

Anthony, L., Labadan, B. (2021). Coaching styles, motivation, and sports performance laurence anthony barredo labadan. *Jurnal Konseling dan Pendidikan*, 8(I), 1–13. https://doi.org/10.29210/169300

Aru Fantiro, F., Arifin, B., Muzakki, A., & Setiawan, E. (2022). Blended learning or full online: Increase student mood and motivation during the new normal era. *Jurnal SPORTIF: Jurnal Penelitian Pembelajaran*, 8(1), 13-28. https://doi.org/10.29407/js_unpgri.v8i1.17507

- Bloom, G. A., Falcão, W. R., & Caron, J. G. (2014). *Coaching high performance athletes: Implications for coach training. Positive Human Functioning from a Multidimensional Perspective.* Nova Science Publishers.
- Chin, N. S., Liew, G. C., Kueh, Y. C., Hashim, H. A., Tee, V., & Kuan, G. (2021). Cross-cultural adaptation and validation of the malay version of sports motivation scale-ii. *International Journal of Environmental Research and Public Health*, *18*(21), 1-14. https://doi.org/10.3390/ijerph182111694
- Chiu, L. K., Mahat, N. I., Marzuki, N. A., & Hua, K. P. (2014). Student-athletes' evaluation of coaches' coaching competencies and their sport achievement motivation. *Review of European Studies*, 6(2), 17–29. https://doi.org/10.5539/res.v6n2p17
- Coakley, J. (2007). Sport in Society: Issues and Controversies. McGraw-Hill.
- Đurović, D., Aleksić Veljković, A., & Petrović, T. (2020). Psychological Aspects of Motivation in Sport Achievement. Facta Universitatis, Series: Physical Education and Sport, November, 465. https://doi.org/10.22190/fupes190515044d
- Dyakova, G., Dyakov, T., & Angelova, I. (2017). Study of the students' interest in the football game, motivation and desire for practicing football. *Trakia Journal of Science*, 15(Suppl.1), 375–382. https://doi.org/10.15547/tjs.2017.s.01.063
- Edwards, T. M., Chiera, C. (2021). Coaching for character development: insights from a simple mathematical model. *Journal of Physical Education and Sport*, 21(6), 3374–3378. https://doi.org/10.7752/jpes.2021.06457
- Ferris, K. A., Ettekal, A. V., Agans, J. P., & Burkhard, B. M. (2016). Character Development Through Youth Sport: High School Coaches' Perspectives about a Character-based Education Program. *Journal of Youth Development*, 10(3), 127–140. https://doi.org/10.5195/jyd.2015.13
- González-Ponce, I., Leo, F. M., Jiménez, R., Sánchez-Oliva, D., Sarmento, H., Figueiredo, A., & García-Calvo, T. (2018). Athletes' perceptions of coaching competency and team conflict in sport teams: A multilevel analysis. *European Journal of Sport Science*, 18(6), 851–860. https://doi.org/10.1080/17461391.2018.1461245
- Gould, D., Collins, K., Lauer, L., & Chung, Y. (2007). Coaching life skills through football: A study of award winning high school coaches. *Journal of Applied Sport Psychology*, 19(1), 16–37. https://doi.org/10.1080/10413200601113786
- Graña, M., De Francisco, C., & Arce, C. (2021). The relationship between motivation and burnout in athletes and the mediating role of engagement. *International Journal of Environmental Research and Public Health*, *18*(9), 23-34. https://doi.org/10.3390/ijerph18094884
- Hawkins, J. R., Sharp, E. B., & Williams, S. M. (2015). Take a Page from Your Coach's Play Book: Teaching Technical and Tactical Skills in Athletic Training. *Athletic Training Education Journal*, 10(3), 244–248. https://doi.org/10.4085/1003224
- Holt, L. (2013). Interpersonal relationships and the association with athlete's motivation, self-efficacy and fear of failure. *Theses*. Ithaca College.
- Horn. (2002). Coaching Effectiveness in the Sport Domain. Journal of Psychology, 7, 134-149.
- Johnson, S., Wojnar, P., Price, W., Foley, T., Moon, J., Esposito, E., & Cromartie, F. (2011). A Coach's Responsibility: Learning How to Prepare Athletes for Peak Performance. *The Sport Journal*, 14(1), 1–14.
- Kassim, A. F M. (2018). Athletes' Perceptions of Coaching Effectiveness in Team and Individual Sport. Thesis. University of Birmingham.

- Kaya, A. (2014). Decision Making by Coaches and Athletes in Sport. *Procedia Social and Behavioral Sciences*, 152, 333–338. https://doi.org/10.1016/j.sbspro.2014.09.205
- Komarc, M., Harbichová, I., & Scheier, L. M. (2020). Psychometric validation of Czech version of the Sport Motivation Scale. *PLoS ONE*, *15*(1), 1–20. https://doi.org/10.1371/journal.pone.0227277
- Kucukibis, H. F., Gul, M. (2019). Study on sports high school students' motivation levels in sports by some variables. Universal Journal of Educational Research, 7(3), 839–847. https://doi.org/10.13189/ujer.2019.070325
- Lickona, T. (2001). What is Effective Character Education? *Paper Presented at The Stony Brook School Symoposium on Character*.
- Lockwood, P., Perlman, D. (2008). Enhancing the Youth Sport Experience: A Re-examination of Methods, Coaching Style, and Motivational Climate. *The Journal of Youth Sports*, 4(1), 30–35.
- Mageau, G. A., Vallerand, R. J. (2003). The coach-athlete relationship: A motivational model. *Journal of Sports Sciences*, 21(11), 883–904. https://doi.org/10.1080/0264041031000140374
- Manzoor, M. (2018). Role of Coach Encouragement between Athlete's Interest, Motivation and Frequency of Participation: A Case Study of District of Sialkot. *Global Physical Education & Sports Sciences Review*, *I*(I), 20–26. https://doi.org/10.31703/gpessr.2018(i-i).04
- Mertens, N., Boen, F., Vande Broek, G., Vansteenkiste, M., & Fransen, K. (2018). An experiment on the impact of coaches' and athlete leaders' competence support on athletes' motivation and performance. *Scandinavian Journal of Medicine and Science in Sports*, 28(12), 2734–2750. https://doi.org/10.1111/sms.13273
- Moen, F., Fikse, C. (2011). Elite coaches' perceptions of needed coach competencies in elite sport. *idrottsforum.org*.
- Muskanan, K. (2015). Analisis Motivasi Berprestasi Atlet Pusat Pendidikan dan Latihan Olahraga Pelajar Provinsi Nusa Tenggara Timur. *JKAP (Jurnal Kebijakan Dan Administrasi Publik)*, 19(2), 105-112. https://doi.org/10.22146/jkap.7608
- Myers, N. D., Beauchamp, M. R., & Chase, M. A. (2011). Coaching competency and satisfaction with the coach: A multi-level structural equation model. *Journal of Sports Sciences*, 29(4), 411–422. https://doi.org/10.1080/02640414.2010.538710
- Nabilla, R., Setiawan, M., & Susilowati, C. (2021). The Effects Of Coach Competence And Social Support On Athlete Achievement Through Mediation Of Motivation (A Study On Female Athletes Who Won Asian Games 2018 Medals). *International Journal of Business, Economics and Law*, 24(5), 88-92.
- Nasiruddin, M. N., Fauzee, M. S. O., Sin, I., & Omar, M. N. (2020). The motivation of football players: The impact of coach leadership style in malaysian sports schools. *International Journal of Human Movement* and Sports Sciences, 8(4), 124–133. https://doi.org/10.13189/saj.2020.080404
- Ohuruogu, B., Jonathan, U. I., & Ikechukwu, U. J. (2016). Psychological Preparation for Peak Performance in Sports Competition. *Journal of Education and Practice*, 7(12), 47–50.
- Omar-Fauzee, M., Nazarudin, M., Saputra, Y., Sutresna, N., Taweesuk, D., Abd-Latif, R., & Soh, K. G. (2012). The Strategies for Character Building through Sports Participation. *International Journal of Academic Research in Business and Social Sciences*, 2(3), 48.
- Pelletier, L. G., Rocchi, M. A., Vallerand, R. J., Deci, E. L., & Ryan, R. M. (2013). Validation of the revised sport motivation scale (SMS-II). *Psychology of Sport and Exercise*, 14(3), 329–341. https://doi.org/10.1016/j.psychsport.2012.12.002

- Solihin, M., & Ratmono, D. (2021). Analisis SEM-PLS dengan WarpPLS 7.0 untuk Hubungan Nonlinier dalam Penelitian Sosial dan Bisnis. Penerbit Andi.
- Stoner, M. E. (2004). Building ethics, character and sportsmanship in today's athletes. PSAHPERD, 30-31.
- Sucipto, A., Mutohir, T. C., & Sudijandoko, A. (2017). Development Of Coach Competency Evaluation Instrument Of Football School. International Journal of Physical Education, Sports and Health, 4(2), 106–110.
- Teo, E. W., Khoo, S., Wong, R., Wee, E. H., Lim, B. H., & Rengasamy, S. S. (2015). Intrinsic and extrinsic motivation among adolescent ten-pin bowlers in Kuala Lumpur, Malaysia. *Journal of Human Kinetics*, 45(1), 241–251. https://doi.org/10.1515/hukin-2015-0025
- Trevor, D. R., N., Vidya. (2021). A Review of Factors Considered by the Athletes on Accepting their Sport Coaches. *International Journal of Management, Technology, and Social Sciences*, 6(1), 321–329. https://doi.org/10.47992/ijmts.2581.6012.0148
- Weathington, B.L., Alexander, A. C., & Rodebaugh, L. L. (2010). Coaching influences on student-athlete motivation, stress, and skill. *Athletic Insight: Online Journal of Sport Psychology*, 2(2), 1-18.