

THE EFFECTIVENESS OF MOTIVATIONAL INTERVENTION PROGRAMS TOWARDS THE PERFORMANCE AMONGST FOOTBALL PLAYERS OF SECONDARY SCHOOLS IN KUALA LUMPUR

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ABSTRACT

The purpose of this study is to investigate and examine the effectiveness of motivational intervention towards the performance among secondary school football athletes in Malaysia. The instrument that have been used in this study is *Task and Ego Orientation in Sports Questionnaire (TEOSQ)* from Goal Orientation Theory (Duda & Nicholls, 1992) and *Perception of Success Questionnaire (POSQ)* from Transtheoretical Model (Roberts, Treasure & Balague, 1998). The sample in this study consists of 36 school boys representing SMK (L) Methodist Kuala Lumpur and SMK Methodist Sentul football players under 15 years. These samples were divided into two groups. They are the control group which consist of 18 players (n=18) from SMK Methodist Sentul and treatment group which consist of 18 players (n=18) from SMK (L) Methodist, Kuala Lumpur. The study design that used is quasi experimental method with the pre and post-test design. The finding of the study shows that there was a significant difference ($t=0.004$, $P<0.05$) in football performance between the control and the treatment group after which the treatment group undergone 6 weeks test and observation before the real competition. Prior to this study, the finding of this research give a clear picture to the teachers and coaches to design motivation program into their coaching planning. This intervention will enhance their performance in actual meet.

Keywords: Goal orientation, Motivation, Performance and Football

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1. INTRODUCTION

Athletes are passionate about strengthening their level of motivation and expect someone to provide feedback on their performance. Especially if someone is patting their backs and congratulating them on their accomplishments in sports (Ramalu, 2007). As Karim (2017) points out, football players who repeatedly failed to deliver the ball correctly in a football game eventually succeeded in sending the ball right after getting reinforced by the goal setting. As mentioned by Elliot and Story (2017), individuals actively set goals in response to internal (intrinsic motivation) and external forces (extrinsic motivation) according to their task. They describe that intrinsic motivation entails an individual perform a task out of inherent satisfaction, where extrinsic motivation involves attainment of a separate external outcome. Based on Van de Pol, & Kavussanu, (2012) research, self-reinforcement is more important because it comes from the inner self rather than external reinforcement because external reinforcement comes from the coach. Therefore, coaches need to use both of these methods to provide more effective reinforcement to the athlete. From time to time, coaches are looking for alternatives to improve athlete performance.

A study conducted by William and Straub (1998) with university students shows that 80% of athletes' performance is influenced by mental skills. Followed by Sheard and Golby (2006), that examined 36 national level swimmers after seven weeks of psychological skill interventions and overall, the results have a big significant improvement in the post intervention in psychological aspects. The latest version study done by Trigueros and Aguilar-Paraa (2019) with 324 development athletes on the effect of psychological and motivation application needs in sports. The results of the study indicated that it is a compulsory need in their training to enhance their performance based on the athlete's achievement. Recognizing this fact, most coaches are beginning to pay attention to the motivation psychological aspects of goal orientation to improve athlete performance (Karim 2017). According to Ramalu, 2007; Duda, 1989; and Mike, 2015 goal orientations are cognitive representations of the general type of goal an individual will tend to pursue. Goal orientations are dynamic and subject to change as information pertaining to one's performance on the task is processed. While an individual can hold a number of goal orientations that govern their reasons for engaging in an activity, research has primarily focused on two types of goals namely, task-oriented goals and ego-oriented goals.

According to Sarmiento, Peralta, Harper and Marques (2018), there are two different goal orientations in order to achieve goal theory which is ego orientation that focusing on displaying one's superiority to other people with the aim of demonstrating competence in relation to his/her peers, and the second one is task orientation that the person is more likely to define success or

competence in terms of mastery or task improvement. Goal orientation in motivation is very important in the sport as it will enhance the spirit and effort of the athlete to advance. One of the most important ways to motivate athletes is through reinforcement feedback. The methods and guidelines for providing reinforcement feedback have not been addressed by psychologists in the country (Ramalu, 2007; Karim 2016). Therefore, this study aims to identify what forms or types of reinforcement that can motivate athletes toward achieving their goal orientation.

Problem Statement

Psychological aspects such as motivation or reinforcement have received little attention because it is often the coach's perception that physical training is one of the important training components in the training and preparation of school athletes (Kassim & Boardley, 2018). It is undeniable that fitness training and fitness components are the most important factors in a team's success but at a high level of motivation especially in goal orientation will ensure success in the hands of the team (Weinberg & Gould, 1999). So, awareness of the importance of this motivation for improving the performance of athletes in sports has been put in place. However, how to apply this motivational method is not well-known to some coaches (Kassim & Boardley, 2018). Therefore, it is important to see how well the motivational intervention methods are understood and used in training effectively by these high school football athletes.

Research Objective

The main objective of this study was to find out the effectiveness of motivation in the achievement of football athletes' performance in the Kuala Lumpur Schools Sports Council football league competition can be enhanced by motivational intervention based on the *Task Orientation and Ego in Sports Questionnaire (TEOSQ)* (Duda & Nicholls, 1992) according to the Goal Orientation Theory and followed by the *Perceptions of Success Questionnaire (POSQ)* (Roberts, Treasure & Balague, 1998) according to the Transtheoretical Model Theory. The second objective was to see if there were any significant differences between treatment groups who received motivational intervention including normal football training with the control group who had only undergone football training but whose motivation intervention was not implemented and only supervised.

Research Question

The purpose of this study was to find answers to research questions related to the effectiveness of motivational interventions in the achievement of athletes' performance in football.

- i. Is there a significant difference in the achievement of mean test scores pre and post-test for the control group?
- ii. Is there a significant difference in the achievement of mean test scores pre and post-test for the treatment group?
- iii. Is there a significant difference in mean score achievement between the control group and the treatment group in the post-test?

2. METHOD

The study used quasi experimental methods with pre and post-test design involving 14-year-old football players from two schools. The total samples that selected is 36 which consist 18 players from SMK Methodist Sentul ($n = 18$) were from the control group while 18 others were selected from Kuala Lumpur Methodist SMK ($n=18$) as the treatment group. An independent t-test was performed to ensure that the two groups selected were equivalent. After the pre-test, samples from the control and treatment groups will undergo regular football training for a period of 6 weeks with a training rate of 3 times a week. The first test they passed was the TEOSQ Questionnaire (Duda & Nicholls, 1992) based on the Goal Orientation Theory. This pre-test was conducted during the first training session for both teams. During the 6-weeks training period, the control group only underwent football training according to the program, while the treatment group underwent 6-weeks football training with motivational intervention. After both teams had a 6 weeks training session, post-test POSQ Questionnaire (Robert, Treasure & Balague, 1998) based on Transtheoretical Theory were conducted. The post-test was conducted two hours before the actual competition to compare the success perception of each team. From the assessment of this questionnaire it is possible to know the mental preparation in goal orientation of each player in the treatment group before playing the actual game.

The motivational interventions session conducted for the treatment group over a 6-week period were as follows:

- Progressive Muscle Relaxation (PMR)
- Grid Concentration Test
- Floatation Tank
- Visualization with music
- Goal orientation for short- and long-term
- Control optimal awakening (TKO)
- Controls the level of anxiety
- Discuss the issues facing by the players.

During the football session, all motivational interventions are implemented on a timetable for the treatment group. Whereas the control group only had football training sessions without any intervention. To ensure that the program runs smoothly, the same coach guides both groups.

Instrument

The instrument used in this study was the *Task and Ego Orientation in Sport Questionnaire (TEOSQ)* (Duda & Nicholls, 1992) which tested a validity coefficient of .70 and .80 reliability coefficient according to Cronbach Alpha (1951) for the pre-test. For the post-test, the *Perception Success Questionnaire (POSQ)* (Roberts, White & Balague, 1998) tested a validity coefficient of .70 and a reliability coefficient of .70 according to Cronbach Alpha (1951). On top of that in the recent study by Clancy, Herring and Campbell (2017), evaluated six most highly cited

motivation measures in sports stated that despite these questionnaires there are some variance in their psychometrics, properties, conceptualization and structure. Comparatively, TEOSQ and POSQ psychometrically strong instruments for quantifying motivation that widely supported in the literature. In line with Ersoz, Muftuler, Yarlisu-Lapa and Tumur (2017), that TEOSQ and POSQ is most widely used questionnaire for evaluating goal orientation and perception of success which showed good construct validity, as well as internal consistency reliability in different sports and competitive level.

3. RESULTS

Table 1

Independent analysis of t-test on pre-test scores between the control and treatment groups.

T-test results shows pre-test score differences between Control Group and Treatment Group. (n=36; df=28)

	Mean	Mean Difference	Standard Deviation	T-Value	Significant
Control Group	0.28		0.73		
		0.06		0.76	Not Significant*
Treatment Group	0.22		0.58		

*p>0.05; df= 28; Control Group (n=18); Treatment Group (n=18)

Table 1 shows the pre-test scores for the control and treatment groups. The mean pre-test score for the control group was 0.28 and the standard deviation was 0.73. The mean score for the treatment group was 0.22 and the standard deviation was 0.58. The mean difference between the two groups was 0.06. The results showed that t tests for pre-test between control group and treatment group were not significant (p <0.05). These results indicate that there were no significant differences in motivation between the control and treatment groups. Thus, both groups are considered equal.

Table 2

Paired t-test analysis between pre and post-test for control group

T-test results shows, score differences in pre-test and post-test in Control Group (n=18, df=14)

	Mean	Mean Difference	Standard Deviation	T-Value	Significant
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Pre-Test	0.28	-0.65	0.73	0.00	Significant*
Post- Test	0.93		0.81		

*P<0.05; df=14

Table 2 shows the pre and post test scores of the control group. The mean score for the pre-test was 0.28 and the standard deviation was 0.73. While the mean score for the post test was 0.93 and the standard deviation was 0.81. The mean difference for both pre and post-test was -0.65. A t test on the mean difference between the two tests showed a value of $t = 0.00$ ($p < 0.05$). This result shows that there is a significant difference between pre and post-test in the control group over 6 weeks of football training.

Table 3

Paired t-test analysis between pre and post-test for treatment group.

T-test results shows, score differences in pre-test and post-test in Treatment Group ($n=18$, $df=14$)

	Mean	Mean Difference	Standard Deviation	T- Value	Significant
Pre-Test	0.22	-0.75	0.58	0.00	Significant*
Post Test	1.97		1.61		

*P<0.05; df=14

Table 3 shows the pre and post test scores of the treatment group. The mean score for the pre-test was 0.22 and the standard deviation was 0.58. While the mean score for the post test was 1.97 and the standard deviation was 1.61. The mean difference for both pre and post-test was -1.75. A t test on the mean difference between the two tests showed a value of $t = 0.00$ ($p < 0.05$). The results showed that there were significant differences between pre- and post-test after 6 weeks of football physical training sessions and included motivational interventions for the treatment group.

Table 4

An independent t-test on post-test scores between the control and treatment groups.

T-test result shows, post test score differences between Control Group and Treatment Group ($n=36$; $df=28$)

	Mean	Mean Difference	Standard Deviation	T- Value	Significant
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Control Group	0.93		0.81	0.004	Significant*
Treatment Group	1.97	1.04	1.61		

* $P < 0.05$; $df = 28$; Control Group (n=18); Treatment Group (n=18)

Table 4 shows the post-test score differences between control group and treatment group. Post-test min score for control group is 0.93 with standard deviation of 0.81 while post-test min score for treatment group is 1.97 with standard deviation of 1.61. The min differences for both groups are 1.04. The results show, the min score of treatment group is higher than min score results for control group. A t-test on the differences between the two groups showed a value of $t = 0.004$ ($p < 0.005$). The results showed that there was a significant difference between the control group and the treatment group after the treatment group was exposed to 6-week motivational interventions together with the physical training of football.

4. DISCUSSION

The findings showed a significant improvement in both the control and treatment groups with a mean difference of 0.06 for the control group and 1.04 for the treatment group after 6 weeks of training sessions before participating in the actual competition. Comparisons between these groups have shown that the treatment group has excellent performance compared to the control group. This shows that every athlete in the treatment group is trained for mental preparation before the actual match. The result is proven with excellent performance after the actual match. The findings showed that there was no significant difference in mental preparation prior to football practice where the mean difference between the two groups was 0.06. The results showed that the mean score for pre-test between the control group and the treatment group was not significant ($p > 0.05$) in terms of mental preparation before football training. The results showed that both groups were equivalent before the treatment group was exposed to motivational intervention. Post tests were conducted after both groups underwent a 6-week football training session and before the actual match. Based on the pre and post test conducted, the following are the answers to the research questions.

Study question 1.

Is there a significant difference in achievement of pre and post test scores for the control group?

The findings show that there is a marked improvement in mental preparation after 6 weeks of football training for the control group. This is evident from the performance shown after this

control group competed in the actual match. According to table 2, the mean score for the pre-test is 0.28 and the mean score for the post test is 0.93. The mean difference was 0.65 where the t test for mean difference showed a value of 0.00 ($p < 0.05$). The results showed that there was a significant difference between pre- and post-test after 6 weeks of football training for the control group. The findings indicate that there has been a slight improvement in the 6-week football training session at 3 times a week. So according to Claver, Jiminez, Gil-Arias, & Moreno (2017), this slight improvement was due to the understanding and cooperation throughout the training season that positively affected motivation. This may also be due to the frequency of these exercises to improve mastery of a skill and to correct past mistakes (Magill, 2001; Schmidt, 1993).

Study Question 2

Is there a significant difference between the mean test score pre and post treatment group?

The findings showed that there was a marked improvement in mental preparation after 6 weeks of football training and was exposed to motivational intervention for the treatment group. According to table 3, the mean score for the pre-test is 0.22 and the mean score for the post test is 1.97. The mean difference for both pre and post-tests was 1.75. A t test on the mean difference between the two tests showed a value of $t = 0.00$ ($p < 0.05$). These results indicate that there were significant differences between pre- and post-test after 6 weeks of football training sessions with motivational intervention for the treatment group. The improvement in performance is due to these motivational interventions that provide a strong mental preparation in which athletes can control the awakening and anxiety that arise within them. The effect of this intervention is evident from the post test scores in which all treatment team athletes underwent a second TEOSQ questionnaire two hours before the actual competition. Evidence from this score can be demonstrated in the performance of football games. Motivational implications are one of the most important influencing factors for enhancing performance among athletes (Bandura, 1986; Weinberg & Gould, 1999; Claver et al., 2017). Furthermore Bandura (1986), this motivational intervention can increase the degree to which an individual believes he or she is offering a treatment to achieve a specific goal. It can also influence a person's efforts, thoughts, emotional reactions and performance. Mental and physical preparation, social support and coach leadership are key sources for building self-confidence in real performance (Claver et al., 2017).

Study Question 3

Is there a significant difference in the mean achievement of post test scores between the control and treatment groups?

The findings of the post-test study showed that there was a significant difference in the level of mental preparation following a 6-week football training program between the control and treatment groups. The mean posttest score for the control group was 0.93 while the mean score for the treatment group was 1.97. The mean difference between the two groups was 1.04. The

results showed that the mean post test score for the treatment group was higher than the mean score obtained by the control group. A t test on the mean difference between the two groups showed a value of 0.004. was significant ($p < 0.05$). The post hoc test showed that both groups showed significant differences but the improvement in the treatment group was significant compared with the control group. This clearly indicates that motivational interventions have played an important role in the mean differences between the two groups. According to Elliott et al. (2017), at the moment implementation of motivational interventions can focus and focus on what is being done. An athlete who excels in sports usually has low levels of anxiety and high levels of confidence. Karim (2017), also argued that in order to achieve the goal of enhancing the desire for physical activity and sports, the use of motivational theories and goal orientation.

5. CONCLUSION

In conclusion, a coach who guides any team or individual in the sport should be able to enhance their internal motivation by using some of the right reinforcement methods. One of them is to set reasonable goals by providing creative training patterns that can influence the athlete's motivation Claver et al. (2017). Prior to this, multidimensional intervention program improved the performance of the under 15 football players in terms of competence, self-determination and sports commitment. Thus, this research may help other coaches with other different interventions to achieve their performance goals. It's also believed the coaches interventions influenced the athlete's behavior and improve the cognitive motivation process. Although reinforcement should be provided using both positive and negative methods, it is found that 80% to 90% of reinforcement should be positive in that it emphasizes punishment and retaliation as one of the tactics to increase player motivation (Smith, 1993; Mc Cormick, Meijin & Marcora, 2018). Enhancing motivation is primarily about a change in attitude, developing a positive mind set and engaging in behaviors to help keep focused on checkmarks that lead to overall that facilitate improvement in performance. Achievement in motivation is another way in which athletes can remain focused and maintain the desire to be successful (Ramalu, 2007; Brown & Fletcher, 2016). By regularly setting themselves achievable goals, they can remain motivated to do well because they are always striving to achieve something. Achievement motivation is closely linked with intrinsic motivation because it relies on the performers need to fulfil an internal desire rather than to receive material rewards.

ACKNOWLEDGEMENT

The authors are grateful to the Research Management and Innovation Centre (RMIC), Universiti Pendidikan Sultan Idris (UPSI), Tanjong Malim, Perak for their willingness to support the publication of this study.

References

- [1] Ramalu, R., R. (2007). Keberkesanan Motivasi Terhadap Pencapaian Prestasi Atlet Sekolah Menengah. (Published Masters Thesis). University of Malaya, Malaysia.
- [2] Karim, Z. A., & Nadzalan, A. M. (2017). Malaysia Football Coaches: Development characteristics. *International Journal of Academic Research in Business and Social Sciences*, 7(9), 305-312.
- [3] Elliott, Charles N. and Story, Paul A. (2017) "Motivational Effects of Goal Orientation," *The Kennesaw Journal of Undergraduate Research: Vol. 5: Iss. 1, Article 4.*
- [4] Van de Pol, P. K. C., & Kavussanu, M. (2012). Achievement motivation across training and competition in individual and team sports. *Sport, Exercise, and Performance Psychology*, 1(2), 91–105.
- [5] William, J., M. & Straub. (1998). *Applied Sport Psychology: Personal Growth to Peak Performance*. 3rd. Mountain View, CA: Mayfields Publishing Company.
- [6] Sheard, M., & Colby, J. (2006). Effects of Psychological Skills Training Program on Swimming Performance and Positive Psychological development. *International Journal of Sports and Exercise Psychology*. 4(2).
- [7] Trigueros R, Aguilar-Parra JM, CangasDí'az AJ, Fernández-Batanero JM, Mañas MA, Arias VB, et al. (2019). The influence of the trainer on the motivation and resilience of sportspeople: A study from the perspective of self-determination theory. *PLoS ONE* 14(8)
- [8] Duda, J. (1989). The Relationship Between Task and Ego Orientation and the Perceived Purpose of Sport among Male and Female High School Athletes. *Journal of Sports and Exercise Psychology*, 11, 318-335.
- [9] Mike, H. (2015). "Goal Orientation and How a Task or Ego Mentality Can Affect the Enjoyment for College Hockey Players". *Masters of Education in Human Movement Sport and Leisure Studies Graduate Projects*. 32.

- [10] Sarmiento, H., Peralta, M., Harper, L., & Marques, A. (2018). Achievement Goals and Self Achievement in Adult Football Players: A Cluster Analysis. *Kinesiology*, 50.
- [11] Kassim, M., & Boardley, I. (2018). 'Athletes' perceptions of coaching effectiveness and athlete-level outcomes in team and individual sports: A cross-cultural investigation. *The Sport Psychologist*, 32 (3), 189-198.
- [12] Weinberg, R., S., & Gould, D. (1999). *Foundations of Sports and Exercise Psychology*. Champaign, IL: Human Kinetics.
- [13] Karim, Z. B. A., (2016). *Development Characteristics of Football Coaches in Australia and Malaysia (Published doctoral thesis)*. Victoria University of Technology, Melbourne.
- [14] Duda, J., L., & Nicholls, J., G. (1992). Dimensions of Achievement Motivation in Schoolwork and Sports. *Journal of Education Psychology*. 84, 1-10.
- [15] Roberts, G., C., Treasure, D., C., & Balague, G. (1998). Achievement Goals in Sport: the development and validation of the Perception of Success Questionnaire. *Journal of Sports Science*. 16(4), 337-447.
- [16] Clancy, R. B., Herring, M. P., & Campbell, M. J. (2017). *Motivation Measures in Sport: A Critical Review and Bibliometric Analysis*. *Frontiers in Psychology*, 8.
- [17] Ersöz, G., Müftüleri, M., Lapa, T. Y., & Tümer, A. (2017). Reliability and validity of goal orientation in exercise measure (GOEM) — Turkish version. *Cogent Education*, 4(1).
- [18] Cronbach, L., J. (1951). Coefficient alpha and the Internal Structure of Tests *Psychometrics*, 16, 297-334.
- [19] Claver, F., Jiménez, R., Gil-Arias, A., Moreno, A., & Moreno, M. P. (2017). The Cognitive and Motivation Intervention Program in Youth Female Volleyball Players. *Journal of Human Kinetics*, 59(1), 55–65.
- [20] Magill, R., A. (2001). *Motor Learning Concepts and Application*. (5th). Iowa: Wm. C. Brown Publishers.
- [21] Smith, R., E. (1993). A positive approach to enhancing sports performance anxiety. *Handbook of Social and Evaluation Anxiety*, 417-454. New York: Plenum Press.

- [22] Bandura, A. (1986). *Social Foundation of Thought and Action. A social cognitive theory*. Eaglewood Cliffs, NJ: Prentice Hall.
- [23] McCormick, A., Meijen, C., & Marcora, S. (2018). Effects of a Motivational Self-Talk Intervention for Endurance Athletes Completing an Ultramarathon. *The Sport Psychologist*, 32(1), 42–50.
- [24] Brown, D. J., & Fletcher, D. (2016). Effects of Psychological and Psychosocial Interventions on Sport Performance: A Meta-Analysis. *Sports Medicine*, 47(1), 77–99.