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IMPACT OF SELF-CONFIDENCE AND SPORTIVE AGGRESSION TOWARDS THE ATHLETIC PERFORMANCE OF AN ATHLETE: TIRUNESH DIBABA ATHLETICS TRAINING CENTER

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Abstract

Self-confidence one of the most robust findings to emerge from the direction literature is that facilitators of symptoms associated with competitive anxiety report greater levels of self-confidence than their debilitating counterparts (Hanton and Jones, 1997). This study demonstrates the potential benefits of and provides further justification for effects between the self-confidence, aggression and athletic performance at TDATC. A triangulation mixed method design has been used as a major method of conducting the research. The study comprises a cross sectional research design. Out of the 123 athletes available at TDATC nearly 50% of the population or 61 athletes were randomly selected and included in the study accordingly. 12 coaches and 2 Administrators were included for interview. Questionnaire and interview were identified as pertinent tools of this study.

Before the actual data gathering, to check the reliability of the instruments; data collection instruments such as questionnaire and interview guiding questions were conducted for soccer team of EYSA. The collected data were summarized and analyzed.

The results of this study showed that the average self-confidence score of the total sample 10.91 ± 2.57 ; which is in overall a low self-confidence score. Similarly female athletes score 10.96 ± 1.49 and males' group was stile indicates a low score of 10.9 ± 2.38 . Though there was no significant difference in the scores of male and female $t(52) = .149, p=.413$. This indicates that the self-confidence of the general population is low and needs improvement. In the same way the aggression of the general population is close to the average more specifically to the male athletes. However, there was no significant difference on aggression level between the female score and male score. The highest aggression score for females was found for 800m events while the lowest was for steeplechase in the same way for the self-confidence score the highest score was found for 800-meter events while the lowest was for jumping. On the other hand, the highest aggression score for males was found for 1500m events while the lowest was for 800meter in the same way for the self-confidence score the highest score was found for short distance events.

The variables self-confidence and aggression have no significant relation with Event best Performance for short distance Athletes. However, there was a higher correlation between the event performance of middle-distance athletes and self-confidence score. Further a strong correlation was evident for 800meter event best performance and Aggression score. On the other hand, no significant relationship was detected between 1500 event best performance and neither self-confidence nor aggression scores. In the same way there was no significant relation with Event best Performance for long distance Athletes and the variables self-confidence and aggression scores. In addition, no significant relationship was detected between Jumping event best performance and neither self-confidence nor aggression scores.

Keywords: Self Confidence, Aggression, Performance, Events.

1. Introduction

Excellence is not often met without adversity. For many athletes, adversity can be found in the form of pain. Not only pain resulting from injury, but also pain brought about by exertion. Most athletic events involve some form of physical exertion. For many events, pain is expected, and even encouraged, as it is associated with improvement and productivity (Guyot, 1991). Researchers often refer to this experience as "positive pain" (Guyot, 1991).

Extensive research has provided evidence reflecting the relationship between pain and anxiety in various, non-sport related domains (Bishop, Holm, Borowiak & Wilson, 2001; McCracken, Gross, Sorg, &Edmonds, 1993; McNeil, Au, Zvolensky, McKee, Klineberg, & Ho, 2001; Spinhoven & Linnsen, 1991). Accordingly, research in the sport psychology field is needed to examine the association between anxieties, self confidence in the athletic performance.

Self-confidence is one of the most robust findings to emerge from the direction literature is that facilitators of symptoms associated with competitive anxiety report greater levels of self-confidence than their debilitating counterparts (e.g., Hanton and Jones, 1997; Hanton, Jones, and Mullen, 2000; Jones et al., 1994; Jones and Swain, 1995; Perry and Williams, 1998). High correlations have also been reported between the self-confidence and the direction subscales of the CSAI-2 (Jones et al., 1993, 1996). Self-confidence has subsequently been suggested in some way to act as a resiliency factor and protect against the debilitating effects of anxiety (Hardy et al., 1996; Mellalieu, Neil, and Hanton, in press). Although Hanton, Mellalieu et al.'s (2004) findings suggest self-confidence



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influences symptom interpretation, the qualitative nature of their design prevented any inferences being made regarding specific mediating or moderating effects. It is apparent, however, that above all other individual difference variables self-confidence may be the most significant factor in discriminating how athletes manage and interpret stressful situations (Hardy et al., 1996). Thus, this study will be performed to examine the impact and mechanisms used to develop and control athlete’s self-confidence and Anxiety athletes. The review of the literature will also deal about the specific physiological and psychological changes in trained athletes. Most commonly used treatments and their effects on the athletes felling and exercise performance will be described. Generally, this study demonstrates the potential benefits of, and provides further justification for effects between the self-confidence, anxiety and athletic performance Tirunesh Dibaba Athletics Training Center.

2. Objectives of the Study

• General Objective

“To examine the impact of self-confidence and sportive aggression towards the athletic performance of an athlete at Tirunesh Dibaba Sport Training Center (TDSTC).”

• Specific Objectives

- To evaluate the status of self-confidence, sport aggression and athletic performance of an athlete at Tirunesh Dibaba Athletics Training Center.
- To illustrate the significant difference in terms of self-confidence and sport aggression across groups and Gender.
- To measure the relationship between athletic Performance, self-confidence and sport aggression.
- To analyze the mechanisms used to develop and control athlete’s self-confidence and aggression.

3. Research Design

The purpose of this study was to examine the athlete’s self-confidence, sport aggression and athletic performance at Tirunesh Dibaba Athletics Training Center. To achieve this, both quantitative and qualitative research approaches were used. This method was selected with the hope that it would help answer the basic question of the study as desired by the researchers via producing a pertinent data. Creswell and Clark (2007) asserted that mixed method research helps answer questions that cannot be answered by qualitative or quantitative approaches alone.

A triangulation mixed method design has been used as a major way of conducting the research. In this type of design qualitative and quantitative data are used for supporting and validating each other. Responses from the questionnaire and interview were analyzed and interpreted in a complementary manner with relation to empirical evidences of training. Generally, the study comprises a cross sectional research design.

4. Study Area

The research was conducted at Tirunesh Dibaba Athletics Training Center found in Asela, Oromiya region.

5. Population of the Study and Sampling Procedure

Target populations of the study were 3 Managers, 12 coaches and 120 athletics trainees of Tirunesh Dibaba Sports Training Center. Out of the 123 athletes available at Tirunesh Dibaba Athletics Training Center nearly 50% of the population or 61 athletes were randomly selected and included in the study accordingly.

6. Data Collection Instruments

To get reliable information from the research participants, types of instruments used have paramount importance. Thus, questionnaire and interview were identified as pertinent tools of the study. In order to elicit the necessary data, a questionnaire was adopted for athletes from (Standard Hardy and Nelson, 1992). However, some items related to mechanisms used to improve athletes’ self-confidence and Anxiety were included. This questionnaire was adopted intentionally since the validity and reliability of the questionnaire was excellent or good.

For Coaches the interview included semi structured open-ended questions. This instrument was more in a sense of oral questionnaire. The instruments were piloted at Football Athletes of Ethiopia Youth Sport Academy (EYSA) for its reliability and content validity of the scores. Test-retest method was used to check the reliability of the instruments and a very good result was found .89. Then, the instruments were given to the expertise to check validity and reliability. Finally, the instruments were improved based on suggestions and recommendations gathered.

7. Methods of Data Analysis

Different methods of data analysis pertinent to the variables were employed. Data were analyzed both quantitatively and qualitatively. The quantitative data was done by IBM SPSS software version 20 software; whereas Data of the interview was analyzed in qualitatively approach. Descriptive statistics like mean, grand mean and percentage were used to analyze basic information and distribution of scores. Mean score was used to compare the calculated mean with the nearest given rating values. This helps to determine the level of agreement of the respondents on the item. The frequency and percentage values were also used to discuss the proportion for respondents along the scales of agreement and disagreement. The t-test was employed to check whether there is significant difference or not between different athletics sports and gender. Pearson Correlation was made to check if there is a relationship between psychological variables and athletes' performance. The non-structured questions were analysed descriptively.

8. Results and Discussion

The questionnaires were distributed for 68 respondents which include process owner, experts and supportive staffs, while 60 respondents 54 (93.11%) filled properly and returned the questionnaire. Interview was conducted with 8 coaches. Thus, the analysis and interpretation were carried out based on the collected data.

A. General Characteristics of the Respondents and Status of the Psychological Variables

There were 54 athletes (28 males and 26 females) recruited for this study. All participants randomly selected. For female athletes' short distance n=5(20.7%), 800m n=2(10.3%), 1500m n=2(6.2%), steeplechase n=3(10.3%), long distance n=9(31.8%), jumping n=3(10.3%). and throwing n=2(10.3%), were female participants distribution for the study. Similarly male participants distribution for short distance n=4(19.4 %), 800m n=4(12.9%), 1500m n=8(25.8%), long distance n=8(29%), and jumping n=4(12.9%).

Accordingly representative participants' distribution was uneven due to the fact that there is a difference in total population across the events as well however the gender distribution for the representative sample is more or less similar. The majority of the respondents were grade 9-10, n=35(64.8%), while 5-8 grade were n=15(27.8%) and very few n= 4(7.4%) were at grade 11-12. Hopefully it is believed that the athletes are capable to understand and fill the questionnaire properly.

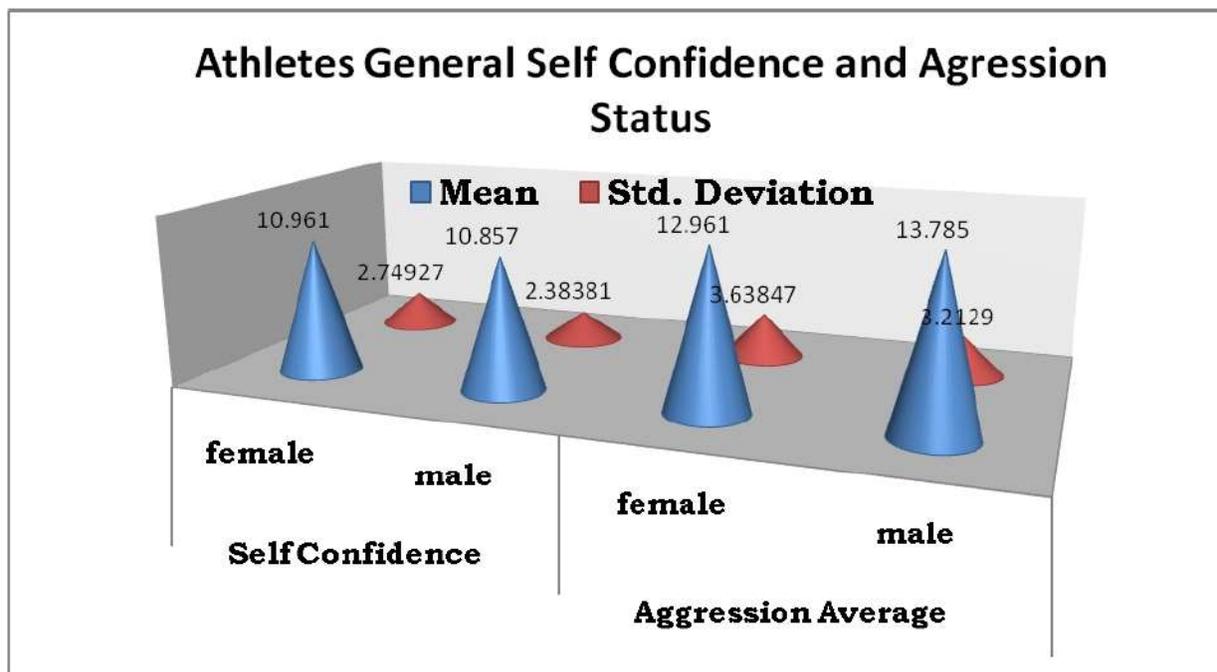


Fig. 1 Athletes' Self-confidence and Aggression Status

The self-confidence questionnaire was with 5 scales from very low to very good scale. Accordingly, the score average is out of 20 with score close to 5 means very low, 10= low, 15 = normal score, 20 = good and 25 is very good. The results of this study were showed that the average self-confidence score of the total sample 10.91 ± 2.57 ; which is in overall a low self-confidence score. Similarly female athletes score 10.96 ± 1.49 and males' group was stile indicates a low score of 10.9 ± 2.38 . An independent t-test was done to check if there was any difference on self-confidence status between male and female athletes. Though there was no significant

difference in the scores of male and female $t(52) = .149, p=.413$. The mean decrease in performance was .104 with a 95% confidence interval ranging from 1.5 to -1.298.

This indicates that the self-confidence of the general population is low and needs improvement. In the same way the aggression scale was with five scales from very low to very good scale. Accordingly, the score average here is interpreted out of 25 with score close to 5 means very low, 10= low, 15 = Average/normal score, 20 = good and 25 is very good. The results of this study showed that the average aggression score of the total sample 13.37 ± 3.43 ; which is in overall close to the average aggression score with a more deviation score. Likewise female athletes score 12.96 ± 3.63 and males' group was stile indicates a low score of 13.79 ± 3.21 .

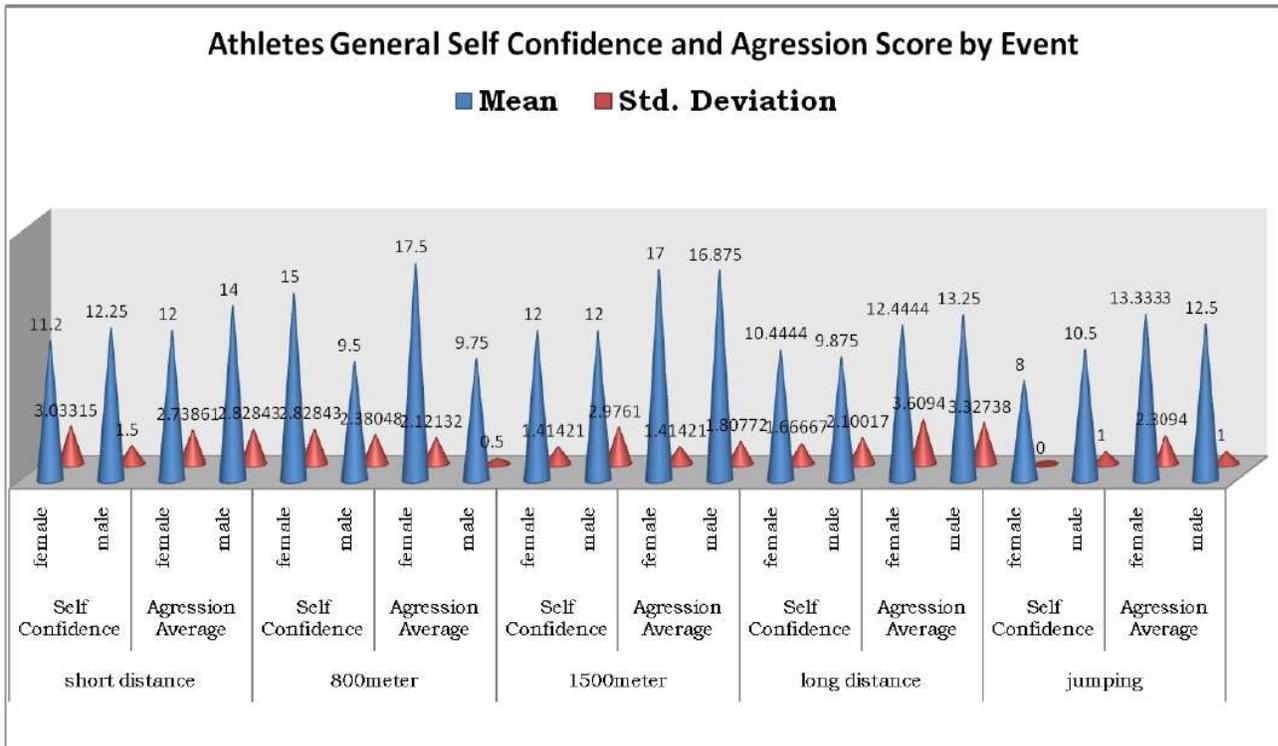


Fig. 2 Athletes Self-confidence and Agression Score by Events

This indicates that the aggression of the general population is close to the average, more specifically to the male athletes. However; there was no significant difference on aggression level between the female score and male score $t(52) = -.884, p=.417$. The mean decrease in performance was .824 with a 95% confidence interval ranging from -2.7 to 1.05.

- The highest aggression score for females was found for 800m trainees while the lowest was for steeplechase.
- In the same way for the self-confidence score the highest score was found for 800-meter events while the lowest was for jumping.
- On the other hand, the highest aggression score for males was found for 1500m events while the lowest was for 800meter.

In the same way for the self-confidence score the highest score was found for short distance events.



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B. Differences of the psychological variables and performance across gender and Events

Table 1. Differences of the psychological variables and performance across gender and Events

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
Aggression Average	Between Groups	16.304	3	5.435	.451	.718
	Within Groups	602.529	50	12.051		
	Total	618.833	53			
Self Confidence	Between Groups	38.827	3	12.942	2.131	.108
	Within Groups	303.710	50	6.074		
	Total	342.537	53			

The highest aggression score for females was found for 800m events while the lowest was for steeplechase; in the same way for the self-confidence score the highest score was found for 800-meter events while the lowest was for jumping.

Table 2. Difference in Self-confidence and Aggression

		Descriptive							
		N	Mean	Std. Dev.	Std. Error	95% Confidence Interval for Mean	Min.	Max.	
						Lower Bound	Upper Bound		
Aggression Average	short	9	12.8889	2.80377	.93459	10.7337	15.0441	10.00	16.00
	middle	19	14.0526	4.24884	.97475	12.0048	16.1005	7.00	19.00
	long	17	12.8235	3.39550	.82353	11.0777	14.5693	7.00	18.00
	Field Events	9	13.5556	1.94365	.64788	12.0615	15.0496	12.00	16.00
	Total	54	13.3889	3.41703	.46500	12.4562	14.3216	7.00	19.00
Self Confidence	short	9	11.6667	2.39792	.79931	9.8235	13.5099	8.00	14.00
	middle	19	11.7368	3.19448	.73286	10.1972	13.2765	6.00	17.00
	long	17	10.1765	1.84510	.44750	9.2278	11.1251	8.00	13.00
	Field Events	9	9.7778	1.56347	.52116	8.5760	10.9796	8.00	12.00
	Total	54	10.9074	2.54224	.34595	10.2135	11.6013	6.00	17.00

On the other hand, the highest aggression score for males was found for 1500m events while the lowest was for 800meter; in the same way for the self-confidence score the highest score was found for short distance events.



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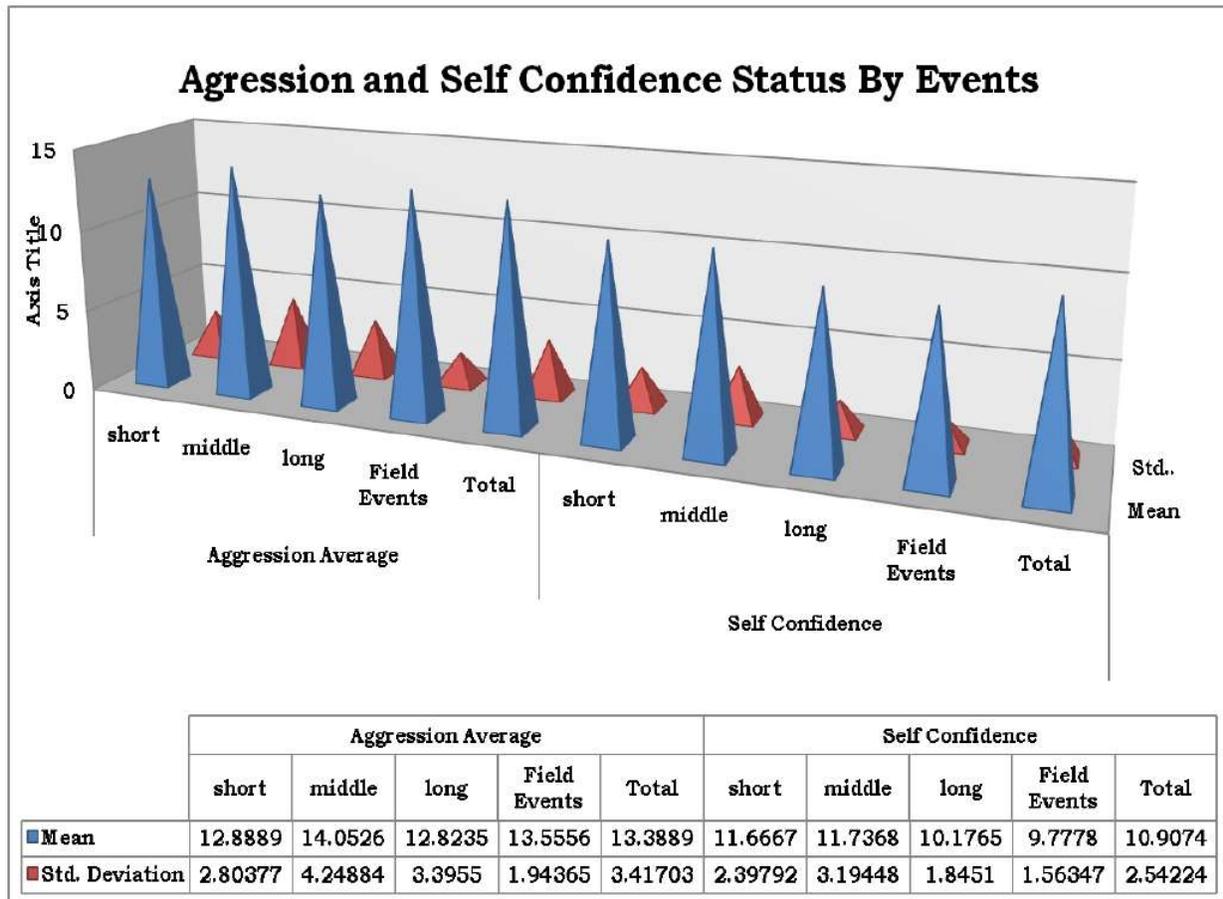


Fig. 3 Aggression and Self-confidence status by Events

Independent Samples Test

Levene's Test for Equality of Variances
t-test for Equality of Means

		F	Sig.	t	df	Sig. tailed)	(2-Mean Difference	Std. Difference	Error95% Confidence Interval of the Difference	
									Lower	Upper
Self Confidence	Equal variances assumed	.682	.413	.149	52	.882	.10440	.69886	-1.29797	1.50676
	Equal variances not assumed			.149	49.67	.882	.10440	.70261	-1.30706	1.51585
Aggression Average	Equal variances assumed	.669	.417	-.884	52	.381	-.82418	.93256	-2.69550	1.04715
	Equal variances not assumed			-.880	50.03	.383	-.82418	.93693	-2.70603	1.05768

Table. 3 Self-confidence and Aggression average score



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C. The Relationship between Event Related Performance, Aggression and Self Confidence

The relationship between Event performance, self-confidence and aggression variables was investigated using Pearson product-moment correlation coefficient. Split event analysis for relationship was done. Preliminary analyses were also performed to ensure no violation of the assumptions of normality, linearity and homoscedasticity. The variables self-confidence and aggression have no significant relation with Event best Performance for short distance athletes with $r=.078$, $n=9$, $P= .87$ and $r=.04$, $n=9$, $P= .9$ respectively.

However, there was a higher correlation between the event performance of middle-distance athletes and self-confidence score, $r=.87$, $n=17$, $P< .05$, Further a strong correlation was evident for 800meter distance athletes' event best performance and Aggression score., $r=-.98$, $n=7$, $P< .01$.

On the other hand, no significant relationship was detected between 1500m running event best performance and neither self-confidence nor aggression scores, $r=-.018$, $n=9$, $P= .96$ and. $r=.027$, $n=9$, $P= .94$ respectively. In the same way there was no significant relation with Event best Performance for long distance athletes and the variables self-confidence and aggression scores with $r=.17$, $n=17$, $P= .51$ and. $r=-.066$, $n=17$, $P= .803$ respectively. Further no significant relationship was detected between Jumping event best performance and neither self-confidence nor aggression scores, $r=-.17$, $n=9$, $P= .708$ and. $r=-.59$, $n=9$, $P= .163$ respectively. The variables self-confidence and aggression have no significant relation with Event best Performance for short distance Athletes with $r=.078$, $n=9$, $P= .87$ and. $r=.04$, $n=9$, $P= .9$ respectively.

However; there was a higher correlation between the event performance of middle-distance athletes and self-confidence score, $r=.87$, $n=17$, $P< .05$.

Further a strong correlation was evident for 800meter distance athletes' event best performance and Aggression score, $r=-.98$, $n=7$, $P< .01$.

On the other hand, no significant relationship was detected between 1500meter event best performance and neither self-confidence nor aggression scores, $r=-.018$, $n=9$, $P= .96$ and. $r=.027$, $n=9$, $P= .94$ respectively. In the same way there was no significant relationship with event best Performance for long distance athletes and the variables self-confidence and aggression scores with $r=.17$, $n=17$, $P= .51$ and. $r=-.066$, $n=17$, $P= .803$ respectively.

9. Conclusions and Recommendations

Conclusions

Based on the findings obtained, the researchers conclude that:

1. The variables self-confidence and aggression have no significant relation with Event best Performance for short distance Athletes.
2. There was a higher correlation between the event performance of middle-distance athletes and self-confidence score.
3. Further a strong correlation was evident for 800meter distance athletes' event best performance and Aggression score.
4. There was no significant relation with Event best Performance for long distance, Jumping event, and 1500m trainees and the variables self-confidence and aggression scores.
5. Generally, the result indicates that the self-confidence of the general population was low and needs an intervention for improvement.

Recommendations

The study came up with the following recommendations:

The coach occupies a critical position in the development of athlete's psychological makeup as a social worker (like counselling and advising). Coaches should be careful when they are communicating with the athletes (Sari, 2010), and when they are giving feedbacks to their athletes. Feedbacks; if not appropriate and systematic, that could diminish athletes' self-confidence might result in lower motivation of them.

Coaches should provide mental training, beside with that of physical training, aimed at improving and developing psychological skills of trainees. The training center should employ sport psychologist to help athletes on psychological and sociological parts. The training center should include psychological tests when recruiting trainees for training.



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Further study regarding sport psychology and the implementation in training centre, clubs and in national level should be incorporated.

Reference

1. Clark, N. Fluids, Dehydration, and Thirst Quenchers (2002). Sports Nutrition Sports Medicine Systems, Inc
2. Irrgang, J., S.Whitney, &E.Cox.(1994) Balance and proprioceptive training for rehabilitation of the lower extremity J.of Sport Rehab.3:68-93,
3. Lamb, D. R. (1978) Physiology of Exercise, Responses and Adaptations (2nd edition), p. 322. New York: Macmillan,
4. Nideffer, R. M. (1983.) The injured athlete: psychological factors in treatment. Orthop.Clin. North Am. 14:373-385,
5. Pease, D. G. (1996.) Psychologic factors of rehabilitation. In Physical Rehabilitation of the Injured Athlete (2nd edition), Andrews, J. R., and G. L. Harrelson (eds.), pp.1-12. Philadelphia: W. B. Saunders Co.,
6. Prentice, W. Arnheim's, (2005.) Principles of Athletic Training (12th edition). Boston: McGraw H
7. Baćanac, Lj., Nikolić, M., & Ilić, J. (2010). Self-confidence Relationship with Demographic Situation and Psychological Characteristics of Athletes. In R. Stankovic (Ed), 14th International Science Conference „Fis Communication 2010“(pp. 359-378). Niš: University in Niš, Faculty of Sport and Physical Education.
8. Baćanac, Lj., & Juhas, I. (2004). Level of Sport Competitive Anxiety Trait as a Function of Sex, Age and Sport Experience. In Third International Scientific Congress „Sport, Stress, Adaptation “. (pp. 85-94), Sofia: National Sport Academy.
9. Baćanac, Lj., Petrović, N., & Manojlović, N. (2009). Degree and types of sport related violence in Serbia. Belgrade: The Republic institute for sport; Ministry of Youth and Sport.
10. Baćanac, Lj., Kitanović, V., Nikolić, M., Ćirković, T., & Ilić, J. (2011). Psychometric properties and norms for the tests: SCATr, SCI, ACSI-28 and GSE. Document for internal use. Belgrade: Serbian Institute of Sport and Sports Medicine. Cox,
11. R., Shannon, J., McGuire, R., & McBride, A. (2010). Predicting subjective athletic performance from psychological skills after controlling for sex and sport. Journal of sport Behavior, 33 (2), 269-286.
12. Ferreira, J. P., & Fox, K. R. (2008). Physical self-perceptions and self-esteem in male basketball players with and without disability: a preliminary analysis using the physical self-perception profile. European Journal of Adapted Physical Activity, 1 (1), 35–49.
13. Ferreira, J. P., Chatzisarantis, N., Caspar, P.M., & Campos, M. J. (2007). Precompetitive anxiety and self-confidence in athletes with disability. Perceptual and Motor Skills, 105 (1), 339-334.
14. Geczi, G. (2009). Success and talent development as indicated by motor tests and psychometric variables of U18 ice hockey players. Unpublished doctoral dissertation, Budapest: Semmelweis University - Sport Sciences Doctoral School.
15. Kasum, G., Lazarević, Lj., Jakovljević, S., & Baćanac, Lj. (2011). Personality of Male Wheelchair Basketball Players and Non-athletes Persons with Disability. Facta Universitatis, series Physical education and Sport, 9 (4), 407-415.
16. Kasum, G., Lazarević, Lj., Jakovljević, S., Baćanac, Lj., & Eminović, F. (2012). Personality characteristics of Serbian male wheelchair and professional basketball players. Acta Universitatis Palackianae Olomucensis Gymnica, 42 (2), 41-47.
17. Kirkby, R. J. (1995). Wheelchair Netball: Motives and Attitudes of Competitors with and Without Disabilities. Australian Psychologist, 30 (2), 109–112.
18. Kitanović, V. (2011). Metrijske karakteristike testa Inventar psiholoških veština prevladavanja stresa u sportu, ACSI-28 [Metric characteristics of Athletic Coping Skills Inventory ACSI-28]. Unpublished master thesis, University in Belgrade, Philosophy Faculty.
19. Kolayis, H. (2012). Examining how wheelchair basketball players' self-esteem and motivation levels impact on their state and trait anxiety levels. Biology of Sport, 29 (4), 285-90.
20. Machida, M. (2008). An examination of sources and multidimensionality of self-confidence in collegiate athletes. Unpublished doctoral dissertation, Miami University. Retrieved July 2013, from www.ohiolink.edu/etd/
21. Martin, J. J., & Wheeler, G. (2011). Psychology. In: Y. C. Vanlandewijck, & W. R. Thompson, (Eds), Handbook of Sports Medicine and Science: The Paralympics Athlete (pp.116-134).
22. Oxford: IOC Medical Commission, Wiley-Blackwell. Nikolić, M., Baćanac, Lj., Kitanović, V., Ćirković, T. (2011). Psychological coping skills of elite and non-elite level athletes. In S. Stojiljković (Ed), International Scientific Conference: Physical Activity for Everyone, Book of abstracts (pp. 24-25). Belgrade: Faculty of Sport and Physical Education.
23. Omar-Fauzee, M. S., Mohd-Ali, M., Geok, S, K, & Ibrahim, N. (2010). The Participation Motive in the Paralympics. J. of Alternative Perspectives in the Social Sciences, 2 (1), 250-272.
24. Smith, R., Schutz, R., Smoll, F. & Ptacek, J. T. (1995). Development and Validation of a Multidimensional Measure of Sport-Specific Psychological Skills: The Athletic Coping Skills Inventory-28. Journal of Sport and Exercise Psychology, 17 (4), 379-398.
25. Smith, R. E., & Christensen, D. S. (1995). Psychological Skills as Predictors of Performance and Survival in Professional Baseball. Journal of Sport and Exercise Psychology, 17 (4), 399-415.
26. Vealey, R. S. (1986). Conceptualization of sport-confidence and competitive orientation: Preliminary investigation and instrument development. J. of Sport Psychology, 8 (3), 221-246.
27. Vealey, R.S., & Chase, M.A. (2008). Self-confidence in sport: Conceptual and research advances. In T. Horn (Ed.), Advances in Sport Psychology (pp.65-97).