International Journal of Physical Education, Exercise and Sports
www.physicaleducationjournal.com
Online ISSN: 2664-9896, Print ISSN: 2664-9888
Received: 01-04-2022, Accepted: 02-05-2022, Published: 17-05-2022
Volume 4, Issue 1, 2022, Page No. 55-57

Analysis of aggression differentials among pugilists

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Abstract
Sports scientists increasingly recognize that performance outcomes are influenced not only by physical fitness but also by an individual's psychological makeup and sociological profile. This highlights the importance of socio-psychological dimensions in athletic performance. Aronson (1977) [1] defined aggression as behavior intended to cause harm or pain, emphasizing the element of intent. This study aimed to analyze aggression differentials among champion and non-champion boxers and male and female boxers. A total of 280 boxers participating in inter-college competitions in northern India were selected through random sampling. Aggression levels were measured using the Aggression Scale developed by Roma Pal and Tasneem Naquavi (1980) [4], with a reliability and validity coefficient of 0.78 each.
Results revealed no significant differences in aggression levels between champion and non-champion boxers, though champions exhibited slightly higher aggression. Gender-based comparisons also indicated no significant differences. However, the interaction effect of performance (champion and non-champion) and gender (male and female) was significant. These findings suggest that while controlled aggression is crucial for success, excessive aggression may impede performance. It is well known fact that aggression is just like a double-edged weapon and excessive or much higher level of aggression may cause undue hindrance in successful performance.

Keywords: Pugilists, psychological makeup, physical fitness, sports scientists, aggression differentials

Introduction
Sports scientists emphasize the combined role of physical, psychological, and sociological factors in athletic performance. Modern competitive sports, especially boxing, often involve controlled aggression. While some sports demand physical force against opponents, others involve aggression directed towards the environment within structured rules. Encouraging optimal aggression is crucial for competitive success, especially in boxing, where psychological attributes significantly influence performance (LeUnes & Nation, 1989) [3]. Some sports require that a great deal of physical force to be directed against one's opponent whereas others require forceful actions against the environment instead of direct aggression. However, many sports require that individual aggression with in structured rules and specified conditions. Thus, in sports, as in life, one problem is to encourage an optimum amount of aggression when called for. Thus, aggression is such a psychological attribute which do affect an athlete's performance in competition, more so in case of boxers.
Aggression is defined as the friction of an aversive stimulus, either physical, verbal gestural, upon one person by another. Aggression is not an attitude but behavior and most critically it is reflected in acts committed with the intent to injure (Le Unes and Nation 1989) [3]. Bhushan (2002) [2] investigated 240 subjects of various sports groups in order to study the effect of psychological variables in relation to performance and gender. The subjects ranged from 18 to 25 years in the age. To measure aggression, scale constructed by Roma Pal and Tasneem Naquavi (1980) [4] was administered. He observed significant differences on the level of aggression among college and university basketball and handball players. He concluded that the college basketball players and handball players possessed high level of aggression than university athletes.

Objectives
This study aimed to:
1. Investigate differences in aggression levels between champion and non-champion boxers.
2. Compare aggression levels between male and female boxers.
3. Examine the interaction between performance (champion and non-champion) and gender (male and female) concerning aggression.
4. Provide recommendations for boxer selection and psychological stimulation in training.

Hypotheses
1. Champion and non-champion boxers significantly differ in aggression levels.
2. Male and female boxers show significant differences in aggression levels.
3. A significant interaction effect exists between performance and gender regarding aggression.

Methodology

To serve the purpose of the study, 280 boxers were selected using random sampling technique. The subjects belonged to the champion and non-champion categories, who had participated at inter college level. An equal number of subjects were taken from both the gender, in each category. To measure the aggression for the present study, Aggression scale developed by Roma Pal and Tasneem Naquavi (1980) [4] was administered. The reliability of the scale was found to be .78. The validity coefficient was also found to be .78.

Statistical design

The data collected through the administration of the test was subjected to the statistical treatment. Analysis of variance (2x2 factorial design) was employed to find out the interaction of the results of performance (i.e. champion and non- champions) and the gender groups. Mean and SD values were also calculated to find out the direction of differences. For the purpose of this study the level of significance was set at 0.05.

Results and discussion

ANOVA (2x2) Results with regard to Champion and Non-Champions, Male and Female boxers on the variable of Aggression Table-1

Table 1

Sources of variance	SS	Df	Ms	F-Value
Champion x Non-Champion	421.08	1	421.08	0.73
Male x Female	1567.84	1	1567.84	4.25*
Performance x Gender	1639.47	1	1639.47	4.05*
Within/Residual	104456.80	276	318.60	-

*($p<0.05$)

The results regarding 2X2 (ANOVA) factorial design on the variable aggression presented in table -1 indicates that the champion and non-champion category of boxers had SS= 421.08, df =1, Ms=421.08 and F-value was .73 the same was not found to be significant.

The ANOVA regarding the two gender groups on the variable aggression reveal that these subjects had obtained SS=1567.84, df=1, Ms=1567.84. The calculated F value 4.25 was found to be significant.

With regard to the interaction effect of performance (Champion and Non –champion) X gender (Male and Female) the result show that SS was 1639.47, df=1, and Ms was 1639.47. The F value was 4.05 was also found to be significant. Hence, these results relating to the main effect of interaction were also found to be significant.

To find out the direction of differences the mean and SD values were calculated within the two groups i.e. performance and gender groups. These values have been presented in Table – 2.

Table 2: The Mean and SD values with regard to the performance (champion and non – champion) and gender (male and female)

Values	Champion	Non-champion	Male	Female
Mean	82.48	72.55	86.35	73.40
SD	22.12	16.20	24.15	17.55

The result presented in Table -2 show that the champion boxers had the mean value of 82.48 and SD =22.12 whereas the non –champions obtained the Mean value of 72.55 and SD =16.20.These differences were not found to be significant, the male boxers had the mean value 86.35 and SD 24.15 whereas the female boxers obtained the mean value of 73.40 and SD =17.55.These differences were also not found to be significant on the Variable Aggression.

A perusal of results regarding the variable Aggression show that the two performance groups i.e. the champion and non-champion did not differ from each other significantly. The champion were found to have a little higher level of aggression as compared to the non-champion as the former group had the mean score of 82.48 whereas the later group had the mean score of 72.55 (low scores indicated lower aggression level). However, as per the classification in the test manual both the groups fell in the "Average" level of classification. Bhushan (2002) [2] also support the findings who found no significant differences between college and university level hockey players on aggression. On the other hand significant differences ($p<0.05$) were observed between male and female boxers. Male players having higher mean scores (86.35) were found to be significantly more aggressive than female boxers (73.40). These findings do not support to the findings of Bhushan (2002) [2] who reported no significant differences among players of handball and basketball. The main interaction effect between the performance and the gender was also found to be significant ($p<0.05$) which indicated that it influenced the dependent variable.

Conclusion and implication

Controlled aggression is essential for competitive success, as demonstrated by higher aggression levels among champion boxers. Male boxers displayed significantly higher aggression than female boxers, highlighting the

need for gender-sensitive coaching strategies. It is well known fact that aggression is just like a double edged weapon and excessive or much higher level of aggression may cause undue hindrance in successful performance. Among the two gender groups, females have exhibited quiet lower level of aggression as compared to men. Coaches should monitor aggression levels to ensure they remain within optimal ranges, as excessive aggression can hinder performance.

References

1. Aronson E. The Social Animal. San Francisco: W.H. Freeman, 1977.
2. Bhushan B. Anxiety, aggression, and team cohesion in selected team sports (Unpublished doctoral dissertation). Panjab University, Chandigarh, 2002.
3. LeUnes ID, Nation JR. Sports Psychology: An Introduction. Illinois: Nelson-Hall, 1989.
4. Pal R, Naquavi T. Aggression Scale. Psychological Research Cell, Agra, 1980.