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COMPARATIVE ANALYSIS OF PSYCHOLOGICAL ADAPTATIONS AMONG WEIGHTLIFTERS, POWER LIFTERS AND BODYBUILDERS

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ABSTRACT

Performance in sports and games depends on both physical and mental abilities. Body and mind have an equal contribution in human success. Psychologists are intrigued to find out about the brain's emergent features, which connect psychology to neuroscience. They do studies on personality, motivation, brain function, intelligence, emotion, perception, cognition, attention, and emotion. Interpersonal interactions, psychological resilience, family resilience, and other social psychology-related topics are all of interest to psychologists. The Greek word psyche, which means spirit or soul, is where the word psychology comes from. The Renaissance marked the time the word psychology was first used.

Methods

To achieve the determination of the study 60 college men were selected Chennai District, Tamil Nadu. Their aged of the subject ranged from 18 to 16 years. Selected subjects was randomly allotted to three equal groups (n=20), group I underwent weight lifters, group II (n=20) acted as power lifters and group III (n=20) underwent body physique. The following variables were measured with standard test items: Self- confidence (Confidence level inventory developed by Philippa Davies (2003) and Stress (Giordano and Everly (1979) Stress inventory).

Result

The data was analyzed by smearing paired sample 't test. The level of significance was set at 0.05. The weight lifting power lifting and body physique had positive impact on self- confidence and stress.

Conclusion

The results of the present study are in confirmatory with the findings of (Review). Thus it is concluded that weight lifters pointedly improves self- confidence and stress better then power lifters and body physique.

KEY WORDS: *Self- Confidence, Stress, Weight Lifters, Power Lifting and Body Physique.*

INTRODUCTION

The scientific study of the human mind and its processes, particularly those which influence behavior in a particular situation, is referred to as psychology in broad terms. It is an academic and applied discipline involving the scientific study of mental processes and behavior. Psychological preparation of the sportsmen is defined as the set of training and education strategies and techniques used in order to increase the mental capacity and to develop sportsmen's personality, according to the requirements of the sports events or of the specific sport, so as to obtain high effects and results in training and competition Football requires the psychological skills of mental toughness, motivation to compete, self- confidence, imagery, energy management, performance routines, team cohesion and goal setting (Once players have mastered football's mental game, they can focus on the physical dimensions of the sport and thereby fulfill their potential. **Octavian (2013)**

Sports psychology is a branch of psychology that applies psychological methods and ideas to situations involving physical activity. To support coaches and athletes in understanding the aspects of themselves and those around them related to sport, performance, and exercise, the field of sport psychology which is still in its formative stages draws on the research and knowledge of several other areas of psychology, including social psychology and psychophysiology.

Stress activates the body's fight-or-flight response, releasing hormones like cortisol and adrenaline, which increase heart rate, blood pressure, and alertness. Short-term stress can be beneficial, improving focus and motivation. However, chronic stress can lead to health issues such as anxiety, depression, high blood pressure, heart disease, and weakened immunity. It can also affect sleep,

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digestion, and overall well-being. Managing stress involves relaxation techniques, regular exercise, healthy eating, time management, and social support. Practices like deep breathing, meditation, and hobbies help reduce stress levels. Seeking professional help may be necessary if stress becomes overwhelming. Maintaining a balanced lifestyle and developing coping strategies can help individuals handle stress effectively and improve overall mental and physical health.. **Latham** *et al.,* **(2015).**

Self-confidence trait refers to the beliefs or degree of certainty, that the individual athletes possess their ability to succeed (**Arnold** *et al.,* **2002**). Instructional behaviors can also directly target the area on the skills development model while depicts self-confidence, characteristics such as perceived competence, perceived control, and attributions for performance (Shane M. Murphy, 1995). Confidence can be improved in a variety of ways: accomplishing through performance, acting, thinking confidently, using imagery, goal mapping, physical and mental conditining. Self-confidence is an essential quality of sports person. An athlete should have the self-confidence to achieve his goal. If he doubts about his success then he will not perform well in his event. Self-confidence is a boosting variable, which helps a person to do his work in a good manner. Many psychologists have found out that if one has self-confidence he/she wins the competition usually. So self-confidence is a positive attitude of self towards one's self-concept and it helps more in the field of sports.

METHODOLOGY

A total of 60 college men were selected Chennai District, Tamil Nadu. Their aged of the subject ranged from 18 to 16 years. From these, 60 college men sample due to taking valid data on weight lifters, power lifters and body physique. Participants were recruited institution in the provinces of Chennai district, to participate in an intervention to power lifters and body physique. The subjects were randomly assigned in to three equal groups (n=20), group I underwent weight lifters, group II (n=20) acted as power lifters and group III (n=20) underwent body physique. The following variables were measured with standard test items: Self- confidence (Confidence level inventory developed by Philippa Davies (2003) and Stress (Giordano and Everly (1979) Stress inventory).

STATISTICAL ANALYSIS

The data was collected & statically examined to compare the psychological variables of weight lifting power lifting and body physique. The "t" ratio was calculated to find out the significance difference if any in all the cases to test significance of 0.05 level of confidence was used.

TABLE - I
COMPUTATION OF 'T' RATIO ON SELF- CONFIDENCE OF WEIGHT LIFTERS POWER LIFTERS AND BODY PHYSIQUE
(Scores in points)

Variable	Groups	Mean	Std. Deviation	T ratio
Self- Confidence	Weight Lifters	105.50	1.45	7.66*
	Power Lifters	99.50	1.20	
	Body Physique	90.60	0.90	

*Significant level 0.05 level (degree of freedom 2.09, 1 and 19)

Table I reveals the computation of mean, standard deviation and 't' ratio on self-confidence of experimental group. The obtained 't' ratio on self-confidence were 7.66 respectively. The required table value was 2.09 for the degrees of freedom 1and 19 at the 0.05 level of significance.

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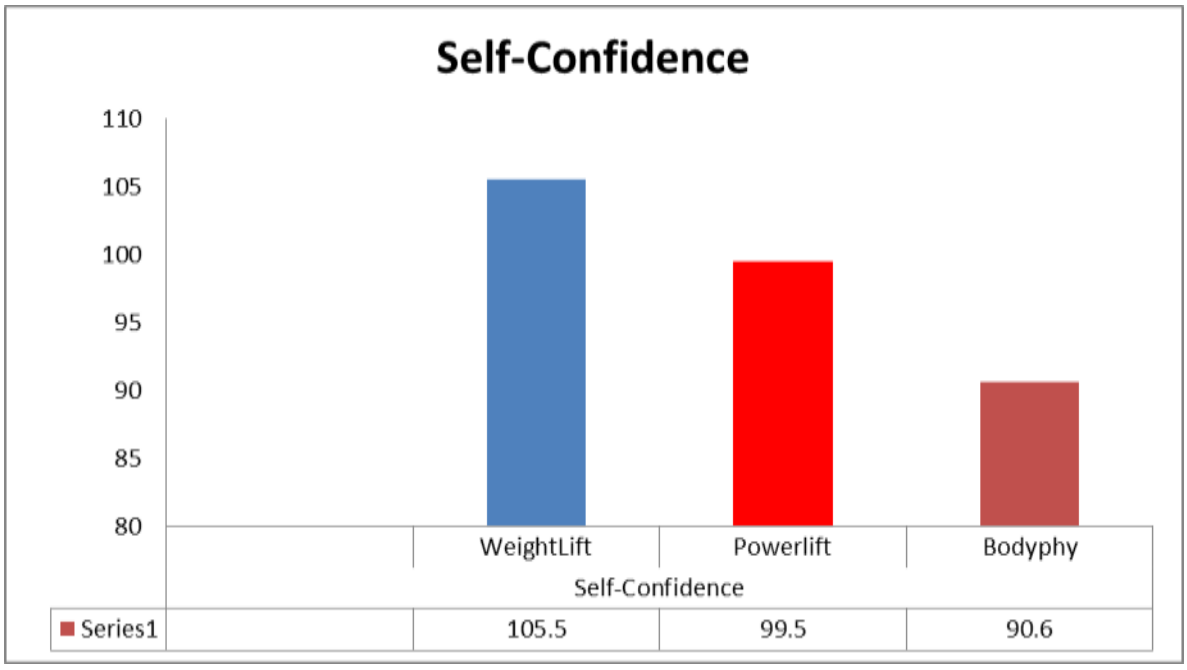


FIGURE- I
BAR DIAGRAM SHOWING THE MEAN VALUE SELF-CONFIDENCE OF WEIGHT LIFTERS POWER LIFTERS AND BODY PHYSIQUE

TABLE - II
COMPUTATION OF 'T' RATIO ON STRESS OF WEIGHT LIFTERS POWER LIFTERS AND BODY PHYSIQUE
(Scores in points)

Variable	Groups	Mean	Std. Deviation	T ratio
Stress	Weight Lifters	80.60	1.60	5.45*
	Power Lifters	85.90	1.15	
	Body Physique	82.80	0.80	

*Significant level 0.05 level (degree of freedom 2.09, 1 and 19)

Table I reveals the computation of mean, standard deviation and 't' ratio on stress of experimental group. The obtained 't' ratio on stress were 5.45 respectively. The required table value was 2.09 for the degrees of freedom 1and 19 at the 0.05 level of significance.

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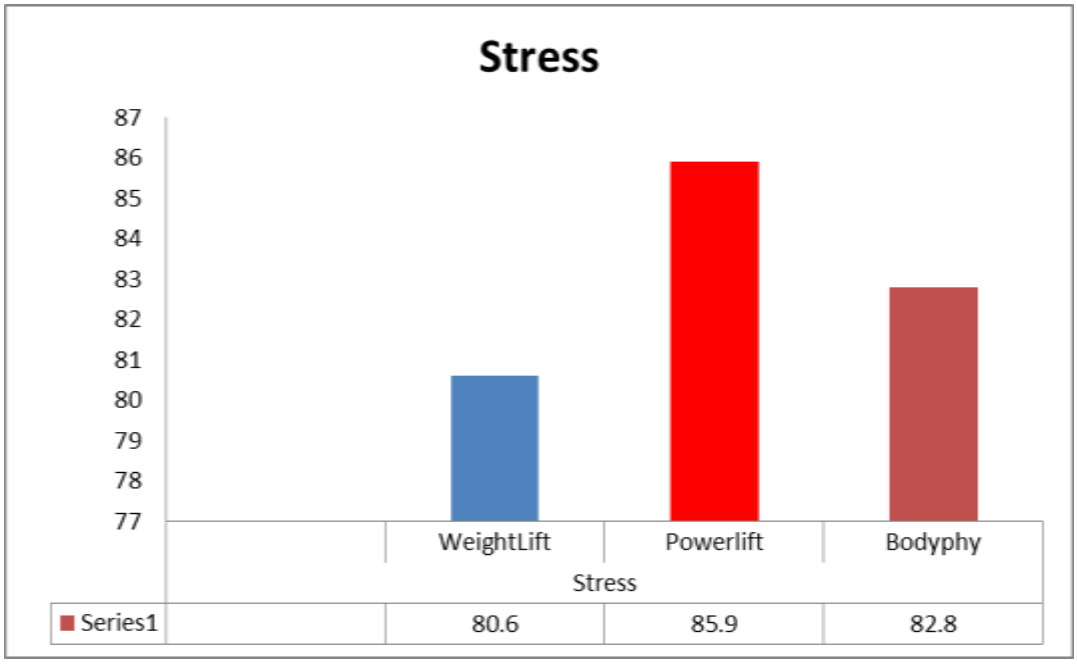


FIGURE- I
BAR DIAGRAM SHOWING THE MEAN VALUE STRESS OF WEIGHT LIFTERS POWER LIFTERS AND BODY PHYSIQUE

DISCUSSION AND FINDINGS

The present comparative analysis of psychological adaptations among weightlifters, power lifters, and bodybuilders revealed distinct variations in mental attributes such as confidence, motivation, stress tolerance, and focus. Weightlifters, who perform highly technical and explosive lifts, displayed greater concentration and mental alertness, as their discipline demands precision, timing, and control under competitive pressure. Power lifters, on the other hand, showed higher levels of mental toughness, resilience, and stress management, since their training and competition involve maximal strength exertion with limited attempts, where mental stability plays a decisive role in performance. Bodybuilders demonstrated superior self-discipline, patience, and self-motivation, as their training and lifestyle emphasize long-term consistency in exercise, nutrition, and body maintenance. The findings suggest that while all three groups develop psychological strength, the nature of their training results in different mental adaptations: weightlifters sharpen focus and concentration, power lifters enhance mental toughness and determination, and bodybuilders cultivate self-control and intrinsic motivation. These results highlight that the type of strength training not only shapes physical outcomes but also fosters specific psychological qualities, which can be utilized by coaches and trainers to design sport-specific mental conditioning programs.

Weightlifters demonstrated greater psychological focus, alertness, and concentration. Since Olympic-style lifts such as the snatch and clean & jerk require technical precision, split-second decision-making, and coordination, weightlifters tend to cultivate mental sharpness and the ability to stay composed under time-bound pressure. Previous research has suggested that weightlifting athletes score higher in attention control and task-oriented focus compared to other strength athletes **(Garhammer, 2017).**

Power lifters were found to exhibit higher levels of mental toughness, resilience, and emotional stability. The maximal-effort lifts in squat, bench press, and deadlift demand not only strength but also strong psychological preparedness, as success often depends on the athlete's ability to manage fear, anxiety, and arousal levels before attempting near-maximal loads. Findings are in line with studies showing that power lifters demonstrate elevated self-efficacy, confidence, and persistence under high-stress performance conditions **(Tod, Hardy, & Oliver, 2011).**

Bodybuilders, by contrast, displayed superior self-discipline, intrinsic motivation, and long-term goal orientation. The focus on physique enhancement and aesthetic perfection requires strict dietary control, consistent training, and mental endurance over extended periods. Studies have highlighted that bodybuilders often exhibit higher levels of self-regulation and motivation, though they may also face challenges related to body image and perfectionism (**Goldfield, 2009).**

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Overall, these findings suggest that while all three disciplines promote psychological growth, the adaptations differ in their emphasis: weightlifting fosters concentration and precision, powerlifting enhances resilience and stress tolerance, and bodybuilding cultivates self-discipline and intrinsic motivation. Coaches, sport psychologists, and trainers can use this understanding to design sport-specific psychological conditioning programs, integrating relaxation techniques, motivational strategies, and mental rehearsal tailored to the demands of each discipline.

CONCLUSIONS

Within the limitations and delimitations of the present study, and based on the results obtained, the following conclusion was drawn:

It was concluded that weightlifters exhibited significant improvements in the selected psychological variables of self-confidence and stress management when compared with power lifters and bodybuilders. The findings suggest that the technical and performance-oriented demands of weightlifting enhance athletes' confidence levels and their ability to cope with competitive stress more effectively than those engaged in powerlifting or physique-oriented training.

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