

EMOTIONAL AROUSAL AND MOTOR PERFORMANCE IN SPORTS

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Introduction:

One of the most widely accepted Principles of human behaviour is that people perform best when “motivated”

The relationship between arousal & performance is a complex one & does not appear to follow a straight line.

This paper will investigate several aspects of this phenomenon.

What is Emotion?

The terms “Motivation”, “Excitement” or “Arousal”, though often used interchangeably may imply different things to different individuals.

When one speaks of Emotional arousal he may be referring to one or a combination of the following.

Negative condition: Fear, Anger, Anxiety, Jealousy, Embarrassment, Disgust, Boredom or rage whereas

Positive Condition: states may include- Joy, Elation, Ecstasy, Interest, Happiness & Love.

Arousal and Motor performance:

According to Cratty (1968), Husman (1969) & Oxendine (1968) the optimum level of arousal varies with the particular motor task i.e. different tasks require different levels of arousal for most effective performance. In addition, the optimum arousal state varies from person to person.

For Example – High anxiety versus Low anxiety, Extraversion versus Introversion, Experience versus Non experience are some of the individual variables making it difficult to establish definitive guidelines for all persons.

The Yerkes – Dodson law – According to this law, complex tasks are performed better when one's drive is low while simple tasks are performed better when drive is high. Therefore, drive which is either too great or too low for particular tasks may result in impaired performance.

On the basis of research evidence, scientific literature and empirical observation the following generalizations are offered on the arousal performance topic:

1. A high level of arousal is essential for optimal performance in gross motor activities involving strength, endurance and speed.

2.A high level of arousal interferes with performances involving complex skills, fine muscle movements, co-ordination, steadiness & general concentration.

3.A slightly above average level of arousal is preferable to a normal or sub-normal arousal state for all motor tasks.

Arousal Effects on strength, Endurance & Speed :

D.L.Johnson (1965) reported that subjects with induced motivational techniques made significant gains in strength whereas a nonmotivational group did not. On the basis of research and observation there is every reason to believe that a very high arousal state will result in most extraordinary strength performances. Therefore, the Gymnast performing an “Iron-cross” the weight lifter pressing a heavy weight or the student doing a leg lift with dynamometer – each would do his best if greatly aroused.

If we talk about endurance situations eliciting strong emotional arousal will result in significant endurance gains.

While in Speed- the belief remains that a child being chased by either a bully or a ghost will run faster than when told by the teacher to “run as fast as you can” Thus, there is ample reason to assume that sprinters will run faster & Swimmers will swim faster if highly aroused.

Emotional arousal and Performance in Sports:

Optimum arousal level for some typical sports skills

Level of Arousal	Sports skill
#5 (Extremely excited)	Football blocking & tackling performance on the Rogers PFI test Running (220 yards to 440yards) Sit up, Push up or bent arm hang test Weight lifting
#4	Running long jump Running very short & long races Shot-put Swimming races Wrestling & Judo
#3	Basketball skills Boxing High Jumping Most gymnastic skills Soccer skills
#2	Basketball pitches & batters Fancy dives Fencing Football quarter back

	Tennis
#1(Slight arousal)	Archery & bowling Basketball free throw Field goal kicking Golf putting & short irons Skating figure 8's
#0(Normal state)	-----

One of the few studies in this specific area was conducted by Harman and Johnson (1952) who found a major college team played its best game of the season when aroused to the highest level. On the other hand, the team performed poorest when the arousal level was at the lowest state.

This study Shows that emotional arousal as considered in this discussion is reflected in physiological responses nevertheless the study fails to answer many question for the teacher or athletic coaches interested in gaining more specific guidelines for the conduct of their activities – for example when the Yerkes - Dodson law is used, there is a question of which tasks are complex and which are simple furthermore, which is “High drive” and “low drive”?

Sportsman has to tackle his stressful life's problem along with physical training, it indirectly may affect on his performances so far that we need to give emphasis on psychological methods and technique.

Psychological method and techniques –competition (Challenges), praise and reproof , rewards and punishment, pep talk, music and hypnosis, biofeedback , meditation, demand training. Such methods and technique required that athletes carefully assess their personal needs and then train with the appropriate method enough to have good control over its application.

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