



**EVOLUTION OF BEHAVIOUR RELATED IMPRESSIONS IN THE FIELD  
OF PHYSICAL EDUCATION – WITH SPECIAL REFERENCE TO  
PERSONALITY TRAITS, ANXIETY AND AGGRESSION**

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**ABSTRACT :**

It is the science of psychology that teaches us to hold in check the wild thinking of the mind, place it under the control of the will, and thus free ourselves from its uninterrupted mandates. Psychology is therefore the science of sciences, without which all sciences and all other knowledge are worthless with education in general and physical education in particular being no exception. The general methods of content analysis and deductive reasoning have been followed to review the published literature. Furthermore the studies based on sport psychology in Indian context are very few and hence, it can be concluded that the evolution of sports psychology field is uneven in the developed as well as developing worlds. Hence, it is suggested that specific efforts be taken to improve the knowledge generation efforts in the field of sports psychology in India.

**INTRODUCTION :**

It is the science of psychology that teaches us to hold in check the wild thinking of the mind, place it under the control of the will, and thus free ourselves from its uninterrupted mandates. Psychology is therefore the science of sciences, without which all sciences and all other knowledge are worthless with education in general and physical education in particular being no exception. The uncontrolled and unguided mind is likely to drag us down, down, for ever — rip us, kill us; and the mind controlled and guided will save us, free us and will help us to achieve remarkable success. Hence, it must be controlled, and the correct knowledge of psychology teaches us how to do it. The mind operates by perception and impulsion. For instance, the rays of the light enter by eyes, are carried by the nerves to the brain, and still we do not see the





light. The brain then conveys the impulse to the mind, but yet we do not see the light; the mind then reacts, and the light flashes across the mind. The mind's reaction is impulsion, and as a result the eye perceives the object. Such is the importance of human mind and the psychology associated with it. In view of the above, an attempt has been made in this study to review the published literature to unearth the evolutionary patterns in sports field and the psychology related knowledge generation efforts.

### **METHODOLOGY :**

For the purpose of this study the literature was reviewed using the standard principle of deductive reasoning. All the literature cited in this study was selected from standard scientific journals with science citation index number. The general methods of content analysis and deductive reasoning have been followed to review the published literature. Based on the review, the discussion is presented hereunder.

### **DISCUSSION :**

**Pre 2000 era:** Peterson et al., (1967) determined the distinguishing personality traits when women who compete in team sports were compared to women who compete in individual sports and concluded that there were no differences in the factors of sociability, intelligence, stability, surgency, conscientiousness, suspecting, guilt-proneness, high self-sentiment, or high ergic tension. Further to this Walton and Last (1969) explored relation between personality, sex, and examination performance of recent graduates at Edinburgh. Authors concluded that women in general were less anxious, more impulsive and sociable, and less studious than the men. The impulsive and sociable doctors of either sex were less decided about their career plans than their relatively unsociable colleagues.





The psychological factors which would render an individual more susceptible to injury have been discussed by Sanderson (1978) and stated that psychological problems that can follow injury and that could prevent or delay recovery are an important aspect of the sports field. Gordon (1981) administered mood scales of spectators attending an especially violent ice hockey game and a relatively nonviolent game. He found that the relationship between hostility (and arousal) and the period of play was best described by an inverted-U function. Arousal decreased at the nonviolent match. Other mood states were largely unaffected by the two games. Kirkcaldy (1982) reported that when grouped in terms of 'level of competitive involvement', top-class male athletes were shown to be significantly more tough-minded and less stable than middle- or lower-class participants, an almost opposite trend being found in females, where top athletes were liable to be more extraverted, less neurotic and less aggressive and tough-minded than the other classes.

Kerr and Svebak (1989) investigated effects of arousal avoidance and impulsivity on preference for and actual participation in 'risk' and 'safe' sports. The study results showed that subjects who opted for risk sports given a free choice, and subjects who actually performed risk sports in summer and in winter, scored significantly lower on the TDS arousal avoidance subscale than those choosing safe sports. Gondola and Wughalter (1991) studied the profile of the female athlete both psychologically and physiologically. Kerr (1993) described, the basic postulates of reversal theory, and the potential of the theory for professional practice in sport psychology.

Jackson and Wilson (1993) compared Eysenck Personality Profiler of motorcycle enthusiasts with population norms separately by sex and found out that results are generally in accord with the public image of bikers as adventure-seeking drop-outs. Andersen et al., (1994) addressed the recognition and referral of athletes with personality and mood





disorders and concluded that careful training of sport psychology consultants in the recognition and referral of athletes with psychopathology will help expand and improve the quality of service.

Frauenknechta and Brylinskya (1996) stated that the unique “pressures” of collegiate athletes place them “at-risk” for making health-enhancing decisions and hence examined the relationship between social problem-solving and high-risk health behaviors of male and female intercollegiate athletes. Study results showed that collegiate athletes would benefit from problem-solving training as part of a health education program designed to increase coping skills and decrease engagement in health-compromising behaviors. In addition to above, Breivik (1996) examined personality, sensation seeking needs and risk taking in the Norwegian Everest expedition of 1985 and concluded that there was a definite high risk athlete profile that may be identified both on more general personality tests.

Johnson (1997) investigated three Differences in personality, mood and coping ability between athletes of a high competitive level with long-term injuries and concluded that team-sport athletes can cope better in terms of ‘passive acceptance’ of help from others, whereas individual athletes were found to activate ‘problem-solving’ strategies in face of a stressor. This suggests that social aspects of rehabilitative work are important and support the concept that rehabilitative work with long-term injured athletes should be individualized to be maximally effective. Nideffer (1997) stated that particularly at professional and Olympic levels, injuries of one kind or another are an inevitable consequence of competition, which puts more pressure on the sportspersons. Lusk et al., (1998) illustrated an evolutionary approach to individual differences and friendship choice and author has conceptualized individual differences in personality and other trait dimensions as resource environments for individuals. Kokotailo et al., (1998) compared risky health behaviors of







female intercollegiate varsity athletes and their non-athlete peers and concluded that the athletes were found to engage in significantly fewer risk-taking behaviors than the nonathletes. O'Sullivan et al., (1998) compared the male members of two college teams, baseball and football, and female members of two teams, field hockey and lacrosse and equestrians and concluded that sensation seeking was more characteristic of participants in high risk sports offering unusual sensation and personal challenges.

Augestad et al., (1999) examined the relationship between personality factors, self-reported eating disorders, type of physical activity, level of sport competition and hours spent on physical activity each week among physically active non-athletes and athletes. The results showed that women with eating disorders scored higher in anxiety, hostility and detachment, and lower in socialisation than the women without eating disorders. The results indicated that individuals with certain personality characteristics had a higher risk for being classified with ED, but it does not seem to be related to whether they are physically active or not. Ferraro (1999) had reported that Asian athletes tend to be more perfectionistic, more work oriented, receive more family support, are more family oriented and tend to be less aggressive and less angry, while conversely, the American athlete appears to be more aggressive, less work-oriented, often complains more about practice, have looser family ties, and are less guilty about defeating opponents. Piedmont et al., (1999) has stated that the dimensions of the five-factor model of personality could be used as predictors of athletic performance.

**3.2 Post 2000 era:** Knight et al., (2002) has reported that the magnitude of gender differences in aggression was relatively small in research contexts that appeared to produce no or large increments in emotional arousal and larger (favoring males) in contexts that appeared to produce small or medium increments in emotional arousal. According to Yu and

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Wang (2003) researchers from kinds of sports technique action, training and completing psychology of the injured athlete factors, reasons shows that psychology cause related with personal psychology, ill impulsive factors outside, preparative of psychology before the march, physical psychology fatigue and so on. Roberti (2004) has advocated a need to study non-risky forms of sensation seeking in young adults.

Kjelsås and Augestad (2004) examined associations between personality traits, eating disorder behavior, exercise, and gender and concluded that the risk ratio for women was three times higher compared with men. The factors that contributed most to the differences between students who scored higher on the EDI were neuroticism, BMI, gender, and age. Maxwell (2004) examined the relationship between anger rumination (the propensity to think almost obsessively over past experiences that have provoked negative affect in the form of anger) and athlete aggression and concluded that provocation and anger rumination were significant predictors of subsequent aggression and suggestions for preventing rumination, such as thought stopping and thought switching. Broshek and Freeman (2005) argued that sports medicine professionals may be the first point of contact for athletes dealing with psychological issues, related and unrelated to concomitant physical conditions and hence, their role in development of sports is very high.

Beckner and Minette (2005) observed that a large body of research exists relative to male aggression, however, current trends applicable to theories of aggression should be evaluated. According to Monasterio (2007) adventure and risk-taking sports such as mountaineering, kayaking, rock climbing, and Downhill Mountain biking and base jumping have increased in popularity in recent years and hence, personalities of such athletes should be studied in greater detail for e.g. Climbers have good self-esteem and self-reliance and therefore tend to be high-achievers. Cazenave et al., (2007) investigated the psychological

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profiles and emotional regulation characteristics of women involved in risk-taking sports and concluded that there exists differences between the profiles of Group 2 (escape profile, masculine gender identity, and high scores on sensation seeking, impulsivity, alexithymia) and Group 3 (compensation profile, androgynous gender identity, average score on sensation seeking, and low scores on impulsivity, alexithymia). Lafollie and Scanff (2007) showed how taking emotional data into account is essential to understand careless sport activities. Stojan et al., (2008) focused on differences in sensation seeking between male and female athletes who engage in high risk sports and concluded that male and female mountain climbers in Slovenia are equal in sensation seeking needs and can be treated as a homogenous sample.

According to Sysoeva et al., (2009) aggression is a heterogeneous heritable psychological trait, also influenced by environmental factors. Authors stated that synchronized swimmers had lower scores on Assault, Negativism, Irritability and Verbal Hostility compared to age-matched control girls (in general and for each 5-HTT genotype separately), suggesting that they may have more matured emotional system.

More recently, OŞOrhean et al., (2010) expressed a need to increase the scope of research in the sports psychology, wherein it was proposed that a thorough investigation involving the sports managers be carried out to understand the prevailing psychological traits. Among the strong points of female managers were proposed for the study are; conscientiousness, dynamism, personal charm, and physical presence and the weak points of female managers, and strong points of male managers we mention: intelligence, intuition, sense of responsibility and tenacity. Jalili et al., (2011) investigated and identified personality dimensions of individual and team athletes and to compare the level of social skills and mental toughness of individual and team athletes with non-athletes and





concluded that personality characteristics of individual and team athletes are different from non-athletes.

Murtaza et al., (2011) compared the sensation seeking on Body Builders and Weight Lifters and concluded that body builders have higher level of sensation seeking and anxiety state as compared to weight lifters. Moreover, the rationale of Bauger et al., (2011) for studying personality traits is that they could be an important factor influencing the time invested into the sport, which in turn affects performance levels. Hendry (2012) considered social interaction within sports, and offers a number of theoretical constructs which might be utilized in the analysis of the athlete-coach relationship. These constructs are to some extent interdisciplinary, and range from a social-systems framework to a social-action perspective. Hayrettin (2013) examined the relationship between trait and state competitive anxiety of aggression of professional football players and conclude that Hostile aggression was associated with Self-Confidence, Somatic Anxiety and Trait Anxiety. Besides, self-confidence was the most important predictor of Hostile aggression. Passive Aggression was positively predicted by Somatic Anxiety, Self-Confidence and Cognitive Anxiety.

Pathania and Tiwari (2013) have recently reported that the non-sportsperson's personality is not affected by the socio economic status of their family. Leasure (2014) evaluated dimensions of impulsivity as moderators of the association between physical activity and alcohol consumption. The study results showed a consistent pattern of interactions between the positive urgency and sensation seeking dimensions of impulsivity and moderate physical activity on number of drinks per week. Xavier (2014) observed that the application of psychological principles to the improvement of performance in sports has received greater attention in these days. Coaches, physical educationist and sports scientist have always expressed a greater need to know more

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about those psychological principles which are helpful in improving the motor skill of the players.

### **CONCLUSION:**

The review of literature was carried out to identify the research gaps in the field of sports psychology. It is apparent from the review that most of the psychological studies in sports were carried out by selecting individual parameter such as only anxiety, only stress or only aggression. Furthermore the studies based on sport psychology in Indian context are very few and hence, it can be concluded that the evolution of sports psychology field is uneven in the developed as well as developing worlds. Hence, it is suggested that specific efforts be taken to improve the knowledge generation efforts in the field of sports psychology in India.

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