

Mental Toughness as a Psychological Characteristic between Indian Paralympics Sportsmen and Regular Athletes

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Abstract

Background: The purpose of the study was to investigate the Mental Toughness as a Psychological Characteristic between Indian Paralympics Sportsmen and Regular Athletes.

Methods: For the purpose of the study sixty male Paralympics sportsmen and sixty male regular athletes were selected randomly during the respective National Championships. Mental toughness was assessed by the total scores in Mental Toughness Questionnaire (MTQ) developed by Goldberg, (2004). With the help of the questionnaires related to Mental Toughness as a psychological characteristic necessary data was collected. The data was analyzed by applying Descriptive Statistics i.e. Mean, Standard Deviation and Range & Independent 't' test in order to compare the significant difference among Paralympics sportsmen and Regular Athletes. Further, Analysis of Variance (ANOVA) technique was applied to determine significant difference among different games of Paralympics sportsmen. The level of significance was set at 0.05 levels.

Results: Paralympics sportsmen as a whole exhibited low levels of mental toughness. Paralympics (Athletics group) showed higher mean scores on mental toughness than the other three groups namely badminton, power-lifting and swimming. Insignificant difference was found between Paralympics sportsmen and regular athletes in relation to mental toughness. Insignificant differences were observed between different games of Paralympics sportsmen in relation to mental toughness.

Key words: Mental Toughness, Paralympics Sportsmen and Regular Athletes.

INTRODUCTION

A key question for sports and exercise psychologist is whether champions have simply inherited the dominant psychological traits necessary for success or whether mental toughness can be acquired through training and experience. Recent research has attempted to explore the concept of mental toughness in sports more thoroughly and it appears that, will some people are naturally more tough minded and other people can be "toughened up" with the correct approach to training (Rill, 2002).

"Mental Toughness" is the ability to communicate with yourself- especially when you are under pressure. Everyone has some degree of mental toughness. We all have a point at which we falter- when a situation begins to negatively affect our performance. This is the first indicator that mental toughness is being challenged. Anyone can train to improve his or her current level of mental toughness. The most common techniques include visualization, relaxation, energization, self-talk and goal setting (Hodge, 1994).

Loehr (1994) also argued that the mentally tough athletes are able to promptly alter their emotional state from a negative to a positive one and also developed the ability to emotionally cope with setbacks and rejuvenate an ideal performance state whenever the need arises and effectively cope with slumps in performance.

Fourie and Potgieter (2001) also posited that being mentally tough means that the athletes have acquired skills in thinking, believing and visualization that enables them to effortlessly access empowering emotions during competitions. The fact that an athlete is mentally tough does not guarantee success in sports at all times. It is in fact complimentary to good technique and form. The principle is simple and the results should be overwhelming therefore it is not only the development and mastering of the mental toughness skills that matters but also learning proper mental control to execute the skills when it matters most. Mental toughness is also characterized by self-motivation and self-direction. Athletes that are tough mentally are usually calm and relaxed under pressure. They often see adversities as challenges and not as threat.

Jones et. al. (2007) reported attributes of mental toughness to include awareness, control of thoughts, feelings and staying focused (comparable to control), using long-term goals as a source of motivation (analogous to commitment), pushing to the limit (similar to challenge) and having an unshakeable self-belief (comparable to confidence).

Bull & Shambrook (2004) agreed that mental toughness does contribute to their team success and it was also important component that applies during the local football league. Therefore, mental toughness is an important component in the success of sports event. Perhaps, mental skills reduce the anxiety level and build up confidence among athletes (Dominikus, Fauzee, Abdullah, Meesin, & Choosakul, 2009). Furthermore, it also helps to create good imagery and coping strategies in sports performances (Omar-Fauzee, Wan Daud, Abdullah, & Abd Rashid, 2009).

Loehr (1986) had reported 50% success in sports is due to psychological impact concerning mental strength among athletes and coaches. In addition, other studied in mental toughness found that coaches agree that mental toughness contribute to their team performance (Gould et al., 1987). Gould et al. (2002) studied the psychological characteristics of Olympic champions and identified mental toughness as a significant contributor to sports performance enhancement.

Statement of the Problem

Mental Toughness as a Psychological Characteristic between Indian Paralympics Sportsmen and Regular Athletes.

Hypothesis

It was hypothesized that there might not be significant differences between Paralympics Sportsmen and Regular athletes on Mental Toughness as a psychological characteristic.

PROCEDURE AND METHODOLOGY

For the purpose of the study sixty male Paralympics sportsmen (Athletics-15, Badminton-15, Power Lifting-15 and Swimming-15) and sixty male regular athletes (Athletics-15, Badminton-15, Power Lifting-15 and Swimming-15) were selected randomly during the respective National Championships.

Keeping the feasibility aspect in the mind and importance of psychological aspects, the following variable was selected for the purpose of this study: Mental Toughness.

The criterion measures adopted for the study was as follow: Mental toughness was assessed by the total scores in Mental Toughness Questionnaire (MTQ) developed by Goldberg, (2004).

With the help of the questionnaires related to Mental Toughness as a psychological characteristic necessary data was collected. Collection of data was made in regarding psychological variable from sixty Indian Paralympics sportsmen and sixty Regular Athletes.

The data was analyzed by applying Descriptive Statistics i.e. Mean, Standard Deviation and Range & Independent ‘t’ test in order to compare the significant difference among Paralympics sportsmen and Regular Athletes. Further, Analysis of Variance (ANOVA) technique was applied to determine significant difference among different games of Paralympics sportsmen. The level of significance was set at 0.05 levels.

RESULTS AND DISCUSSIONS OF THE FINDINGS

Table No – 1: Descriptive Statistics of Paralympics Sportsmen and Regular Athletes on Mental Toughness

Variable	Groups	Mean	Std. Deviation	Range	
				Minimum	Maximum
Mental Toughness	Paralympics Sportsmen	21.68	3.07	16.00	27.00
	Regular Athletes	22.23	2.70	16.00	27.00

Table No – 2: Comparison of Mean Scores of Paralympics Sportsman and Regular Athletes between Different Games

Variable	Groups	Athletics	Badminton	Power lifting	Swimming
Mental Toughness	Paralympics Sportsmen	22.66	21.33	20.80	22.13
	Regular Athletes	22.66	22.06	23.66	21.53

Figure No -1. Graphical Representations of Mean Scores Paralympics Sportsmen and Regular Athletes on Mental Toughness



Table No – 3: Comparison of Mean Scores of Paralympics Sportsman and Regular Athletes among Different Games

Variable	Groups	Mean	Std.	N	df	MD	't'
Mental Toughness	Paralympics Sportsmen	21.68	3.07	60	118	0.55	1.04
	Regular athletes	22.23	2.70				

*Significant at 0.05 level of significance

Table No-3 revealed that no significant difference was found between Paralympics sportsmen and regular athletes in mental toughness $t(118) = 1.04, P > .05$.

Table No-4: Analysis of Variance of Mental Toughness among Different Games of Paralympics Sportsmen

Source of Variance	DF	SS	MSS	F-ratio
Between Groups	3	33.78	11.26	1.205
Within Groups	56	523.20	9.34	

*Significant at 0.05 level of confidence, $F_{0.05}(3, 56) = 2.76$

Table-4 revealed that insignificant difference was found among different games of Paralympics sportsmen in relation to Mental toughness, as obtained 'F' ratio of 1.205 which was lower than the $F_{0.05}(3, 56) = 2.76$.

DISCUSSION

Mental toughness is the ability to communicate with yourself- especially when you are under pressure. Everyone has some degree of mental toughness. We all have a point at which we falter- when a situation begins to negatively affect our performance. This is the first indicator that mental toughness is being challenged. Anyone can train to improve his or her current level of mental toughness. Mental toughness can be defined as that unshakable perseverance and conviction towards some goal despite pressure or adversities (Middleton, 2004). In this study Paralympics sportsmen possessed lower mental toughness in comparison to regular athletes; whereas no significant difference was found between Paralympics sportsmen and regular athletes. The findings may be attributed to the fact that mental toughness is the ability to consistently sustain one's ideal performance during adversities and pressure situations of competition. May be due to their physical disabilities they might be feeling low in this aspect. That's why regular athletes possess higher mental toughness in comparison to Paralympics

sportsmen. Finally, insignificant difference was found among different games of Paralympics sportsmen in relation to mental toughness.

The similar trends had been cited by **Crust (2009), Crust and Azadi (2005), Paul and Gerry (2004) and Golby, Sheard, Lavelle (2003).**

CONCLUSIONS

1. Paralympics sportsmen as a whole (Athletics, Badminton, Power- lifting and Swimming) exhibited low levels of mental toughness.
2. Paralympics (Athletics group) showed higher mean scores on mental toughness than the other three groups namely badminton, power-lifting and swimming.
3. Insignificant difference was found between Paralympics sportsmen and regular athletes in relation to mental toughness.
4. Insignificant differences were observed between different games of Paralympics sportsmen in relation to mental toughness.

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