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Comparative study of mental toughness between amateur golfers and caddie turned amateur golfers

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Abstract

In this study, we assessed the mental toughness between the amateur golfers and caddie turned amateur golfers. Two hundred (200) male golfers of 18 to 24 years of age group were randomly sampled to participate in the present study. They were further divided into two groups which includes one hundred (n=100) amateur golfers and one hundred (n=100) caddie turned amateur golfers. All the subjects, after having been briefed about the objective and protocol of the study, gave their consent, and volunteered to participate in the study. Participants completed the mental toughness inventory (MTI) by Middleton *et al.* (2005) was used to measure mental toughness. To determine the difference of Mental Toughness between male golfers independent t-test was employed through SPSS package 20.0 and the significant level was set at 0.05. The findings of this research paper showed that there was non-significant mean difference for overall mental toughness between Amateur golfers and Caddie turned amateur golfers along with its domains: Rebound ability, Ability to handle pressure, concentration ability, Level of confidence and motivation. Yet Caddie turned amateur golfers presented more mental toughness.

Keywords: Golf, amateur golfers, caddie turned amateur golfers, mental toughness

Introduction

An outdoor game Golf, basically a ball-stick game is played around the world. It is played on a large open-air course in which a ball is struck by a club with the aim of taking the lowest number of strikes possible to get the ball into 18 holes in the ground. The objective of golf is to get the ball into the holes in the lowest number of shots. Whether one play for fun or play competitively, golf is a complex game. Golf is intensely associated with traits like patience, persistence, skilled practice, and focused ability. To be a successful player reaching fullest potential, ongoing practice and professional instruction is needed. Psychological parameters mental toughness, adjustment, and self-concept play an important role for growth of golfers whether Amateurs or Professional. Amateur golfer is who plays for enjoyment and does not receive payment in cash or kind as a reward. Caddie is the person who carries a player's bag and clubs and gives insightful advice and moral support. Earlier a caddie and then become an Amateur Golfer is known as Caddie turned amateur golfer.

The vast majority characterize mental toughness as the capacity to create steady outcomes in practices and in games paying little heed to the circumstance. Regardless of whether it's helpless climate, a physical issue, or a weight circumstance, competitors with mental sturdiness figure out how to create similar outcomes. Some eminent competitors with mental strength include:

- Michael Jordan, who has hit different match dominating shots under the most tension filled of circumstances.
- Serena Williams, the best female tennis player ever, produces a great many pros down breakpoint or match point.
- Adam Vinatieri, a future lobby of-acclaim kicker, has hit field objectives that have won his group NFL Super Bowl Championships.

These competitors could not perform at this level reliably without mental strength. Undoubtedly, mental ability is fundamental for competitors to accomplish the most ideal outcomes with regards to sports. At these times, competitors should have the drive and inspiration to push through testing and weight filled minutes and proceed to progress.

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This type of transitional response to adversity is not unique to Olympic champions and is an important formative experience for talent development (Savage *et al.*, 2016) [7]. Progressing investigation seems to help the importance of prologue to hardship. Helpful impact of difficulty with 10 Olympic gold medallists. The Olympic victors proposed that unfriendly encounters at first prompted injury, but instead than evoking maladaptive conduct reactions, the extreme negative feelings were utilized to fuel the competitors' future exertion and application (Sarkar *et al.* 2015) [6]. Another examination investigating the difficulty and development related encounters of Olympic swimmers found that by embracing momentary related systems, the competitors eventually flourished notwithstanding affliction, and prospered as entertainers and people (Howells and Fletcher, 2015) [5]. Competitors' prosperity or disappointment is multifactorial. It relies upon the mix of numerous components including physical, tactical, specialized, and mental components. Mental factor is generally the determinant that differentiates a victor also, a washout in games (Brewer, 2009) [1]. In an examination including ten Olympians, they detailed mental toughness is one of the most noteworthy positioned mental attributes that decide at fruitful execution (Gould, Dieffenbach, and Moffett, 2002). Competitors, mentors, and applied games analysts have reliably alluded to mental toughness as quite possibly the main mental qualities identified with results and accomplishment in the first-class sports. Nonetheless, it is most likely one of the most un-comprehended terms utilized in applied games brain science (Jones, Hanton, and Connaughton, 2002) [4].

Methodology

Participants

The participants were 200 golfers who regularly participated in various Amateur golf competitions. The sample consists of 200 male golfers from Chandigarh, Delhi, Haryana and Punjab. They were further divided into two groups which includes hundred (n = 100) amateur golfers and hundred (n = 100) caddie turned amateur golfers. The groups have been presented in Table 1 The random sampling technique was used to obtain the required data. All participated an informed consent form before data collection.

Table 1: Details of selected Amateur Golfers and Caddie Turned Amateur Golfers

Details of selected golfers				
Sr. No.	A	Sample	B	Sample
1.	Amateur Golfers	100	Caddie Turned Amateur Golfers	100

Measures

Mental toughness was measured by applying mental toughness inventory constructed by Middlenton *et al.* (2005). Mental toughness inventory consists of 30 items measuring the mental toughness in five areas, i.e., rebound ability, ability to handle pressure, concentration, confidence, and motivation. There was only true/false answers option in this questionnaire and subjects must tick only one option. The questionnaire is suitable for the age group as selected for the study.

Data Analysis

Descriptive statistics (Mean, Standard Deviation, Skewness, Kurtosis, Standard Error of Skewness and Standard Error Kurtosis) were calculated for all measures. Data screening was used to ensure all dependent variables met the

assumptions necessary for the use of parametric statistics before data analysis. In addition, independent t-test were used to test the between-group differences between amateur and caddie turned amateur golfers in mental toughness. The level of $p > 0.05$ was considered non-significant. Statistical Package for Social Science (SPSS) version 20.0 was used.

Results

Table 2: Descriptive statistics of amateur golfers N=100

	Mean	Std. Deviation	Skewness	Kurtosis
Rebound ability	4.77	1.24	-0.734	-0.443
Ability to Handle Pressure	5.31	0.84	-0.949	-0.104
Concentration Ability	4.89	0.68	-0.254	0.130
Level of Confidence	5.09	0.71	-0.303	-0.405
Motivation	5.08	0.74	-0.427	-0.230
Overall Mental Toughness	25.11	2.79	-0.331	0.046

N=100

Table 2 shows descriptive statistics related to various domains of mental toughness among Amateur golfers. Little lower than solid skill mean (M-4.77) was found in terms of rebound ability. Above Solid skill and somewhat below Special strength was witnessed while handling pressure (M-5.31). Nearly solid skill was demonstrated for concentration (M-4.89). Both Level of confidence (M-5.09) and Motivation (M-5.08) were showing Solid skill level of Amateur golf players. Rebound ability (-0.734) and Ability to handle pressure (-0.949) were moderately skewed. All other domains concentration (-0.254), Level of confidence (-0.427) and Motivation were skewed. Except concentration ability (0.130) being leptokurtic, all other domains showed platykurtic distribution. Overall Mental toughness score was skewed (-0.331) and found mesokurtic distribution by Kurtosis (0.046). More than average (M-25.11) mental toughness was found among enrolled Amateur golfers.

Table 3: Descriptive Statistics of Caddie turned Amateur golfers N=100

	Mean	Std. Deviation	Skewness	Kurtosis
Rebound ability	4.84	1.24	-0.780	-0.453
Ability to Handle Pressure	5.30	0.90	-1.220	1.052
Concentration Ability	4.95	0.75	-0.344	-0.178
Level of Confidence	5.14	0.76	-0.520	-0.288
Motivation	5.14	0.68	-0.182	-0.826
Overall Mental Toughness	25.38	2.89	-0.345	-0.070

N=100

Table 3 presents the dispersion of data among caddie turned Amateur golfers regarding various domains of mental toughness. All domains ranged from 2 to 6 with rebound ability (M-4.84) and Concentration ability (M-4.95) little less than solid skill and all other domains; Ability to handle pressure (M-5.30), Level of confidence (M-5.14), Motivation (M-5.14) above solid skill. The Caddie turned Amateur golfers (M-25.38) showcased more than average to moderate mean overall mental toughness score. Where Rebound ability (-0.780) and level of confidence (-0.520) were moderately skewed all other domains were found fairly skewed along with overall mental toughness score (-0.345). Only Ability to handle pressure (1.052) was leptokurtic distributed, all other domains were distributed light tailed or platykurtic distributed according to Kurtosis. But Overall mental toughness score (-0.070) was almost normally distributed.

Table 4: Distribution of golf players according to Nlenta Toughness Overall Scoring

Mental Toughness	Group	N	Mean	SD	Mean Difference	T	DF	P-Value
	Amateur Golfer	100	4.77	1.24	-0.070	-0.397	198	.691: ¹⁵
Rebound								
Ability	Caddie Tuned	100	4.84	1.24				
Amateur Golfer								
Ability to	Amateur Golfer	100	5.31	0.84	0.010	0.081	198	1936: ¹⁵
Roadie								
Pressure	Caddie Tuned	100	5.30	0.90				
Amateur Golfer								
Concentration	Amateur Golfer	100	4.89	0.68	-0.060	-0.590	198	1556: ¹⁵
Ability								
	Caddie Tuned	100	4.95	0.75				
	Amateur Golfer							
Level of	Amateur Golfer	100	5.09	0.71	-0.050	-0.478	198	1633: ¹⁵
Confidence								
	Caddie Tuned	100	5.14	0.76				
	Amateur Golfer							
Mothation	Amateur Golfer	100	5.08	0.74	-0.060	-0.593	198	1550: ⁵
	Caddie Tamed	100	5.14	0.68				
Amateur Golfer								
Mental	Amateur Golfer	100	25.11	2.79	-0.270	-0.671	198	1503: ¹⁵
Tong tiess	Caddie Tuned	100	25.38	2.89				
Total	Amateur Golfer							

Table 4 tabulates the distribution of golf players according to mental toughness overall scoring. In the domain rebound ability, the mean score was 4.77 for amateur golfers and 4.84 for caddie turned amateur golfers. Mean difference was -0.070. The p-value was found non-significant (t- 0.397, p- 0.691 ($p>0.05$)). The mean score was almost same for amateur golfers (M- 5.31) and caddie turned amateur golfers (M- 5.30) in the domain ability to handle pressure. The p-value was statistically non-significant (t- 0.081, p- 0.936($p>0.05$)). In concentration ability domain, amateur golfers had attained a mean score of 4.89 and caddie turned amateur had a mean score of 4.95. Mean difference was -

0.060. The p-value was found non-significant (t- -0.590, p- 0.556 ($p>0.05$)). A mean score of 5.09 by amateur golfers and 5.14 by caddie turned amateur golfers was attained in level of confidence domain. The p-value was found non-significant (t- -0.478, p- 0.633 ($p>0.05$)). In the domain motivation, the mean score was 5.08 for amateur golfers and 5.14 for caddie turned amateur golfers. Mean difference was -0.060. The p-value was found non-significant (t- -0.593, p- 0.554($p>0.05$)). A mean score of 25.11 by amateur golfers and 25.38 by caddie turned amateur golfers was attained in mental toughness total domain. The p-value was found non-significant (t- -0.671, p- 0.503($p>0.05$)).

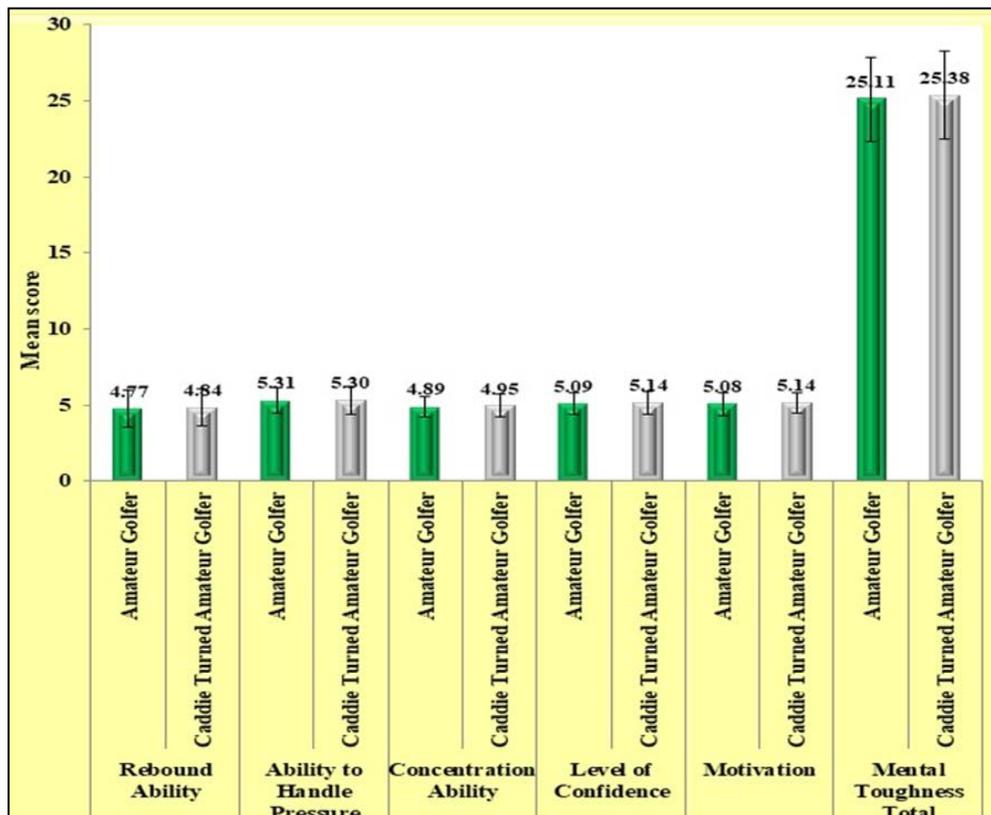


Fig 1: Mean and SD in various domains of mental toughness among golfers

Figure 1 shows the mean distribution of domains of mental toughness among golfers. In rebound ability, amateur golfers achieved a mean score of 4.77 and SD 1.24 and caddie turned amateur golfers achieved a mean score of 4.84 and SD 1.24. Mean score of 5.31 and 5.30 was achieved by amateur golfers and caddie turned amateur golfers respectively in ability to handle pressure. The SD was 0.84 and 0.90. In concentration ability, amateur golfers achieved a mean score of 4.89 and SD 0.68 and caddie turned amateur golfers achieved a mean score of 4.95 and SD 0.75. Mean score of 5.09 and 5.14 was achieved by amateur golfers and caddie turned amateur golfers respectively in level of confidence. The SD was 0.71 and 0.76. In motivation, amateur golfers achieved a mean score of 5.08 and SD 0.74 and caddie turned amateur golfers achieved a mean score of 5.14 and SD 0.68. Mean score of 25.11 and 25.38 was achieved by amateur golfers and caddie turned amateur golfers respectively in mental toughness total. The SD was 2.79 and 2.89.

Discussion

The purpose of present research was to compare the mental toughness of Amateur golfers and caddie turned amateur golfers. As the results of this research shows from the findings of Table 4 with regard to mental toughness that non-significant difference have been observed on the sub variables; rebound ability, ability to handle pressure, concentration, confidence, motivation and overall mental toughness between amateur golfers and caddie turned amateur golfers. The mean comparison of two groups for various domains related to mental toughness was found non-significant. Mean score of most domains was better among Caddie turned amateur golfers than amateur golfers with little mean difference between groups.

Conclusion

The primary objective of this study was to know and compare the difference between amateur golfers and caddie turned amateur golfers on different sub-variables of mental toughness. The results indicated that there is a non-significant difference between amateur golfers and caddie turned amateur golfers on the sub variables and overall mental toughness from which it can be concluded that caddie turned amateur had non-significantly higher rebound ability, confidence, motivation, and overall mental toughness. It can be concluded from the average overall mental toughness score that caddie turned amateur golfers were mentally tougher than amateur golfers but not significantly.

Recommendations

- The research was restricted only to male golf players. Analysis of gender differences may be carried out in further studies.
- Many other psychological criteria for golf players, such as motivation, anxiety, can be studied.
- The present research can be extended by multiple sports.

References

1. Brewer BW. Handbook of sports medicine and science, sport psychology. Chichester: John Wiley & Son s Ltd 2009.
2. Clough PJ, Earle K, Sewell D. Mental toughness: The concept and its measurement. Inm Cockerill (Ed.), Solutions in sport psychology London: Thomson 2002, 32-43.
3. Gould D, Hodge K, Peterson K, Petlichkoff L.

Psychological foundations of coaching: Similarities and differences among intercollegiate wrestling coaches. *The Sports Psychologist* 1987;1(4):293-308. <http://doi.org/10.1123/tsp.1.4.293>.

4. Jones G, Hanton S, Connaughton D. What is this thing called mental toughness? An investigation of elite sport performers. *Journal of Applied Sport Psychology* 2002;14(3):205-218. <http://doi.org/10.1080/1041300290103509>
5. Howells K, Fletcher D. Sink or swim: adversity-and growth-related experiences in Olympic swimming champions. *Psychol. Sport Exercise* 2015;16:37-48.
6. Sarkar M, Fletcher D, Brown DJ. What does not kill me...: adversity-related experiences are vital in the development of superior Olympic performance. *J. Sci. Med. Sport* 2015;18:475-479. doi: 10.1016/j.jsams.2014.06.010
7. Savage J, Collins D, Cruickshank A. Exploring traumas in the development of talent: what are they, what do they do, and what do they require? *J. Appl. Sport Psychol* 2016;29:101-117. doi: 10.3275/8617
8. <http://www.sportpsychologytoday.com/sports-psychology-articles/the-mental-game-of-golf/>
<https://indiangolfunion.org/about-golf/>
9. <https://onlinemasters.ohio.edu/blog/the-importance-of-mental-toughness/>