



## “A COMPARATIVE STUDY OF MOTIVATION AND MENTAL TOUGHNESS BETWEEN RANI CHANNAMMA UNIVERSITY AND BANGALORE UNIVERSITY PHYSICAL EDUCATION GRADUATE STUDENTS”

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### INTRODUCTION:

Sport is an ever expanding avenue of human life. From earliest time to the modern age sport in its various forms has played a vital role in the life of mankind. Sport activities provide a means of emancipation from daily routine and pressures. In modern competitive world every sportsman is in race of excel better than others. Everyone desires to see himself/herself successful and for which personality plays a major role personality is the set of psychological traits and mechanisms within the individual that are organized and relatively enduring and that influence his or her interactions with and adaptation to the intra-psychic physical and social environments (Watt 2009).



### What is motivation?

‘Motivation is the answer to the question “why we do, what we do? The motivation theories try to figure out what the “m” is in the equation: “m-motivates P” (motivator motivates the person) it is one of the most important duty of an entrepreneur to motivate people (I strongly believe that motivating people with visionary and shared goals is more favourable than motivating through tactics, incentives and manipulation through simple carrot and stick approaches because motivating with vision is natural whereas the former is artificial and ephemeral).’

‘Motivation theories can be classified broadly into two different perspectives: Content and process theories. Content theories deal with “what” motivates people and it is concerned with individual needs and goals, maslow, Alderfer, Herzberg and McClelland studied motivation from a “content” perspective. Process theories deal with the “process” of motivation and are concerned with “how” motivation occurs uroom. Porter and Lawler Adams and Locke studied motivation from a “process” perceptively’ (Watt 2009).

### Content theories about motivation

- In the first level, physiological needs exist which include the most basic needs for humans to survive, such as air, water and food.
- In the second level, safety needs exist which include personal security, health, wellbeing and safety against accidents remain.
- In the third level, belonging needs exit. This is where people need to feel a sense of belonging and acceptance. It is about relationships, families and friendship; organizations fulfill this need for people.
- In the fourth level, self-esteem needs remain. This is where people looks to be respected and to have self-respect, achievement needs respect of others are in this level.

- In the top level, self-actualization needs exist. This level of need pertains to realizing the person's full potential.

Research has shown the participation in school physical education may affect student's motivation to engage in physical activity because it has the potential to provide both positive and negative experiences for the student population (Hagger *et al.*, 2003; McKenzie, 2007; Pratt *et al.*, 1999). When children and adolescents experience positive outcomes from their involvement in physical activity, they can also be expected to remain involved in physical activity in adulthood (Dishman *et al.*, 2005; Sallis *et al.*, 2000; Telema *et al.*, 2005; Vlachopoulos *et al.*, 1996) previous findings however have indicated that motivation to participate in PE programmes declines over the school years (Mowling *et al.*, 2004; Sallis *et al.*, 1992) suggesting a number of students may demonstrate negative perceptions towards school based physical activity. It is important, therefore, for researchers to acquire a clear understanding of the motivational mechanisms that under lie the positive or negative affective outcomes of PE, such as enjoyment or anxiety.

### Mental toughness

'Mental toughness is the primary reason I play racquetball I know it is a great sport. Lost of fun and good exercise, but ultimately I want the ability to think under pressure to keep my composure and to keep finding a way to win a point. In short, "to keep moving forward" I love the rocky series of movies and from the last movie came one of the greatest quotes' (Balboa, 2006).

'What is it you said to the kid? The world in it all sunshine and rainbows. It is a very rough, mean place.. and no matter how tough you think you are it will always bring you to your knees and keep you there permanently... if you let it, you or no body ain't never gonna hit as hard as life. But it ain't about how hard you lit... it's about how hard you can get lit and keep moving forward... how much you can take and keep moving forward, if you know what you are worth, go out and get what you are worth. But you gotta be willing to take the lit' (Balboa, 2006).

It is very easy to get caught up in the rush of the match and there are a lot of internal and external factors going on. It is important to take advantage of the break periods in racquetball to plan, recover and give your "real self" some reassurance. Most players want to rush into the next point and hat delays.

Time outs you get three thirty second time outs during each game and two during a tie-breaker. Once the score is called, there is another ten second period.

1. Two minutes between games and five minutes between game 2 and a tie-breaker.
2. Injury time out is fifteen minutes.
3. Equipment time out is upto two minutes.

Normally, I want to keep the momentum going when I am scoring and destroy it if my opponent is on fire. Taking a time out or my allotted time between rallies can help change the momentum of a game. I am a pretty easy going guy, but sometimes the competitive fire burns a little too hot, as Dr. James Loehr wrote in his book about anger "It's like trying to put out a fire with gasoline". "You see, fear keeps you sharp. It keeps you awake it makes you Wanna survive. But the thing is, you gotta Learn how to control it" (Balboa, 2006).

I remember two examples at the same round robin where anger hindered and helped me one game I was totally outclassed and had a one way ticket to the donut shop, but I broke his serve once and did a traditional "Double kill" first pump and yelled at myself "C'mon Joe! Do something!!" There was nothing left of myself. I wanted to serve hard and play hard at any cost. I was blinded by bloodlust.

My next opponent won the lower division last time and I did not care I was angry about getting the donut, but it was not the same out of control anger. It brought a level of focus I always wanted. I wanted the points, I wanted to win. I was the "wounded bear" that Brad Gilbert mentioned in his book my opponent lost and walked away with three points and it was my best racquetball. Anger and fear play an important part in mental toughness without them your body is not really ready to fight, but if they get out of control they ruin your chances for winning and during recreational play anger can ruin friendship.

### Tips on keeping composure

1. Accept your lights and lows
2. Always play seriously
3. Give yourself a pep talk between points

### Goal # 3 getting the point

Get one point at a time, I thought the score did not matter, but reading broad Gilbert's book showed me how "setup points" can set the stage for a win in tennis. A point at 13-5 is a lot different than at 5-3, so taking advantage of the scores psychological effect is often overlooked.

The past and future points often serve as a distraction and have no place in my thoughts during a rally, but they still keep coming up especially at the worst times.

### Tips for getting the point

1. Focus on the ball
2. Keep the ball in play
3. Find more than one serve that works
4. Get your opponent tired and keep them tired

### Advantages and disadvantages of motivation

Motivation provides us with energy to pursue outcomes. The energy may come from an inside source or an outside source. These sources can be defined as either extrinsic or intrinsic motivation (Rodgers and Loitz, 2009). Extrinsic motivation "lies outside of the individual and the task being performed", whereas, intrinsic motivation "lies within the individual and the task" (Ormond, 2008). The task is found to be enjoyable and worthwhile alone.

### Advantages of intrinsic motivation

- Long-lasting
- Self-sustaining
- Focuses on the subject rather than the reward or punishment.

### Disadvantages of intrinsic motivation

- Slow to change the behaviour
- Requires long the preparation and special attention
- A variety of approaches may be needed to motivate students

### Advantages of extrinsic motivation

- Quickly changes behaviour
- Requires little effort or preparation
- Requires little knowledge of the student

### Disadvantages of intrinsic motivation

- Provides distraction from learning
- Difficulty in determining appropriate rewards and punishment
- Ineffective after a long period of time
- Once the reward is removed, motivation is lost

## THE STATEMENT OF PROBLEM

The purpose of the study was to compare the motivation level and mental toughness between two physical education college students from RANI CHANNAMMA UNIVERSITY AND BANGALORE UNIVERSITY .

## Hypothesis

The hypotheses of the present study are as follows:

- There will be no significant difference in motivation levels between UCPE and SCPE college physical education students.
- There will be no significant difference in mental toughness between UCPE and SCPE college physical education students.

## THE LIMITATIONS OF STUDY

The delimitations of study were as follows:

- Though the structured and standardized questionnaires are used for this study. The questionnaires have their own constraints; this would be a limitation for the study.
- The students' behavior while responding the questions were beyond the control of the research scholar.
- The health conditions of the respondents at the time of data collection may effect on the responses, this would be a constraint for the study.

## THE DELIMITATIONS OF STUDY

- The study was restricted to two physical education colleges of Rani Channamma Univeristy and Banagalore University jurisdiction.
- The sample size was delimited to 42 physical education students pursuing bachelor's degree in physical education during the academic year 2014-15.
- The study was further delimited to standardized questionnaires related to achievement motivation, mental toughness.

## THE SIGNIFICANCE OF STUDY

- The study helps of find out the level of motivation and mental toughness of SCPE and UCPE students.
- The study may provide psychological variables differences between of SCPE and UCPE students.
- This study will help the coaches & physical education teachers to plan training programmes to improve the students' psychological characteristics, if required.
- The study may throw new light on the existing knowledge in the field of physical education and sports.

## THE DEFINITIONS AND EXPLANATIONS OF TERMS

**Motivation** is the answer to the question "why we do, what we do? The motivation theories try to figure out what the "m" is in the equation: "m-motivates P" (motivator motivates the person) it is one of the most important duty of an entrepreneur to motivate people (I strongly believe that motivating people with visionary and shared goals is more favorable than motivating through tactics, incentives and manipulation through simple carrot and stick approaches because motivating with vision is natural whereas the former is artificial and ephemeral) (Balboa, 2006)

**Mental toughness** is the primary reason I play racquetball I know it is a great sport. Lots of fun and good exercise, but ultimately I want the ability to think under pressure to keep my composure and to keep finding a way to win a point. In short, "to keep moving forward" I love the rocky series of movies and from the last movie came one of the greatest quotes' (Balboa, 2006).

## REVIEW OF LITREATURE

Babied *al.* (2005), studied the effect of psychological interventions such as general relaxation, imagery and combination of both on the mental toughness dimensions of table-tennis players. The study was carried out on 32 national level table-tennis players in the age group of 12-17 years. Loehr psychological performance inventory was administered to assess their mental toughness on seven variables viz. self-confidence, negative-energy, attention control, visual and imagery control, motivational level, positive energy and attitude control. The data obtained was analyzed using ANOVA, t test and percentage distribution. The results indicate that all the 3 psychological interventions enhanced mental toughness dimensions of sports persons. However combined intervention consisting of both relaxation and imagery therapies showed the maximum effect on mental toughness dimensions.

Balaji and Jesudass (2011) studied to find out the differences in Mental Toughness among Cricket Players of different age groups. To achieve this purpose, ninety Cricket players at the age group of 10-21 years were selected from Chennai District, who regularly practice the game and participate in various tournaments. Mental Toughness Questionnaire-a standardized sports psychological inventory designed by Dr. Goldberg, was responded by all the subjects. The collected data was analyzed using simple analysis of variance (ANOVA). The results of the study showed that there was a significant difference in Mental Toughness among Cricket Players group 18-21 years showed significantly greater mental toughness than the other two age groups. This may be due to their experience in the game.

Loehr, 1986 studies the mental toughness and its influence on performance outcomes in competition. For this study 72 Male Kabaddi Players of different level competing in All India Invitational Kabaddi Tournament Organized by SahyogKridaMandal, (Registered Sports Organization, Registration no. JN 1531/94) at Sridhar, District Narsinghpur, Madhya Pradesh was selected as sample. The Sample was further divided in two groups as per performance outcomes in competition one is successful kabaddi players as their team had won the first, second and third place and other one is non-successful kabaddi players as their team had not won any place in All India Invitational Kabaddi Tournament 2010. Psychological Performance Inventory was administered to measures the mental toughness to the both group in this study. Analysis of the fundamental areas of mental toughness revealed that the successful kabaddi players scored significantly higher on all subscale of mental toughness and significant differences were observed between two groups (successful and non-successful) on all subscale of mental toughness ( $p=0.05$ ). Early stage of the league towards winning among Malaysian football players. The instrument used in this study was the questionnaire of *Psychological Performance Inventory (PPI)*, Lower, 1986. The difference between the mental toughness between the categories of elite and non-elite, professional and amateur players was measured. Other than that, the relationship between the players' category, status and achievement with the seven dimension of mental toughness (Self-confident (SC), Negative energy control (NE), Attention control (AT), Visual imagery control (VI), Motivational (MT), Positive energy control (PE) and Attitude control (AC) was evaluated. The results from the descriptive analysis showed that the mental toughness of Malaysian football players is at an excellence level.

Hartsburg, Scherer, Viselike, and Vernon (2009): recently provided support for the psychometric properties and factor structure of the MTQ48, using both exploratory and confirmatory factor analysis, to assess MT. In their study with monozygotic and dizygotic twins (Clough *et al.* 2002).

Horsburghet *al.* (2009) found that the scales of the MTQ48 correlated significantly with the big five factors of personality and that differences in MT were the result of both genetic and non-shared environmental factors. This provides some support for Clough et al.'s hypothesis that MT can be considered a personality trait. Furthermore, good support exists for the construct validity and criterion validity of the MTQ48 in sport

This study investigated the relationship between mental toughness (MT), stress, stress appraisal, coping strategies and coping effectiveness in the context of sport. Most research concerning MT in sport has been exploratory in nature, whereby researchers have explored athletes' understanding of this construct (e.g., Jones, Hinton, & Connaughton, 2007). However, such research has failed to utilize existing

psychological theory (Gucciardi, Gordon, & Dimmock, 2009). An exception has been the work of Clough, Earle, and Sewell (2002) who conceptualized MT from both the athlete and established psychological theory. MT in their view is a trait like construct that shares similarities with hardiness (Cobias, 1979). Hardiness is characterized by three main components: control of various life situations; commitment, being when one tends to involve him/herself in the action they are doing; and challenge, the extent to which individuals see challenges as opportunities based upon their research.

Clough *et al.* (2002) extended the work of Kobasa and added a fourth factor: confidence. This addition is consistent with the extant literature on MT, which suggests that self-confidence and the belief in one's ability is considered the most important characteristic of MT in sport (e.g., Gucciardi *et al.*, 2009 and Jones *et al.*, 2007).

Manicure, R. and Panole, S.K. (1977), in their study on "Self-confidence of adolescents in relation to their Academic achievement" revealed that there is no significant correlation between academic achievement and Self Confidence. However, significant differences were observed in the academic achievement to the high and low self-confidence groups.

The purpose of this study is to examine the mental toughness perceived by selected the National football players. A sample of twelve Malaysian footballers (current and ex-players), aged 19 to 57 years old agreed to participate. All of them have been playing in the Malaysia National Football League that consists of four former national footballers, four former state footballers and four currently active footballers. Among them, five individuals are active as a coach. A semi-structure interview scheduled was used in the research. All of the respondents have signed the informed consent letter for tape-recorded during the interviewed. The transcribed verbatim from the tapes were content analyzed by the authors to identify the themes. Results show that eight themes emerged from the interviews, which are motivation, negative energy, self-confidence, positive energy, visual and imagery control, patriotic spirit, perseverance and attention control. Almost all of the themes have been identified by previous researchers (i.e., Fourie & Potgieter, 2001; Jones, Hanton & Connoughton, 2002; 2007; and Lower, 1986), except for patriotic and perseverance. Recommendations for further research also suggested.

Lower (1986) defines mental strength as the ability to perform consistently at the optimum level during the competition when needed. There are seven (7) components of mental toughness, 1) Self-confident 2) Negative energy control 3) Focus control 4) Imagery and visualization 5) Motivation level 6) Positive energy control and 7) Cognitive and behavioral control. However, in Fourier and Potgieter (2001) study done among 131 expert coaches (in certain sports specifically) and 160 athletes from elite groups found that there are 12 components of mental toughness. The components are motivation, coping skill, confident maintenance, cognitive skill, discipline and goal directedness, competitiveness, possession of prerequisite physical and mental requirement, team unity, preparation skill, psychological hardiness and ethics.

### Definition and description of mental toughness

In fact, Gould *et al.* (1987) conducted a study in which 82% of coaches rated mental toughness as the most important psychological attribute or characteristic in determining success in wrestlers. Unfortunately, the results also showed that only 9% of those same coaches had been successful in developing mental toughness in their Athletes. "The general lack of clarity and precision surrounding the term mental toughness is unfortunate, since it is arguably one of the most important psychological attributes in achieving performance excellence" (Jones *et al.*, 2002, p. 206). Mental toughness is a term that is used daily in physical activity without a clear understanding of its meaning or components. This lack of clarity regarding the definition and the desired attributes of mental toughness has resulted in wide interpretations and confusion (Jones *et al.*). Much of the confusion is a consequence of the failure of previous literature to distinguish between mental toughness and the attributes of mental toughness (Jones *et al.*). In an attempt to address this lack of clarity, a study was done in 2002 by Jones, Hanton and Connaughton. The purpose of this study was to conduct an investigation which attempted to define and identify the key attributes of mental

toughness (Jones *et al.*). This study utilized qualitative methods in order to probe the athletes and establish detailed.

The mind-body connection is a very powerful one. For everything one thinks in the mind, the body has a reaction; regardless of whether it is real or imagined (Sugar man, 2007). Competition is tight, athletes are physically fit, and the margin for victory is slim. According to Sugar Man (2007):

Managers, coaches and players are realizing that to get ahead they need an added resource, and that resource is a trained mind. When there are two teams that are physically equal, it is the team that works together smoothly and is mentally prepared and confident that will come out on top. However, no mental training will compensate for ineffective technique. Athletes need to be strong, technically and mentally. (p. 1) 6.

Many coaches have progressed as far as they could in the physical aspects of training and are now coming to grips with and beginning to make steady headway in the mental aspects. Coaches desire a mentally tough athlete; mental toughness plays a crucial role in clutch situations (Best, 1999).

According to Creasy, et.al. (2008), the formal definition of mental toughness was described as an athlete having the natural or developed psychological edge that enables them to generally cope better than their opponents with the many demands (competition, training, lifestyle) that sport places on a performer; specifically be more consistent and better than their opponents in remaining determined, focused, confident, and in control under pressure. Mental training toughness is achieved through mental training

Athletes who demonstrate peak performance in sports follow a set of mental processes that allow them to produce excellent results consistently (Dalloway, 2008). To perform at a level that matches their potential, athletes need to understand their mental strengths and weaknesses. Consistency in performance, rate of athletic development, and the joy and sense of achievement from athletic performance and competition are enhanced by awareness of mental strengths and weaknesses. The use of mental training skills serves as powerful techniques in reaching a high level of mental toughness (Lefkowitz & McDuff, 2002).

Mental toughness is probably one of the most used but least understood terms used by sporting communities globally (Gordon, 2005). According to the existing literature regarding collegiate athletics' relationship with mental training and motivation have been most commonly associated with the concept of mental training and/or mental toughness (Creasy *et al.*, 2008; Fourier & Potgieter, 2001; Jacobin, Peter, Roper, Whitney, & Burin, 2002; Gordon, 2005; Gould, Dieffenbach, & Moffett, 2002; Hoover, 2006; Jones, Hinton, & Connaughton, 2002; Lower, 1982; Middleton, Marsh, Martin, Richards, & Perry 2004a, b, c).

The foundation of the existing literature on mental toughness dates back seven years to the study conducted by researchers Jones, Hinton, and Connaughton (2002). Ten international performers participated in focus groups or one-on-one interviews from which the definition and attributes of mental toughness emerged. Jones *et al.* (2002) defined mental toughness as having the natural or developed psychological edge that enables athletes to generally cope better than opponents with the many demands (competition, training, lifestyle) that sport places on a performer. Specifically, the purpose is to be more consistent and better than their opponents in remaining determined, focused, confident, and in control under pressure (2002). As a result of the qualitative study, a list of 12 attributes of the ideal mentally tough performer emerged:

Gould, Dieffenbachia and Moffett (2002) endeavored to define the term mental toughness by researching the psychological characteristics, and their development, of Olympic champions as. Interview data and questionnaire were both used from 10 Olympic champions (who have won 32 Olympic medals collectively), their coaches, parents/guardians and/or significant others. The following definition, similar to that of the Jones *et al.* (2002) definition, emerged as a result of the study:

Mental toughness is having the natural or developed psychological edge that enables athletes to generally cope better than opponents with the many demands (competition, training, and lifestyle) that sport places on a performer; specifically, be more consistent and better than opponents in remaining determined, focused, confident, and in control under pressure. (pg. 209)

Mental toughness is undoubtedly an important ingredient of athletic success, whether athletes are in the pool, on the field, or on the court. Some concepts addressed in the literature that are related to mental toughness include learned helplessness, dispositional optimism, self-efficacy, and resiliency. These themes were used in previous research by Cherry (2003) to develop a mental toughness questionnaire comprised of three components: Competitive desire, self-confidence, and resiliency. In this chapter, previous research on learned helplessness, dispositional optimism, self-efficacy, resiliency, and past measures of mental toughness are discussed. A number of qualitative studies have suggested that mentally tough athletes cope more effectively than less mentally tough athletes (Jones *et al.*, 2007 and Thelwellet *al.*, 2005). Indeed, the six professional soccer players in the Thelwellet *al.* (2005) study felt that being mentally tough always helped them to cope more effectively. However, it is unclear whether mentally tough athletes cope more effectively as a consequence of experiencing dissimilar stressors types, interpreting these stressors in a different way (e.g., stress intensity variations or different perceptions of control over the event), use different coping strategies, or the same coping strategies, but more effectively than athletes who are less mentally tough.

James (1890) in his "Principles of Psychology" defined self-esteem as being the sum of our successes divided by our pretensions i.e. what we think we ought to achieve. Self-esteem can be increased by achieving great successes and maintained by avoiding failures. Raised self-esteem could, he argued, also be achieved and maintained by adopting less ambitious goals. Self-esteem was therefore defined as being competence-oriented but also open to change.

## METHODOLOGY

In this chapter selection of the subjects, selection of the variables, procedure followed to collect the data were explained.

### Selection of the subjects

Forty two subjects from two colleges of physical education were selected as subjects for study. University College of Physical Education (UCPE) Karnatak University and Sree Siddagangamata Physical Education College (SCPE) were the institutions identified from Rani Channamma Univeristy and Banagalore University respectively. The students were pursuing BPEd Degree during the academic year 2014-15.

### Variables of study

Achievement motivation (html document, 2013) (annexure I), mental toughness(annexure II) developed by Goldberg (1998) and questionnaire (annexure III) formulated by Sullivan and Felts (2005) were used to test the motivation and mental toughness of the selected subject. The questionnaires were standardized questionnaires.

### Orientation of the study to Subjects

To achieve the purpose of the study subjects were oriented about the test at different stages of administration. The meaning of different words and statement in the questionnaire were explained to the subjects as and when they got they were clarified. The achievement motivation and mental toughness questionnaires were administered to the trainees at the respective colleges during the class hours by taking prior permission from the authorities.

The questionnaires were handed over to the subjects and asked to answer all the questions without omitting any question. Before collecting the questionnaires all the statements were checked whether they have answered or not. The scoring was done by the answer keys suggested by respective authors.

### The Analysis of Data



The data collected from the subjects were treated with the statistical techniques. The scores was compared by getting mean difference between two groups. 't' test scores were obtained by using SPSS package (17<sup>th</sup> Version). The results, interpretations and findings of study discussed in chapter IV.

**ANALYSIS, INTERPRETATION AND RESULTS OF STUDY**

The study was to identify the levels of motivation and mental toughness of Rani Channamma Univeristy and Banagalore University during the academic year 2014-15.

The descriptive statistics of psychological variables of UCPE and SCPE students are given in table 1.

**Table 1. DESCRIPTIVE STATISTICS OF PSYCHOLOGICAL VARIABLES OF UCPE AND SCPE PHYSICAL EDUCATION STUDENTS**

Variable	Range	Mean	Std. Deviation
UCPEMOT	8.00	12.83	1.62
SCPE Mot	11.00	10.76	2.26
UCPEMT	12.00	14.30	2.71
SCPEMT	10.00	13.83	2.41
UCPE Anger	15.00	33.73	3.74
SCPE Anger	12.00	36.40	2.92
UCPE Confusion	23.00	33.76	4.76
SCPE Confusion	17.00	36.80	3.65
UCPE Depression	17.00	35.42	3.75
SCPE Depression	22.00	33.90	4.84
UCPE Fatigue	16.00	35.02	3.98
SCPE Fatigue	23.00	33.71	4.43
UCPE Tension V	25.00	32.42	5.46
SCPE Tension V	23.00	32.54	5.14

Analysis of table one reveals that motivation levels of UCPE students average is 12.83 (SD=1.62) range was 8.00. Motivation levels of SCPE students average 10.76 (SD=2.26) range was 11.00 which speaks of normal distribution in favorable of UCPE physical education students. Analysis on mental toughness UCPE physical education students average is 14.30 (SD=2.71) range was 12.00. Mental toughness SCPE physical education students average 13.83 (SD=2.41) range was 10.00 which speaks of normal distribution in favorable of UCPE physical education students. Because range & S D was less when compare to UCPE physical education students.

Analysis of table reveals that anger UCPE physical education students average is 33.73 (SD =3.74) range was 15.00 anger SCPE physical education students average 36.40 (SD =2.92) range was 12.00 which speaks of normal distribution in favorable of UCPE physical education students, because range & SD was less when compare to UCPE physical education students.

Analysis of table reveals that confusion UCPE physical education students average is 33.76 (SD =4.76) range was 23.00. Confusion SCPE physical education students average 36.80 (SD =3.65) range was 17.00 which speaks of normal distribution in favorable of UCPE physical education students, because range &SD was less when compeer to UCPE physical education students

Analysis of table reveals that depression UCPE physical education students average is 35.42 (SD =3.75) range was 17.00 depression SCPE physical education students average 33.90 (SD =4.84) range was 22.00 which speaks of normal distribution in favorable of SCPE physical education students, because range &SD was less when compare to SCPE physical education students

Analysis of table reveals that fatigue UCPE physical education students average is 35.02 (SD =3.98) range was 16.00. Fatigue SCPE physical education students average 33.71 (SD =4.43) range was 23.00 which

speaks of normal distribution in favorable of SCPE physical education students, because range &SD was less when compare to SCPE physical education students

Analysis of table reveals that tension and vergers UCPE physical education students average is 32.42 (SD =5.46) range was 25.00. Tension and vergers SCPE physical education students average 32.54 (SD =5.14) range was 23.00 which speaks of normal distribution in favorable of UCPE physical education students, because range & SD was less when compare to UCPE physical education students.

Paired sample 't' test results are predicted in table 2.

**Table 2. PAIRED SAMPLE T TEST OF UCPE AND SCPE PHYSICAL EDUCATION STUDENTS**

VARIABLE		Paired Differences			95% Confidence Interval of the Difference		T*	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper			
Pair 1	UCPEMOT – SCPE Mot	2.07143E0	2.85753	.44093	1.18096	2.96190	4.698E0	41	.000
Pair 2	UCPEMT – SCPEMT	.47619	3.87133	.59736	-.73020	1.68258	.797	41	.430
Pair 3	UCPE Anger – SCPE Anger	-2.66667E0	5.17342	.79828	-4.27882	-1.05452	-3.341E0	41	.002
Pair 4	UCPE Confusion – SCPE Confusion	-3.04762E0	6.34747	.97944	-5.02563	-1.06961	-3.112E0	41	.003
Pair 5	UCPE Depression – CPE Depression	1.52381E0	6.10173	.94152	-.37762	3.42524	1.618E0	41	.113
Pair 6	UCPE Fatigue – SCPE Fatigue	1.30952E0	6.38400	.98507	-.67987	3.29892	1.329E0	41	.191
Pair 7	UCPE Tension V – SCPE Tension V	-.11905	6.66700	1.02874	-2.19663	1.95854	-.116	41	.908

't' ratio table value- 2.0 at 0.05 level of significance

Analysis of table two reveals that the physical education students of both the colleges differed significantly in achievement motivation and two sub-variables of there was no significant difference between two college students in mental toughness variable. Introspection of the results depict that the achievement motivation of UCPE students (mean=12.83) was at higher level when compared to SCPE students (mean=10.76). 't'=4.69 value is higher than the table value and hence it was significant.

This is quite natural that the university college has got better system of students' entry into the course than private organization. Mores ever, the faculty, the facilities at Karnatak University are better when compared to SCPE college faculty. Most of the faculty of the university is with doctorate degree holders with lots of experience in the field. Whereas, SCPE faculty are young and upcoming needs lots of experience in the field. This may be the indirect cause for better achievement motivation levels of UCPE students.

The encouragement of staff in both the colleges seems to be very good and both the colleges students had almost similar levels of mental toughness and hence the 't' valued obtained was insignificant in respect of this psychological variable.

In both the variables the UCPE students were better psychologically balanced than SCPE students. Again the aforesaid reasons would give probable answer to the fact. When the students are satisfied with their college as regard their learning process, when their requirements are fulfilled they will not worry much

regarding their studies. If any disturbances are there then only they start expressing their anger or sometimes they are confused.

The results clearly depicts that there is no differences in mental toughness variable of UCPE and SCPE college students. There was a significant difference in achievement motivation levels of both the groups of study. Overall variable showed no significant difference between UCPE and SCPE college students, whereas, anger and confusion sub variables did differ significantly with that of UCPE and SCPE students and UCPE students had better control over their anger and they were less confused when compared to SCPE students.

## **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

### **SUMMARY**

The purpose of this study was to evaluate and compare the selected psychological variables this purpose the investigation was conducted on (42) forty two Rani Channamma Univeristy and Banagalore University.

The standard questionnaire of motivation and mental toughness was used for the collection of the data .The data thus collected was statistically treated by t-test to know the significant differences between means.

### **FINDINGS**

The results clearly depicts that there is no differences in mental toughness variable of UCPE and SCPE college students. There was a significant difference in achievement motivation levels of both the groups of study. Overall variable showed no significant difference between UCPE and SCPE college students, whereas, anger and confusion sub variables did differ significantly with that of UCPE and SCPE students and UCPE students had better control over their anger and they were less confused when compared to SCPE students.

### **CONCLUSIONS**

The following conclusions may be drawn from the result presented in the previous chapter, On the basis of the finding of the study.

The present study examined the motivational characteristics of students involved in physical education at the upper elementary school level. We clearly identifies representative of a highly intrinsically motivated group and a low intrinsically and extrinsically motivated group, significant differences were found between these two profiles in enjoyment.

- There was significant difference in motivation levels between UCPE and SCPE college physical education students.
- There was no significant difference in mental toughness between UCPE and SCPE college physical education students.
- Overall variable showed no significant difference between UCPE and SCPE college students, whereas, anger and confusion sub variables did differ significantly with that of UCPE and SCPE students and UCPE students had better control over their anger and they were less confused when compared to SCPE students.

### **RECOMMENDATIONS**

On the basis of the present research and findings, of the study, below mentioned recommendation are made.

1. It is recommended that similar study may be conducted to deferent age groups
2. Same study may be conducted on larger sample
3. The same study may be conducted on the students who were not considered in this study.

4. Similar study may be conducted deferent levels.

#### BIBLIOGRAPHY

- <http://dx.doi.org/10.1016/j.ypped.2003.12.007>, How to Cite or Link Using DOI
- <http://heb.sagepub.com/content/26/1/12.short>
- <http://heb.sagepub.com/content/26/1/72.short>
- <http://her.oxfordjournals.org/content/3/3/283.short>
- [http://journals.lww.com/nursingresearchonline/Abstract/1998/05000/Older\\_Adults\\_and\\_Exercise\\_\\_Pat\\_h\\_Analysis\\_of.9.aspx](http://journals.lww.com/nursingresearchonline/Abstract/1998/05000/Older_Adults_and_Exercise__Pat_h_Analysis_of.9.aspx)
- <http://ozgurzan.com/management/management-theories/theories-about-motivation/>
- <http://psychogerontology.oxfordjournals.org/content/51B/4/S183.short>
- <http://serc.carleton.edu/NAGTWorkshops/affective/efficacy.html>
- <http://www.cabdirect.org/abstracts/19981813020.html;jsessionid=91B1C9F1B7A8304950668EC034226BF6?gitCommit=4.13.29>
- <http://www.eqp.com/pubs/rb/articles/mentaltoughness.php>
- <http://www.gifted.uconn.edu/siegle/selfefficacy/section1.html>
- <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2435261>
- <http://www.psychosomaticmedicine.org/content/60/4/473.short>
- <http://www.tandfonline.com/doi/abs/10.1080/02701367.2001.10608931>
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