



RESEARCH ARTICLE

A COMPARATIVE STUDY OF SWIMMERS, RUNNERS, CYCLISTS AND TRIATHLETES
ON SPORTS MOTIVATION SCALE

*Dr. Kshetrimayum Rojeet Singh

Department of Physical Education, Rajiv Gandhi University, Rono Hills, Doimukh, Arunachal Pradesh, India

ARTICLE INFO

Article History:

Received 26th July, 2017

Received in revised form

06th August, 2017

Accepted 20th September, 2017

Published online 17th October, 2017

Key words:

Sports motivation,
Triathletes,
Runners,
Cyclists,
Swimmers,
Intrinsic Motivation to Know (imtk),
Intrinsic Motivation to Accomplish (imta),
Intrinsic Motivation to Experience
Stimulation (imtes),
Extrinsic Motivation Identification (emi),
Extrinsic Motivation Introjection (emij),
Extrinsic Motivation External Regulation
(emer) and Amotivation (am).

ABSTRACT

The objective of the present study is to compare the junior swimmers, runners, cyclists and triathletes on sports motivation scale and to assess which sports is more motivated among the selected sports.

Method: 80 National junior boys' swimmers (20), runners (cross country runners - 20), cyclists (20) and triathletes (20) were selected for the purpose of the study from Manipur, Pune, Madhya Pradesh, Delhi and Assam. The age of the athletes were ranged from 15 to 19 years. And to assess the level of motivation in the participation of sports by the athletes the sports motivation scale (28 SMS) questionnaire by Pelletier *et al.* (1995) was used. The descriptive statistics such as mean, standard deviation, std. error mean etc. was used and for the comparison between the sports on the factor of SMS the one way analysis of variance (ANOVA) was used.

Results: The mean and standard deviation of the factors of sport motivation for triathletes, runners, cyclists and swimmers are Intrinsic motivation to know (IMTK) (24.45 ± 2.46), (23.55 ± 3.40), (20.3 ± 5.06) and (18.45 ± 2.77), Intrinsic motivation to accomplish (IMTA) (23 ± 2.78), (20.75 ± 5.15), (20.85 ± 3.89) and (18.7 ± 3.80), Intrinsic motivation to experience stimulation (IMTES) (22.8 ± 4.05), (23.85 ± 4.23), (20.45 ± 4.10) and (17.9 ± 3.81), Extrinsic motivation identification (EMI) (22.2 ± 4.47), (21.15 ± 4.38), (20.55 ± 4.57) and (17.7 ± 4.75), Extrinsic motivation Introjection (EMIJ) (22.3 ± 4.12), (21.6 ± 5.83), (20.3 ± 4.53) and (18.45 ± 4.21), Extrinsic motivation external regulation (EMER) (22.45 ± 3.63), (20.1 ± 5.08), (19.75 ± 5.08) and (18.15 ± 4.27) and Amotivation (AM) (21.05 ± 4.08), (22.4 ± 4.16), (20.05 ± 4.32) and (17.3 ± 3.45) respectively. The ANOVA result shows that the p-value of the factors of the sports motivation of the selected athletes was less than 0.05 and hence the F- value is significant at 5 % level. Since the ANOVA results was significant so the Post hoc Comparison of Means was applying by using LSD Test and the results shows that there exists a significant difference in the different factors in between triathletes and cyclists (p = .000), triathletes and swimmers (p = .000), runners and cyclists (p = .005) and runners and swimmers (p = .000) in IMTK, triathletes and swimmers (p = .001) in IMTA, triathletes and swimmers (p = .000) runners and cyclists (p = .010) runners and swimmers (p = .000) and cyclists and swimmers (p = .050) in IMTES, triathletes and swimmers (p = .002) and runners and swimmers (p = .019) in EMI, triathletes and swimmers (p = .012) and runners and swimmers (p = .038) in EMIJ, triathletes and swimmers (p = .004) in EMER and triathletes and swimmers (p = .004), runners and cyclists (p = .000) and cyclists and swimmers (p = .034) in AM as their obtained p-values were less than 0.05 (p < .05). This implies that in spite of similarities in nature of events there exist differences, or there are special requirements for participation in these sports. The existence of similarities in between these four sports is prevalent in triathletes and runners (p = .427) in IMTK, triathletes and runners (p = .079), triathletes and cyclists (p = .093), runners and cyclists (p = .937), runners and swimmers (p = .108) and cyclists and swimmers (p = .093) in IMTA, triathletes and runners (p = .414) and triathletes and cyclists (p = .070) in IMTES, triathletes and runners (p = .467), triathletes and cyclists (p = .254), runners and cyclists (p = .677) and cyclists and swimmers (p = .051) in EMI, triathletes and runners (p = .641), triathletes and cyclists (p = .185), runners and cyclists (p = .387) and cyclists and swimmers (p = .219) in EMIJ, triathletes and runners (p = .107) triathletes and cyclists (p = .065) runners and cyclists (p = .809), runners and swimmers (p = .180) and cyclists and swimmers (p = .270) in EMER and triathletes and runners (p = .291), triathletes and cyclists (p = .434) and runners and cyclists (p = .068) in AM as their obtained p-values were greater than .05 (p > .05).

Conclusion: It must be noted that the present research was solely comparison in nature and that future studies would be needed to assess how athletes actually interpret behavior in competitive sports situations. Elaboration of this information could be potentially useful to coaches and athletes in order to optimize the experience of participants in sport and exercise activities.

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Citation: Dr. Kshetrimayum Rojeet Singh, 2017. "A comparative study of swimmers, runners, cyclists and triathletes on sports motivation scale", *International Journal of Current Research*, 9, (10), 59029-59035.

INTRODUCTION

Stay motivated and setting a strong goals and targets is necessary for all the athletes and are contributing for prediction

*Corresponding author: Dr. Kshetrimayum Rojeet Singh,
Department of Physical Education, Rajiv Gandhi University, Rono Hills,
Doimukh, Arunachal Pradesh, India.

of performance for athletes (Wielinga *et al.*, 2011). An exercise program stressing the components of muscular endurance and muscular strength increases self-concept. Physical exercise has been linked to good mental health and positive self-concepts (James, 1982). Most of the coaches

trained their triathletes through vigorous and various training methods for success but mental skill is also an important aspect to develop confidence, positive thought, motivated and focused which help to achieve the target goals (Friel, 2009). Athletes are more enjoying and motivated during endurance training or workout by listening to music and can help to keep up goal high in their self (Wijnalda, 2005). Austin *et al.* (2012) state that if the body is strong but the mind is weak, all physical gains are lost. Ruggedness, courage, intelligence, exuberance, buoyancies, emotional adjustment, optimism, conscientiousness, alertness, loyalty and respect for authority are Characteristics of the great athletes. Successful athletes did indeed possess more positive mental health characteristics and fewer negative mental health characteristics than the general population. Successful athletes were above the waterline (population norm) on vigor, but below the surface on the more negative moods of tension, depression, anger, fatigue and confusion. But little evidence exists to support the existence of a given athletic personality type, a personality profile that separates elite athletes from the rest of athletes or specific personality types associated with specific activities (Gill, 1986). Perfectionist personal standards develop the goals setting and also help athletes to achieve their best possible performance (Stoeber *et al.*, 2009).

Triathlon having a combination of three individual sports such as swimming, cycling and running there are various factors that interact to determine performance like physical, physiological and psychological factors. Factors such as course difficulty, training volume, age and gender, personality trait are widely accepted for determining success in most of the sports. As this factor are required mostly in endurance events, lack of this personality sometime athletes feel frustration due to overcoming by fatigue and leave the races in between (Galloway, 2012). Many coaches and triathletes believed that mental skills are the key to success in the triathlon competitions (Grand, 2004). Mental fitness as well as physical and technical aspects developed the attention of cyclist (Wielinga *et al.*, 2011). Athletes seeking to improve performance can benefit from using imagery scripts that help them mentally rehearse a task before actually engaging in the task itself. With practice, individuals can increase their ability to use imagery, which can result in working smarter, rather than harder when strength training (Richter *et al.*, 2012).

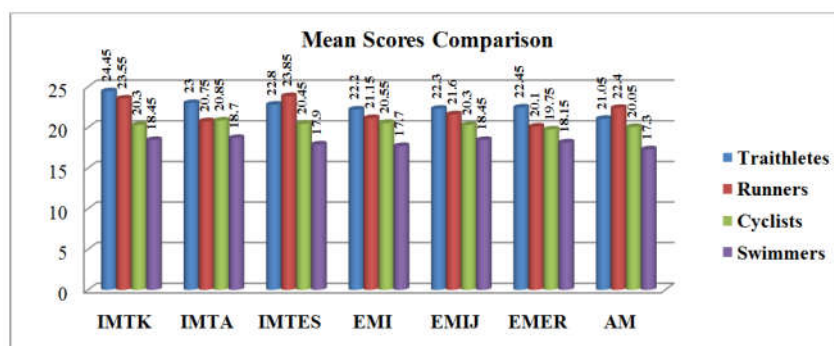
endurance sport. Although each of the three disciplines in triathlon offer unique training challenges, some basic physiological principles can be applied to swimming, cycling and running (Friel, 2013). There are five main factors that contribute to fitness in triathlon- aerobic threshold, endurance, nutrition, economy, strength and recovery, but it should be in balanced. A triathlete can improve performance by identifying weakness by comparing with elite road cyclist, marathon runners as well as long distance swimmers (Kleanthous, 2013). So it is very important to know the characteristic of cyclists, runners and swimmers and the motivation of participating in the selected sports. And the present study is to find out the motivational level of the selected sports and to find out which sports is more motivated among the selected sports.

MATERIALS AND METHODS

80 National junior boys' swimmers (20), runners (cross country runners - 20), cyclists (20) and triathletes (20) were selected for the purpose of the study from Manipur, Pune, Madhya Pradesh, Delhi and Assam. The age of the athletes were ranged from 15 to 19 years. And to assess the level of motivation in the participation of sports by the athletes the sports motivation scale (28 SMS) questionnaire by Pelletier *et al.* (1995) was used. The descriptive statistics such as mean, standard deviation, std. error mean etc. was used and for the comparison between the sports on the factor of SMS the one way analysis of variance (ANOVA) was used.

RESULTS

To compare the sports motivation among the selected athletes, the one way analysis of variance was applied and data pertaining to these have been presented in Table 2. The ANOVA result shows that the p-value of the factors of the sports motivation of the selected athletes is less than 0.05 and hence the F- value is significant at 5 % level. In order to determine which groups differs significantly, the post hoc mean comparison was obtained by applying LSD Test. The Post hoc Comparison of Means was applying by using LSD Test and the results shows that there exists a significant difference in the different factors in between triathletes and cyclists ($p = .000$), triathletes and swimmers ($p = .000$),



Intrinsic Motivation to Know (IMTK), Intrinsic Motivation to Accomplish (IMTA), Intrinsic Motivation to Experience Stimulation (IMTES), Extrinsic Motivation Identification (EMI), Extrinsic Motivation Introjection (EMIJ), Extrinsic Motivation External Regulation (EMER) and Amotivation (AM)

Figure 1. Comparison of mean scores of the various factors of sport motivation scale in pie diagram chart

Factors such as motivation, will power, concentration, anxiety and determination have a decisive influence on developing profile for elite athletes (Wielinga *et al.*, 2011). The sport of triathlon presents a unique physiological challenge in

runners and cyclists ($p = .005$) and runners and swimmers ($p = .000$) in IMTK, triathletes and swimmers ($p = .001$) in IMTA, triathletes and swimmers ($p = .000$) runners and cyclists ($p = .010$) runners and swimmers ($p = .000$) and cyclists and

Table 1. Descriptive Statistics of selected athletes on various factors of sports motivation scale

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min.	Max.	
					Lower Bound	Upper Bound			
IMTK	Traithletes	20	24.45	2.46	0.55	23.30	25.60	20	28
	Runners	20	23.55	3.40	0.76	21.97	25.14	15	28
	Cyclists	20	20.3	5.06	1.13	17.93	22.67	10	28
	Swimmers	20	18.45	2.77	0.62	17.15	19.74	12	24
	Total	80	21.69	4.27	0.48	20.73	22.64	10	28
IMTA	Traithletes	20	23	2.78	0.62	21.70	24.30	17	28
	Runners	20	20.75	5.15	1.15	18.34	23.16	12	28
	Cyclists	20	20.85	3.89	0.87	19.03	22.67	13	27
	Swimmers	20	18.7	3.80	0.85	16.92	20.48	12	25
	Total	80	20.83	4.20	0.47	19.89	21.76	12	28
IMTES	Traithletes	20	22.8	4.05	0.90	20.90	24.69	12	28
	Runners	20	23.85	4.23	0.94	21.87	25.83	15	28
	Cyclists	20	20.45	4.10	0.91	18.53	22.37	11	28
	Swimmers	20	17.9	3.81	0.85	16.11	19.68	13	26
	Total	80	21.25	4.60	0.51	20.22	22.27	11	28
EMI	Traithletes	20	22.2	4.47	0.99	20.10	24.29	13	28
	Runners	20	21.15	4.38	0.98	19.10	23.20	10	27
	Cyclists	20	20.55	4.57	1.02	18.41	22.69	14	28
	Swimmers	20	17.7	4.75	1.06	15.48	19.92	9	27
	Total	80	20.4	4.76	0.53	19.34	21.46	9	28
EMIJ	Traithletes	20	22.3	4.12	0.92	20.37	24.23	13	28
	Runners	20	21.6	5.83	1.30	18.87	24.33	10	28
	Cyclists	20	20.3	4.53	1.01	18.18	22.42	13	28
	Swimmers	20	18.45	4.21	0.94	16.48	20.42	11	26
	Total	80	20.67	4.86	0.54	19.58	21.74	10	28
EMER	Traithletes	20	22.45	3.63	0.81	20.75	24.15	14	28
	Runners	20	20.1	5.08	1.13	17.72	22.48	10	28
	Cyclists	20	19.75	5.08	1.13	17.37	22.13	10	27
	Swimmers	20	18.15	4.27	0.95	16.15	20.15	11	26
	Total	80	20.11	4.73	0.53	19.06	21.16	10	28
AM	Traithletes	20	21.05	4.08	0.91	19.14	22.96	14	28
	Runners	20	22.4	4.16	0.93	20.45	24.35	13	28
	Cyclists	20	20.05	4.32	0.97	18.03	22.07	12	26
	Swimmers	20	17.3	3.45	0.77	15.69	18.91	11	24
	Total	80	20.2	4.37	0.49	19.22	21.17	11	28

The mean and standard deviation of the factors of sport motivation for triathletes, runners, cyclists and swimmers are **IMTK** (24.45 ± 2.46), (23.55 ± 3.40), (20.3 ± 5.06) and (18.45 ± 2.77), **IMTA** (23 ± 2.78), (20.75 ± 5.15), (20.85 ± 3.89) and (18.7 ± 3.80), **IMTES** (22.8 ± 4.05), (23.85 ± 4.23), (20.45 ± 4.10) and (17.9 ± 3.81), **EMI** (22.2 ± 4.47), (21.15 ± 4.38), (20.55 ± 4.57) and (17.7 ± 4.75), **EMIJ** (22.3 ± 4.12), (21.6 ± 5.83), (20.3 ± 4.53) and (18.45 ± 4.21), **EMER** (22.45 ± 3.63), (20.1 ± 5.08), (19.75 ± 5.08) and (18.15 ± 4.27) and **AM** (21.05 ± 4.08), (22.4 ± 4.16), (20.05 ± 4.32) and (17.3 ± 3.45) respectively.

Table 2. Comparison of selected athletes by applying one way analysis of variance

		Sum of Squares	df	Mean Square	F	Sig.
IMTK	Between Groups	470.14	3	156.71	12.341	.000*
	Within Groups	965.05	76	12.70		
	Total	1435.19	79			
IMTA	Between Groups	185.05	3	61.68	3.873	.012*
	Within Groups	1210.50	76	15.93		
	Total	1395.55	79			
IMTES	Between Groups	420.50	3	140.17	8.560	.000*
	Within Groups	1244.50	76	16.38		
	Total	1665.00	79			
EMI	Between Groups	222.30	3	74.10	3.590	.017*
	Within Groups	1568.90	76	20.64		
	Total	1791.20	79			
EMIJ	Between Groups	171.74	3	57.25	2.565	.061
	Within Groups	1696.15	76	22.32		
	Total	1867.89	79			
EMER	Between Groups	188.94	3	62.98	3.035	.034*
	Within Groups	1577.05	76	20.75		
	Total	1765.99	79			
AM	Between Groups	279.90	3	93.30	5.779	.001*
	Within Groups	1226.90	76	16.14		
	Total	1506.80	79			

* The mean difference is significant at the 0.05 level

swimmers ($p = .050$) in IMTES, triathletes and swimmers ($p = .002$) and runners and swimmers ($p = .019$) in EMI, triathletes and swimmers ($p = .012$) and runners and swimmers ($p = .038$) in EMIJ, triathletes and swimmers ($p = .004$) in EMER and triathletes and swimmers ($p = .004$), runners and cyclists ($p = .000$) and cyclists and swimmers ($p = .034$) in AM as their obtained p -values were less than 0.05 ($p < .05$). This implies

that in spite of similarities in nature of events there exist differences, or there are special requirements for participation in these sports. The existence of similarities in between these four sports is prevalent in triathletes and runners ($p = .427$) in IMTK, triathletes and runners ($p = .079$), triathletes and cyclists ($p = .093$), runners and cyclists ($p = .937$), runners and swimmers ($p = .108$) and cyclists and swimmers ($p = .093$) in

IMTA, triathletes and runners ($p = .414$) and triathletes and cyclists ($p = .070$) in IMTES, triathletes and runners ($p = .467$), triathletes and cyclists ($p = .254$), runners and cyclists ($p = .677$) and cyclists and swimmers ($p = .051$) in EMI, triathletes and runners ($p = .641$), triathletes and cyclists ($p = .185$), runners and cyclists ($p = .387$) and cyclists and swimmers ($p =$

$.219$) in EMIJ, triathletes and runners ($p = .107$) triathletes and cyclists ($p = .065$) runners and cyclists ($p = .809$), runners and swimmers ($p = .180$) and cyclists and swimmers ($p = .270$) in EMER and triathletes and runners ($p = .291$), triathletes and cyclists ($p = .434$) and runners and cyclists ($p = .068$) in AM as their obtained p -values were greater than $.05$ ($p > .05$).


Table 3. Post hoc Comparison of Means by using LSD Test

Dependent Variable	(I) GROUPS	(J) GROUPS	Mean Difference (I-J)	Std. Error	Sig.
IMTK	Triathletes	Runners	0.90	1.13	.427
		Cyclists	4.15*	1.13	.000*
		Swimmers	6.00*	1.13	.000*
	Runners	Cyclists	3.25*	1.13	.005*
		Swimmers	5.10*	1.13	.000*
		Swimmers	1.85	1.13	.105
IMTA	Triathletes	Runners	2.25	1.26	.079
		Cyclists	2.15	1.26	.093
		Swimmers	4.30*	1.26	.001*
	Runners	Cyclists	-0.10	1.26	.937
		Swimmers	2.05	1.26	.108
		Swimmers	2.15	1.26	.093
IMTES	Triathletes	Runners	-1.05	1.28	.414
		Cyclists	2.35	1.28	.070
		Swimmers	4.90*	1.28	.000*
	Runners	Cyclists	3.40*	1.28	.010*
		Swimmers	5.95*	1.28	.000*
		Swimmers	2.55*	1.28	.050*
EMI	Triathletes	Runners	1.05	1.44	.467
		Cyclists	1.65	1.44	.254
		Swimmers	4.50*	1.44	.002*
	Runners	Cyclists	0.60	1.44	.677
		Swimmers	3.45*	1.44	.019*
		Swimmers	2.85	1.44	.051
EMIJ	Triathletes	Runners	0.70	1.49	.641
		Cyclists	2.00	1.49	.185
		Swimmers	3.850*	1.49	.012*
	Runners	Cyclists	1.30	1.49	.387
		Swimmers	3.15*	1.49	.038*
		Swimmers	1.85	1.49	.219
EMER	Triathletes	Runners	2.35	1.44	.107
		Cyclists	2.70	1.44	.065
		Swimmers	4.30*	1.44	.004*
	Runners	Cyclists	0.35	1.44	.809
		Swimmers	1.95	1.44	.180
		Swimmers	1.60	1.44	.270
AM	Triathletes	Runners	-1.35	1.27	.291
		Cyclists	1.00	1.27	.434
		Swimmers	3.75*	1.27	.004*
	Runners	Cyclists	2.35	1.27	.068
		Swimmers	5.10*	1.27	.000*
		Swimmers	2.75*	1.27	.034*

* The mean difference is significant at the 0.05 level


Mean of the groups with graphics on Intrinsic Motivation to Know (IMTK)

Traithletes	Runners	Cyclists	Swimmers
24.45	23.55	20.30	18.45

“”Represent no significant-difference between the means at 5 % level.

Mean of the groups with graphics on Intrinsic Motivation to Accomplish (IMTA)

Traithletes	Runners	Cyclists	Swimmers
23	20.75	20.85	18.70

“”Represent no significant-difference between the means at 5 % level.

Mean of the groups with graphics on Intrinsic Motivation to Experience Stimulation (IMTES)

Traithletes	Runners	Cyclists	Swimmers
22.80	23.85	20.45	17.90

“ ”Represent no significant-difference between the means at 5 % level.

Mean of the groups with graphics on Extrinsic Motivation Identification (EMI)

Traithletes	Runners	Cyclists	Swimmers
22.20	21.15	20.55	17.70

“ ”Represent no significant-difference between the means at 5 % level.

Mean of the groups with graphics on Extrinsic Motivation Introjection (EMLJ)

Traithletes	Runners	Cyclists	Swimmers
22.30	21.60	20.30	18.45

“ ”Represent no significant-difference between the means at 5 % level.

Mean of the groups with graphics on Extrinsic Motivation External Regulation (EMER)

Traithletes	Runners	Cyclists	Swimmers
22.45	20.10	19.75	18.15

“ ”Represent no significant-difference between the means at 5 % level.

Mean of the groups with graphics on Amotivation (AM)

Traithletes	Runners	Cyclists	Swimmers
21.05	22.40	20.05	17.30

“ ”Represent no significant-difference between the means at 5 % level.

DISCUSSION

When individuals freely participate in the activities or sports without the presence of external pressures, athletes are fulfilling the need of autonomy. At a challenging skill level, an individual will develop ability and confidence. The increased perception of competence and self determination creates a state of intrinsic motivation (Ryan, 1991). Wielinga *et al.* (2011) in their study stated that factors such as motivation, will power, concentration, anxiety and determination have a decisive influence on developing profile for elite athletes. Self determination theory is built on the presumption that human behavior is motivated by three primary psychological needs: autonomy, competence and relatedness with others (Ryan, R. M., 1991; Ryan & Deci, 2000). The first level of regulation is external regulation. At the external level behavior is directly and externally controlled or coerced. At the second level, interjected regulation, the formerly external control has been internalized to the extent that the individual's desire to gain social approval and avoid disapproval motivates behavior. The next level, identified regulation is characterized by a higher level of internalization and self-determination. In identified regulation, the individual is motivated through interests,

abilities and desire to achieve self-initiated goals (Frederick-Recascino and Schuster-Smith, 2003). Frederick and Ryan (1993) found that intrinsic motivation correlated positively with greater number of hours and days per week of participation in an exercise or sport activity, as well as with higher levels of perceived satisfaction and competence for the activity. On the other hand, extrinsic motivation is positively related to anxiety, while negatively relating to self-esteem. The motivational differences, that leads to differential levels of participation and psychological outcomes for sports participation rather than vice versa (Frederick-Recascino & Schuster-Smith, 2003). The level of competitiveness was correlated positively with both intrinsic and extrinsic participation motives. Regardless of group, high sport competitiveness was positively related to intrinsic sports motives (Frederick-Recascino & Schuster-Smith, 2003). Might be this reason the similarities exists in between triathletes and runners in all the factors of sports motivation.

Sports based competitiveness is positively related to the higher level of intrinsic motivation. Competition exists both within sporting environments and in other life domains (Frederick-Recascino *et al.*, 2003). McAuley and Tammen (1989) study

show that individual's high in perceived success showed higher levels of competence and enjoyment in a competitive sport activity. So might be triathletes are more competitive in nature or in triathlon event only free style swimming is there and then cycling for 40 km and running of 10 km and moreover is an endurance sport and doesn't need much technique like swimming events. Fortier, Vallerand, Briere & Provencher (1995) also stated that the competitive athletes exhibited lower levels of intrinsic motivation might be these reason the significant differences exists in between triathletes and swimmers and scored less than the triathletes in all the factors of Intrinsic Motivation i.e., Intrinsic Motivation to Know, Intrinsic Motivation to Accomplish, Intrinsic Motivation to Experience Stimulation. Athlete's levels of motivation can be affected by aspects of the participation environment, such as feedback received after performance, or reward structure of the activity (Vallerand and Losier, 1999). Outcome oriented individuals adopt a more extrinsic motivational orientation (Frederick-Recascino and Schuster-Smith, 2003). And the present study shows that triathletes are bit higher scored than the swimmers in all the factors of extrinsic motivation. These shows, swimmers are more motivated while performance is down and practicing hard to get goals without much thinking about the rewards and praise. When an individual is choice fully participate or engage in a sport at the optimal level difficulty, he or she feels challenged and efficacious. These feeling of competence and autonomy may motivate an athlete to ride countless circles around a cycling track to learn perfect cornering form, or to practice a sport for many hours a week with no apparent reward (Vallerand and Losier, 1999). Likewise triathletes and cyclists exists similarities in the factors of sports motivation i.e., Intrinsic Motivation to Accomplish, Intrinsic Motivation to Experience Stimulation, Extrinsic Motivation Identification, Extrinsic Motivation Introjection, Extrinsic Motivation External Regulation and Amotivation. It is predicted that cyclists in a direct competitive situation would show lower levels of intrinsic motivation, than other activities. Regardless of activity type, it is further predicted that high level of both sports and global competitiveness would correlate negatively with intrinsic motivation and positively with extrinsic motivation (Frederick-Recascino and Schuster-Smith, 2003). This might be the reason the significant difference exist in between triathletes and cyclists in only Intrinsic Motivation to Know factor. And concluded that triathletes are bit higher scored than the cyclists. There is similarities exists in between runners and cyclists in the factors like Intrinsic Motivation to Accomplish, Extrinsic Motivation Identification, Extrinsic Motivation Introjection, Extrinsic Motivation External Regulation and Amotivation. But there is lack of critical literature to support the results of the present studies so the researcher cannot bring any conclusion why the runners and cyclists having similarities in the factors of the sports motivation. Chandler and Connell, 1987; Ryan and Connell (1989) express that engagement does not always begin with intrinsic motivation. When activities are not freely chosen or challenging, they are said to be extrinsic motivation. Much of human behavior begins with an extrinsic focus and move towards greater self-regulation. Extrinsically motivated behavior can move through three level of internalization, occurring as an individual becomes increasingly self-determined. So might be this reason runners having higher scores and significant differences exist in Intrinsic Motivation to Know and Intrinsic Motivation to Experience Stimulation than cyclists. Similarly, swimmers are also scoring low in

Extrinsic Motivation Identification, Extrinsic Motivation Introjection, Amotivation, Intrinsic Motivation to Know and Intrinsic Motivation to Experience Stimulation than runners. And similarities exist in between runners and swimmers in Intrinsic Motivation to Accomplishment and Extrinsic Motivation External Regulation.

But there is lack of critical literature to support the results of the present studies so the researcher cannot bring any conclusion why the runners and swimmers having differences and similarities in the factors of the sports motivation. Same as between swimmers and cyclists their similarities exists in Intrinsic Motivation to Know, Intrinsic Motivation to Accomplish, Extrinsic Motivation Identification, Extrinsic Motivation Introjection and Extrinsic Motivation External Regulation. The critical literature is very limited to support the result of the present study. And last but not the least the significant differences exist in between cyclists and swimmers in Intrinsic Motivation to Experience Stimulation and Amotivation. And concluded that cyclists are bit higher scored than the swimmers. This means swimmers are more motivated while performance is down. Individuals who are task oriented focus on the challenge and process of the competitive event, and are typically able to maintain their intrinsic motivation. Task oriented individual's gives important to the feeling and experiences their activity engagement provides to them, regardless of outcome. It is predicted that cyclists in a direct competitive situation would show lower levels of intrinsic motivation, than other activities. Regardless of activity type, it is further predicted that high level of both sports and global competitiveness would correlate negatively with intrinsic motivation and positively with extrinsic motivation. Outcome oriented individuals adopt a more extrinsic motivational orientation (Frederick-Recascino and Schuster-Smith, 2003). These might be the proper result for cyclists are bit better in score of amotivation. The results of the present study imply that competition within a sport environment relates to motivation differently than does a dispositional competitive attitude. Elaboration of this information could be potentially useful to coaches and athletes in order to optimize the experience of participants in sport and exercise activities (Frederick-Recascino and Schuster-Smith, 2003).

Conclusion

Triathletes and runners are very similar in all the factors of sports motivation. Triathletes and cyclists are also almost similar in all the factors except in Intrinsic Motivation to Know. Triathletes and swimmers are differences in the intrinsic motivation as well as extrinsic motivation and amotivation and triathletes are scoring more scores than swimmers in all the factors. Runners and swimmers also differences in all the factors except in Intrinsic Motivation to Accomplish and Extrinsic Motivation External Regulation. Runners and cyclists similar in almost all the factors except in Intrinsic Motivation to Know and Intrinsic Motivation to Experience Stimulation. And Cyclists and swimmer are also almost similar in all the factors except in Intrinsic Motivation to Experience Stimulation and Amotivation. These might be because of the nature of events are different and triathlon being a combination of three events so might be always desire to know something new to improve their skill of technique from other counterpart like swimming, cycling and running events. So triathletes are scoring little higher than the others sports in

intrinsic motivation except in Intrinsic Motivation to Experience Stimulation by runners. It must be noted that the present research was solely comparison in nature and that future studies would be needed to assess how athletes actually interpret behavior in competitive sports situations. Elaboration of this information could be potentially useful to coaches and athletes in order to optimize the experience of participants in sport and exercise activities.

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