How to Cite:
Charag, A. S. (2021). Relationship of self confidence with intercollegiate sprinters performance. *International Journal of Economic Perspectives*, *15*(1), 154–161. Retrieved from https://ijeponline.org/index.php/journal/article/view/36

Relationship of Self Confidence with Intercollegiate Sprinters Performance

Ajit Singh Charag
Associate Professor Swami Shukdevanand (PG) College, Shahjahanpur, U.P, India

***Abstract*---**The purpose of the study was to determine the relationship between self-confidence and intercollegiate sprinters performance. To achieve the purpose 30 participants of final sprint events of the MJP Rohilkhand University Intercollegiate athletic meet, held at Bareilly, Uttar Pradesh, 2018 were selected. The age of the subjects was ranged from 18 to 25 years. A questionnaire by Rainer Marten (CSAI-2) was used to collect data about the level of pre-competition anxiety. The CSAI-2 was scored by computing a total score ranging from a low of 9 to a high of 36. The collected data were analyzed by using Pearson's Product Moment Correlation. The result of the study showed that self-confidence (r=0.482) was significantly related to the performance at 0.05 level of significance since obtaining the value of co-efficient correlation is greater than the tabulated value (r=0.361). It is concluded that self-confidence is having a positive relationship with the performance of sprinters.

***Keywords*---**anxiety, cognitive, competition, performance, CSAI-2.

Introduction

Modern competitive sports of today demand more emphasis on the training of psychological aspects of sports. The high-level performance seen in competitive sports is nothing but a perfect optimum harmonious relationship between one's psychological preparedness and technical preparation. The cognitive process can affect the athlete's skill performance regardless of whether they are in the beginner, an intermediate or advanced state of learning (Stoeber et al., 2007; Koivula et al., 2002). These processes are imagery, memory, attention, anticipation, and perception of skill. These are more related to the athlete's perceived ability. It is believed that superior athletic performance has been fitted from knowledge about the psychology and bio-mechanics of human motor activity. However many coaches and psychologists throughout the world believe that future records will be broken primarily because of increased attention to

***Corresponding author**: Charag, A. S., Email: ajitcharag@gmail.com*
Submitted: 27 July 2021, Revised: 18 August 2021, Accepted: 05 September 2021

psychological parameters of human personality (Berger & Owen, 1987; Smith et al., 2001; Cratty, 1968).

Speed plays a vital role in all games and sports but plays a very dominant role for sprinters to perform. He must possess acceleration speed, speed of movement, and reaction time. Even though these four components, of speed, affect the performance of sprinters yet the contribution made by reaction time to enhance speed performance is still not very certain. There is no doubt regarding the contribution of acceleration speed, sprinting speed & speed of movement to bring about better performance on the part of sprinters. Therefore to attain optimum performance in activities where speed is the main factor, acceleration speed, sprinting speed, speed of movement, and reaction time should be woven together (Jones et al., 1991; Dunn & Dunn, 2001; Martin & Gill, 1991).

"Confidence is a quality found in many aspects of society. Therefore, confidence isn't a stranger to sports, when it can be associated with qualities like mental toughness, poise, grit, belief, courage, and heart. These qualities are descriptive verbs that are constantly used when describing someone successful. Recent research has shown that success has affected the level of confidence and confidence can affect success. Elite athletes have revealed that confidence affects their performance through their thoughts, behaviors, and feelings. Nicholls et al. (2010), found that subjective performance and confidence were statistically significant and positively correlated. The world of sport recognizes the importance that confidence has on success (Vealey & Chase, 2008). Athletes are constantly evaluated on the level of confidence they have in their abilities to perform. Coaches, fans, and media constantly discuss confidence when talking about the ability to win. Confidence can affect performance when our efficacy expectation is strong and our abilities are developed. Self-confidence is a term known to more than sport, influencing Vealey (1986), to coin the term "sport-confidence."

Performance in sports is no longer dependent on the physiological well-being of the athlete. It is well established by now that numerous psychological factors affect & improve sports performance like individual differences among the athletes, personality, intelligence, attitude, motivation, aggression, mental imagery, group dynamics, etc. All these factors may affect sports performance in both, positive and negative ways. The effect of anxiety on performance dependence directly on the type of task considered. In most cases, a heightened arousal state has been found to facilitate simple performance. On the other hand as anxiety reaches a certain level a breakdown of psychological and physiological integrative mechanisms is often seen to occur resulting in less efficient performance in more complex tasks. Anxiety has a temporal relationship to performance. In general, anxiety level increases before the dangerous situation until they become relatively high just before it is encountered. During the performance, anxiety is often lessened. Since the individual must concentrate on his action rather than on his internalized fear (Singh & Parmar, 2015; Chang & Torres, 2019).

Jones, Swain, and Cole conducted a study on university athletes and found that in the case of cognitive anxiety males shown no changes across time though females showed a progressive increase as the competition is near. Males and

females showed the same patterning in somatic anxiety with an increase occurring on the day of competition. Self-confidence scores revealed a reduction in self-confidence neared in both gender but there was a greater decrease in females than males. Mathes, H. & Mathes, S. studied the high school gymnastic pre-competitive state anxiety and self-confidence level. The results indicated that the cognitive, somatic anxiety and self-confidence levels varied according to the performance setting but were not influenced by years of experience or by the difficulty of routines (Matheson & Mathes, 1991; Skinner, 2013; Martinent et al., 2010). Surprisingly anxiety was highest and self-confidence lowest, before the dual meet rather than before the district championship.

Hall et al. (1998), employed smith's model of performance-related anxiety to examine the link between perfectionism, achievement goals, the temporal patterning of multidimensional state anxiety on 119 high school runners. Instruments assessed achievement goals (Roberts et al., 1998), perfectionism (Frost et al., 1990) on 4 occasions before a cross-country meet. Hierarchical regression analysis indicated that overall perfectionism was a consistent, significant predictor of cognitive anxiety. Perceived ability was a consistent predictor of confidence, and ego and task goals contributed to the prediction of cognitive anxiety and confidence, respectively. The findings help further develop Smith's model and suggest that the appraisal process underlying multidimensional state anxiety is influenced by individual differences in several achievement-related constructs.

Selmi et al. (2018), investigated the effects of repeated sprint training on somatic anxiety, cognitive anxiety, self-confidence rating of perceived exertion, and repeated sprint ability indicators in elite young soccer players. After RST-G showed a very significant ($p<0.000$) increase in RSA total time performance relative to control Despite the faster sprint pace, the RPE also decrease significantly ($p<0.005$) in RST-G, and their self-confidence was significantly greater ($p<0.01$) while the cognitive ($p<0.01$) and somatic ($p<0.000$) component of their anxiety state decreased. When practiced regularly, shot bouts of sprint exercises improve anaerobic performance associated with a reduction in anxiety state and an increase in SC which may probably be competitive performance.

Mcgrane et al. (2017), assess fundamental movement skill proficiency, physical self-confidence levels, and the relationship between these variables and gender differences among adolescents. A significant correlation was observed between FMS proficiency and physical self-confidence for females only ($r=0.305$, $p<0.001$) males rated themselves as having significantly higher physical self-confidence levels than females ($p=0.001$). Males scored significantly higher than female's FMS proficiency ($p<0.05$), and the lowest physical self-confidence group were significantly less proficient at FMS than the medium ($p<0.001$) and high physical self-confidence groups ($p<0.05$). This information not only highlights those in need of assistance in developing their FMS but will also facilitate the development of an intervention that aims to improve physical self-confidence and FMS proficiency (Moran et al., 2018; Hanton et al., 2004; Patel et al., 2010).

Statement of the problem

The purpose of the study was to investigate the relationship between self-confidence and intercollegiate sprinter's performance.

Delimitations

- The study was delimited to male sprinters who took part in the MJP Rohilkhand University Intercollegiate athletic meet which was held at Bareilly, Uttar Pradesh.
- The study was also delimited to assess pre-competition anxiety level by Competitive State Anxiety Inventory – 2 (CSAI-2).
- The study was further delimited to 30 sprinters of MJP Rohilkhand University Intercollegiate athletic meet, 2018.

Limitations

- Questionnaire research had its limitations, with biasness that might have come into the mind of the subjects at the time of responding to the statements in the questionnaire.
- The study was conducted in a natural competitive situation.

Significance of the study

The researcher scholar based on the availability and his understanding regarding the problem an insight into the process occurring during performance self-confidence is just important to know:

- The degree to which self-confidence could have a facilitating or debilitating effect on intercollegiate sprinter's performance.
- Coaches can work with self-confidence variables for enhancing the sprinters performance.
- For assessment of a player whether he can become a sprinter or not, can be very well known through this test.

Hypothesis

Based on the knowledge reflected by the available literature, research findings, and the scholar's understanding of the problem, it was hypothesized that there may not be a significant relationship between self-confidence and intercollegiate sprinter's performance.

Procedure

Selection of subject: Thirty participants of final sprint events of MJP Rohilkhand University Intercollegiate athletic meet which was held at Bareilly, Uttar Pradesh. The age of the subjects was ranged from 18 to 25 years (Jones & Uphill, 2004; Fletcher & Hanton, 2001).

Selection of Questionnaire and Procedure: The Competitive State Anxiety Inventory-2 by Rainer Marten was selected for the study because it is a sports-specific anxiety test. Further, it assesses competitive anxiety based on three dimensions i.e. cognitive anxiety, somatic anxiety, and self-confidence.

Purpose: To find out the level of Pre-competition anxiety.

Procedure: The CSAI-2 was scored by computing a total score, ranging from a low of 9 to a high of 36, the higher the score, the greater the state of self-confidence. The state self-confidence sub-scale was scored for totaling the responses of the following 9 items- 3, 6, 9, 12, 15, 18, 21, 24, and 27. Scoring for items is reversed in calculating the score for self-confidence (Hanton et al., 2002; Hatzigeorgiadis et al., 2009).

Directions: Several directions preceded before the questionnaire was to be filled – in by the respondents and are as given below:

- Read each statement and then circle the appropriate number to them right now at this moment.
- There is no right wrong answer.
- Do not spend too much time on any one statement, but choose an answer, which describes your feelings right now.

Table 1
The responses of each statement of the score are as follows

S. No.	Response	Scoring
1.	Not at all	4 points
2.	Somewhat	3 points
3.	Moderately	2 points
4.	Very much so	1 point

Administration of Questionnaire: The test was administered on the subjects before one hour of the competition. The subjects were assembled in a group; clear instructions were given that all the items in the Questionnaire must be attempted.

Sprinters performance: Total time clocked by the finalist of sprinting events was considered as the score of sprinters performance. It was obtained from the organizers.

Statistical Procedure: To determine the relationship between self-confidence and the performance of male sprinters of Intercollegiate athletic meet participants, Pearson's Product Moment Correlation was employed. The level of confidence was set at 0.05 level.

Findings

Table 2
Relationship of self-confidence to intercollegiate sprinter's performance

Variable Correlated	Co-efficient correlation
Self-confidence and Sprinter's performance	0.482*

*Significant at 0.05 level
r 0.05 df (28) =0.361

The results obtained from the analysis of data in the table shown that the attribution variable i.e. Self-confidence (r =0.482) was significantly related to the performance at a 0.05 level of significance since the obtained value of co-efficient correlation is greater than the Tabulated value (r = 0.361).

Discussion of Finding: Self-confidence has shown a positive impact on intercollegiate sprinter's performance probably because self–confidence makes them cognizant about their positive abilities or maybe because it is the basic prerequisite for giving their best performance in sprints.

Discussion of hypothesis

Based on the finding, the hypothesis stated early that there may not be a significant relationship between self-confidence and intercollegiate sprinter's performance is rejected. The hypothesis is rejected for the relationship of self-confidence to intercollegiate sprinter's performance (Edwards & Hardy, 1996; Harger & Raglin, 1994; Kamlesh, 2011).

Conclusion

Self –Confidence was having an impact on performance.

Recommendations

Based on the conclusion drawn the following recommendations have been made

- It is recommended to conduct a similar study on female sprinters participating at different levels of competition.
- It is recommended to conduct a similar study on male/female national and international sprinters.
- It is recommended to conduct a similar study in different games and sports.

References

Berger, B. G., & Owen, D. R. (1987). Anxiety reduction with swimming: relationships between exercise and state, trait, and somatic anxiety. *International Journal of Sport Psychology*.

Chang, M. O., & Torres, A. C. M. (2019). Multidimensional diagnosis of competitive anxiety in youth baseball team. *International research journal of management, IT and social sciences*, *6*(6), 104-110.

Cratty, B. J. (1968). *Psychology and physical activity*. Prentice-Hall.

Dunn, J. G., & Dunn, J. C. (2001). Relationships among the sport competition anxiety test, the sport anxiety scale, and the collegiate hockey worry scale. *Journal of Applied Sport Psychology*, *13*(4), 411-429.

Edwards, T., & Hardy, L. (1996). The interactive effects of intensity and direction of cognitive and somatic anxiety and self-confidence upon performance. *Journal of sport and exercise psychology*, *18*(3), 296-312.

Fletcher, D., & Hanton, S. (2001). The relationship between psychological skills usage and competitive anxiety responses. *Psychology of sport and exercise*, *2*(2), 89-101. https://doi.org/10.1016/S1469-0292(00)00014-5

Frost, R. O., Marten, P., Lahart, C., & Rosenblate, R. (1990). The dimensions of perfectionism. *Cognitive therapy and research*, *14*(5), 449-468.

Hall, H. K., Kerr, A. W., & Matthews, J. (1998). Precompetitive anxiety in sport: The contribution of achievement goals and perfectionism. *Journal of Sport and Exercise Psychology*, *20*(2), 194-217.

Hanton, S., Mellalieu, S. D., & Hall, R. (2002). Re-examining the competitive anxiety trait-state relationship. *Personality and Individual Differences*, *33*(7), 1125-1136. https://doi.org/10.1016/S0191-8869(02)00003-X

Hanton, S., Thomas, O., & Maynard, I. (2004). Competitive anxiety responses in the week leading up to competition: the role of intensity, direction and frequency dimensions. *Psychology of sport and exercise*, *5*(2), 169-181. https://doi.org/10.1016/S1469-0292(02)00042-0

Harger, G. J., & Raglin, J. S. (1994). Correspondence between actual and recalled precompetition anxiety in collegiate track and field athletes. *Journal of sport and Exercise Psychology*, *16*(2), 206-211.

Hatzigeorgiadis, A., Zourbanos, N., Mpoumpaki, S., & Theodorakis, Y. (2009). Mechanisms underlying the self-talk–performance relationship: The effects of motivational self-talk on self-confidence and anxiety. *Psychology of Sport and exercise*, *10*(1), 186-192. https://doi.org/10.1016/j.psychsport.2008.07.009

Jones, G., Swain, A., & Cale, A. (1991). Genier differences in precompetition temporal fattening ami antecedents of anxiety and self-confidence. *Journal of Sport and Exercise psychology*, *13*(1), 1-15.

Jones, M. V., & Uphill, M. (2004). Responses to the Competitive State Anxiety Inventory-2 (d) by athletes in anxious and excited scenarios. *Psychology of Sport and Exercise*, *5*(2), 201-212. https://doi.org/10.1016/S1469-0292(02)00054-7

Kamlesh, M. L. (2011). *Psychology in physical education and sport*. Pinnacle Technology.

Koivula, N., Hassmén, P., & Fallby, J. (2002). Self-esteem and perfectionism in elite athletes: Effects on competitive anxiety and self-confidence. *Personality and individual differences*, *32*(5), 865-875. https://doi.org/10.1016/S0191-8869(01)00092-7

Martin, J. J., & Gill, D. L. (1991). The relationships among competitive orientation, sport-confidence, self-efficacy, anxiety, and performance. *Journal of Sport and Exercise Psychology*, *13*(2), 149-159.

Martinent, G., Ferrand, C., Guillet, E., & Gautheur, S. (2010). Validation of the French version of the Competitive State Anxiety Inventory-2 Revised (CSAI-2R)

including frequency and direction scales. *Psychology of Sport and exercise*, *11*(1), 51-57. https://doi.org/10.1016/j.psychsport.2009.05.001

Matheson, H., & Mathes, S. (1991). Influence of performance setting, experience and difficulty of routine on precompetition anxiety and self-confidence of high school female gymnasts. *Perceptual and motor skills*, *72*(3_suppl), 1099-1105.

McGrane, B., Belton, S., Powell, D., & Issartel, J. (2017). The relationship between fundamental movement skill proficiency and physical self-confidence among adolescents. *Journal of sports sciences*, *35*(17), 1709-1714.

Moran, R. N., Hauth, J. M., & Rabena, R. (2018). The effect of massage on acceleration and sprint performance in track & field athletes. *Complementary therapies in clinical practice*, *30*, 1-5. https://doi.org/10.1016/j.ctcp.2017.10.010

Nicholls, A. R., Polman, R., & Levy, A. R. (2010). Coping self-efficacy, pre-competitive anxiety, and subjective performance among athletes. *European journal of sport science*, *10*(2), 97-102.

Patel, D. R., Omar, H., & Terry, M. (2010). Sport-related performance anxiety in young female athletes. *Journal of pediatric and adolescent gynecology*, *23*(6), 325-335. https://doi.org/10.1016/j.jpag.2010.04.004

Roberts, G. C., Treasure, D. C., & Balague, G. (1998). Achievement goals in sport: The development and validation of the Perception of Success Questionnaire. *Journal of Sports Sciences*, *16*(4), 337-347.

Selmi, W., Rebai, H., Chtara, M., Naceur, A., & Sahli, S. (2018). Self-confidence and affect responses to short-term sprint interval training. *Physiology & behavior*, *188*, 42-47.

Singh, A., & Parmar, D. S. (2015). A comparative study of competitive anxiety between basketball and volleyball players. *International research journal of management, IT and social sciences*, *2*(1), 1-4.

Skinner, B. R. (2013). The relationship between confidence and performance throughout a competitive season.

Smith, N. C., Bellamy, M., Collins, D. J., & Newell, D. (2001). A test of processing efficiency theory in a team sport context. *Journal of sports sciences*, *19*(5), 321-332.

Stoeber, J., Otto, K., Pescheck, E., Becker, C., & Stoll, O. (2007). Perfectionism and competitive anxiety in athletes: Differentiating striving for perfection and negative reactions to imperfection. *Personality and Individual Differences*, *42*(6), 959-969. https://doi.org/10.1016/j.paid.2006.09.006

Vealey, R. S. (1986). Conceptualization of sport-confidence and competitive orientation: Preliminary investigation and instrument development. *Journal of Sport and Exercise Psychology*, *8*(3), 221-246.

Vealey, R. S., & Chase, M. A. (2008). Self-confidence in sport.