

## Examination of Self-efficacy Beliefs of on performance (An empirical study on National level Players of team sports in Sri Lanka)

Perera HPN<sup>1</sup>, Jusoh M<sup>2</sup>, Azam SMF<sup>2</sup>, Sudasinghe SRSN<sup>3</sup>

<sup>1</sup>University of Sri Jayewardenepura, Sri Lanka

<sup>2</sup>Management & Science University, Malaysia

<sup>3</sup>Sri Lanka Institute of Development Administration, Sri Lanka

### Abstract:

The main goal of this study was identify the impact of Self-Efficacy on the performance of team sports players in Sri Lanka. Mainly it was focused to measure self-efficacy belief of team players and the experimental variable of the study was perceived performance. The study utilized a likert scale questionnaire which had been adopted from literature to obtain data for the study. The research model was tested using 308 subjects comprised of national level team players. Data were analyzed using SPSS and structural equation modeling with AMOS. Self-efficacy has proven to have a noticeable impact on subjective performance of the players. The recommendations included the strategies which can be utilized to enhance the self-efficacy belief of the players.

**Keywords** Self-efficacy, Subjective Performance, Perceived Performance, Strategies

### 1. Introduction

National level team players are the players who represent Sri Lanka in international arena more often. Sri Lanka was bought to notice among the international community after winning the Cricket world cup in 1996. Afterwards, Sri Lanka players received lots of opportunities and they were recruited by different countries to participate in club events as well as coaches and administrators. The factor that its influence is going to be analyzed in this research is self-efficacy where the predictor of the study is the performance of the team players.

Self-efficacy is a psychological factor that imbedded with individual's belief about their capabilities to articulate control over circumstances that affect their lives (Bandura, 1994).

The issue of the week performance of Sri Lanka team players performance has been noticed by evaluation of Asian, South Asian and Olympic Medal tables (Perera & Pushpakumari, 2015; Perera & Pushpakumari, 2015; Perera, 2015; Perera & Pushpakumari, 2016; Perera & Pushpakumari, 2016). This is not applicable to all team sports persisting in Sri Lanka but the problem is apparent in most sports. For performance outcome, the most important factor affecting is self-efficacy (Perera, Jusoh, Azam, & Sudasinghe, 2019; Perera, Jusoh, Azam, & Sudasinghe, 2019). The purpose of this study is to identify the impact of self-efficacy on the performance of players who are engaged in team sports. This study pursues to response the question of

I. What is the impact of self-efficacy on the performance of team players?

### 2. Literature Review

#### 1.1 Self-efficacy

Albert Bandura (2001) is the pioneer of the concept of self-efficacy in an effort to recognize and expect the human behavior and the theory of self-efficacy was developed within the framework of social cognitive theory. Self-efficacy is defined as a person's belief that she or he is capable of performing a particular task successfully (Bandura, 2001).

Self-efficacy beliefs are not conclusions about one's own skills, but it rather discusses about one's own judgments of what one can achieve with those skills (Bandura, 1986). The judgments which are indicated under self-efficacy describe what one thinks one can do, not what one has. These judgments incorporated with complex process of self-appraisal and self-persuasion which depend on cognitive processing of varied sources of efficacy information (Bandura, 1990). These varied sources of efficacy information had been categorized as past performance accomplishments, vicarious experiences, verbal persuasion, and physiological states by Bandura (1977).

Self-efficacy theories provide the basis for the motivation that a human possesses, his or her well-being, and personal accomplishment, because when people believe that they have the ability to achieve the results they desire, then they will gain more incentive to act or to insist on their actions in the face of difficulties and problems (Pajares, 2002).

Self-efficacy theory was developed within the framework of social cognitive theory which emphasis that people usually will only try things that they consider they can achieve and won't attempt things that they consider they will fail (Bandura, 1994). However, individuals with solid sense of efficacy trust that they can achieve even tough tasks and they perceive these tasks as challenges rather than threats (Bandura, 1994). People with highest self-efficacy, set challenging goals and preserve strong commitment to accomplish them irrespective of impending failures. In opposition, individuals who doubt their capabilities to achieve difficult tasks see these tasks as threats. They do not accomplish the hard tasks and perceiving these activities as threats which prevent them being successful (Bandura, 1994). The said attitudes of efficacious people (who perceive complex tasks as opportunities) lead to reduce their stress and mitigate the risk of depression while less efficacious people suffer with depression and stress (Bandura, 1994).

According to self-efficacy theory, verbal persuasion, mastery experience, vicarious experiences and somatic and emotional states affect the self-efficacy of the individuals and their behavior (Bandura, 1994).

Verbal persuasion or verbal persuasion refers to the positive or negative effects gained from others, such as teammates, coaches or audiences (Pattinson, Cotterill, & Leyland, 2017). It is said that when people are persuaded verbally they can achieve or master a task and they would more likely to do the tasks.

One of the main sources of self-efficacy is through mastery experiences. Mastery experience refers to the confidence that the players' gain through their ability following previous success and the doubt they suffer following failure. In the sport context, several scholars have found positive mastery experiences through practice and more or less previous exposure to similar situations significantly increasing self-efficacy (Jenny, Munroe-Chandler, Hall, & Hall, 2014; Valiante & Morris, 2013) To have a strong sense of self-efficacy requires experience in overcoming obstacles through effort and determination (Pattinson, Cotterill, & Leyland, 2017).

Vicarious experience (also known as modeling or observational learning) denotes the belief in one's capability attained from observing and replicating others or visualizing oneself executing an action, either in person or indirect methods such as videos (Bandura, 1977). The five main practices of vicarious experience are: instructional information (watching an experienced athlete and his performance and skills); the modeling of coping approaches; social association by comparing ability or physique; visual media such as televised competitions; and self-imagery (Pattinson, Cotterill, & Leyland, 2017).

somatic and emotional states or Emotional Cues means the psychological states that arises when individuals expect doing something such as anger, anxiety, stress, depression, aches and pains (Bandura, 1977), that affect the performance of the players either positively or negatively (Bandura, 1977).

## **1.2 Performance**

Performance can be measured through outcome the outcomes of individuals. In performance appraisal, the outcomes can be clarified under two folds namely, contextual (citizenship performance) and task performance (Borman, 1997). The task performance discusses about the recommended role an employee

which he / she should comply with in order to achieve organizational goals (Díaz-Vilela, Rodríguez, Isla-Díaz, Díaz-Cabrera, & Hernández-Fernaud, 2015). Contextual performance describe the behaviors which are not directly related to job tasks, but having a substantial impact on organizational, social, and psychological settings (Díaz-Vilela, Rodríguez, Isla-Díaz, Díaz-Cabrera, & Hernández-Fernaud, 2015; Biyanwila & Perera, 2018). A study conducted by Piermattéo, at.al (2018), pointed out few words associated with sport and performance which would be used / perceived by athletes as performance i.e., Escape, pleasure, surpassing oneself, and training (Piermattéo, Monaco, Reymond, & Eyraud, 2018). Scales are developed and can be developed to measure sports performance based on working definitions of said words in order to measure performance. Beside the above measurements, one can measure his own performance based on his perception (Perera, 2018; Perera & Pushpakumari, 2015; Perera, Jusoh, Azam, & Sudasinghe, 2019; Perera, 2019; Perera, 2018). The perceptions of performance of players are differing from each other. It is being proven by the story of our legendary long distance runner Ranatunga Karunananda. He represented Sri Lanka in long distance events at the Tokyo Olympics in 1964 and had participated the 10,000-metre race with a weakened body. Even with a weaken body, he ran to complete the race even after the others had completed the race. His courage, determination and spirit were recognized by Japanese and had included his story in their student text books (Seneviratne, 2011).

### 3. Materials and Methods

#### 3.1 Population and sample

The population of the study was consisted of 308 male and female team players ranging between 19 to 38 years old who represent Sri Lanka National team sports in 2018/2019. The sampling technique was Census sampling and the questionnaires were circulated amongst the total population. The participants were engaged in the subsequent variety of sports: football (19.5%), basketball (8.4%), Elle (10%), volleyball (14%), Hockey (13%), Kabaddi (13.6%), Netball 96.5%), Rugby (9%) and Throw ball (6%). They were cooperative with the researchers in filling out the questionnaire. The sample size of the present study for data analysis was qualified with the recommendations (recommended sample size of 300) provided by Hair et al. (2010) to analyze with SEM. Table 1 depicts the demographic profile of the participants.

**Table 1:** Demographic profile (n= 308)

Demographic Variable	Frequency	Percentage	Mean $\pm$ SD
Gender			
Male	179	58.1%	
Female	129	41.9%	
Home Town			
Urban	109	35.4%	
Suburb	93	30.2%	
Rural	106	34.4%	
Marital Status			
Single	216	70.1%	
Married	90	29.2%	
Widow/widower	2	0.6%	
Age			25.2 $\pm$ 4.3

#### 3.2 Measurement scale and instruments

Likert five point scale was utilized in asking the questionnaire and measuring the study variables which are organized as strongly disagree to strongly agree and which takes the weight of 1 (one) to 5 (five)

respectively. Questionnaires were distributed manually. The current study used questionnaire derived from different sources to measure the variables. Sources and scales used to measure the study constructs were drawn from the various literatures, and are delineated in the following Table 2.

**Table 2:** Supported literature for sources and measurement scale

Variables	Supported literature	Scale
Perceived Self-Efficacy	(McKinney, 2003; Chen, Gully, & Eden, 2001)	5 point Likert scale
Perceived Performance	(Lemmink, Nederhof, & Visscher, 2008; Walker, 2015)	5 point Likert scale

The Cronbach's alpha coefficients of the present study for perceived Self-Efficacy and perceived performance facets were .815 and .93, respectively, which is higher than the cutoff value suggested by Nunnally (1978).

#### 4. Results

The association between self-efficacy and perceived performance of the players were analyzed using SPSS (version 21) and AMOS (version 23). Goodness of fit was measured through Chi-square statistics (CMIN), comparative fit index (CFI), root mean square error of approximation (RMSEA) Tucker Lewis index (TLI), relative fit index (RFI), incremental fit index (IFI), and the goodness of fit index (GFI) (Hair, Black, Babin, & Anderson, 2010). Data coding and editing, data screening, treatment of missing data and assessment of outliers along with exploratory factor analysis (EFA) were conducted using SPSS, before conducting the data analysis. Structural equation modeling (SEM) with AMOS was utilized for confirmatory factor analysis (CFA) and hypotheses testing.

**Table 3** depicts the reliability measures measured through Composite Reliability (CR) and the Average Variance Extracted (AVE) along with the model fit indices which includes RMSEA, TLI, Normed chi-square and CFI.

Table 1. Model fitting analysis for measurement and structural models of Self-Efficacy

Fit Index	Primary Model	Critical (Acceptable) Value	Modified Model
Comparative Fit Index (CFI)	<b>0.897</b>	>0.9	<b>0.98</b>
Tucker Lewis Index (TLI)	<b>0.88</b>	>0.9	<b>0.953</b>
Normed Chi Square (Chi/Df)	<b>3.996</b>	<3	<b>2.416</b>
Root Mean Square Error Of Approximation (RMSEA)	<b>0.099</b>	<0.085	<b>0.068</b>

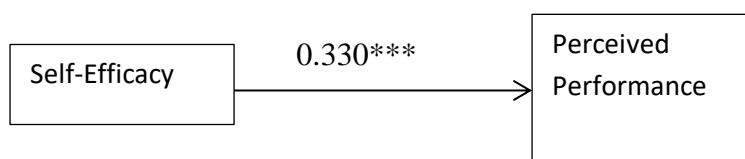
After conducting the CFA, Average variance extracted (AVE) and Composite Reliability (CR) was drawn and is depicted in Table 3.

**Table 3:** Summary of measurement model validity and reliability

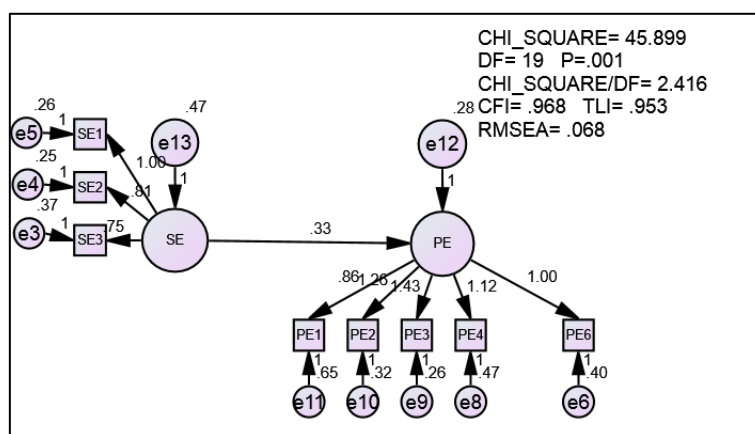
Variable	Items included	Items remaining	AVE	CR
Self-efficacy	05	04	0.411	0.63
Performance	06	05	0.504	0.831

Structural modeling is applied next to identify the hypothesized connection amongst the research constructs (exogenous or endogenous), which is linked to the assumed model's concept.

Hypothesis 1 (H1) : There is a significant relationship between Self-efficacy and performance of the players



**Figure.1 :** Results of the causal model



**Figure 2:** Results depicts in the structural model

The results depicts in Figure 1 and 2, have shown that Self-efficacy of the players has a strong significant positive effect on their perceived performance ( $\beta = 0.33$ ,  $p < 0.001$ ), thus H1 was supported by data.

## 5. Discussion and Conclusion

This section contains the discussion of the previous results and commendations for further researches, from the researchers' viewpoint and according to the study results that showed that there is an impact of self-efficacy on the performance of national level team players in Sri Lanka.

Self-efficacy has proven to have a noticeable impact on sports and non-sports performances (basically on academics performances) irrespective of the culture in which they live. The previous study results were complied, in some of the instances where there were inconsistencies as usual due to contextual differences.

A study conclusion of non-sport setting concerning the government organizations publicized that self-efficacy and mission performance to possess a positive correlation (Su, Lee, Tsai, S, & Lu, 2016). A positive association amongst self-efficacy and work performance was revealed by many studies namely Iroegbu

(2015), and Miraglia et.al (2017), Iroegbu, (2015),Miraglia, Cenciotti, Alessandri, & Borgogni, (2017). A study conducted by Cetin & Askun (2018), with 76 employees from varied organizations functioning in an organized industrialized region in Turkey, concluded that job-related self-efficacy and intrinsic motivation to possess a substantial leading role over work performance (Cetin & Askun, 2018).

Another scholarly research of Sklett, Loras, & Sigmundsson (2018), of sports context revealed that Self-efficacy was moderately affect to ski jumping performance (Sklett, Lorås, & Sigmundsson, 2018) which is consistent with the present study..

Based on the conclusions and findings of the research, the following recommendations can be made in order to give ideas for future researches on self-efficacy domain and also for the stakeholders of sports who are with the intention of increase performance. Since this research was conducted as a cross sectional study, the researcher was not able to measure the pre and post psychological movements in relation to self-efficacy belief of the players which leads to ascertain whether there is any significant deviation between the two stand points. It is suggested for the future researchers conduct research on concerning pre and post competition statistics. Additionally this study was a quantitative study and it is suggested to validate the results based on a mixed method. Based on the statistics it was found that there is a positive relationship between self-efficacy and performance. It is recommended to the stakeholders to create a climate to enhance self-efficacy belief of the players by encouraging them to think that they perform well and their performance is in an appreciable level. The strategies suggested for the stakeholders to enhance the self-efficacy belief of the players are, positive verbal persuasion especially by the coaches, utilizing videos of successive performance of the leading players so as to get vicarious experiences and understanding the emotions of the players and to react accordingly to satisfy them.

## References

- [1] Bandura, A. (1977). . *Social Learning Theory*, Prentice-Hall, Englewood Cliffs, N. J. Prentice-Ha, NL: Englewood Cliffs.
- [2] Bandura, A. (1986). *Social foundation of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- [3] Bandura, A. (1990). Perceived self-efficacy in the exercise of personal agency. *Journal of Applied Sport Psychology*, 2, 128-163.
- [4] Bandura, A. (1994). Self-efficacy. In V. Ramachaudran, *Encyclopedia of human behavior (Vol. 4, pp. 71-81)*. New York: Academic Press (pp. 71-81). New York: Academic Press.
- [5] Bandura, A. (2001). Social cognitive theory: an agentic perspective. *Annual Review of Psychology*, 52(1), 1-26.
- [6] Borman, W. &. (1997). Task performance and contextual performance : The meaning for personnel selection research. *Human Performance*, 10, 99-109.
- [7] Biyanwila, B., & Perera, H. (2018). Associated factors for efficient development of Scool sports system for National level sports in Sri Lanka. *Basic and Applied Sciences*. 11, p. 29. Colombo: General Sir John Kotelawala Defence University.
- [8] Cetin, F., & Askun, D. (2018). The effect of occupational self-efficacy on work performance through intrinsic work motivation. *Management Research Review*, 41(2), 186-201.
- [9] Chen, G., Gully, S., & Eden, D. (2001). Validation of a new general self-efficacy scale. *Organizational Research Methods*, 4, 2-83.

- [10] Díaz-Vilela, L., Rodríguez, N., Isla-Díaz, R., Díaz-Cabrera, D., & Hernández-Fernaud, E. C.-S. (2015). Relationships between Contextual and Task Performance and Interrater Agreement: Are There Any? *PloS one*, *10*(10).
- [11] Duda, J., & Nicholls, J. (1992). Dimensions of achievement motivation in schoolwork and sports. *Journal of Education Psychology*, *8*, 290-9.
- [12] Duda, J., Fox, K. S., & Armstrong, N. (1992). Children's Achievement Goals and Beliefs about success in Sport. *British journal of Educational Psychology*, *62*, 313-23.
- [13] Hair, J., Black, W., Babin, B., & Anderson, R. (2010). *Multivariate Data Analysis* (7th ed.). Upper Saddle River, New Jersey: Prentice Hall.
- [14] Iroegbu, M. (2015). Self Efficacy and Work Performance: A Theoretical Framework of Albert Bandura's Model, Review of Findings, Implications and Directions for Future Research. *Psychology and Behavioral Sciences*, *4*(4), 170-3.
- [15] Jenny, O., Munroe-Chandler, K., Hall, C., & Hall, N. (2014). Using motivational general-mastery imagery to improve the self-efficacy of youth squash players. *Journal of Applied Sport Psychology*, *26*(1), 66-81.
- [16] Lemmink, K., Nederhof, E., & Visscher, C. (2008). Psychomotor speed is related to perceived performance in rowers. *European Journal of Sport Science*, *8*(5), 259-65.
- [17] McKinney, A. (2003, October 31). Goal Orientation: A Test of Competing Models. Blacksburg, Virginia.
- [18] Miraglia, M., Cenciotti, R., Alessandri, G., & Borgogni, L. (2017). Translating self-efficacy in job performance over time: The role of job crafting, *Human Performance*. *30*(5), 254-271.
- [19] Nunnally, J., & Bernstein, L. (1994). *Psychometric Theory*. New York: McGraw-Hill Higher.
- [20] Pajares, F. (2002). Gender and perceived self-efficacy in self-regulated learning. *Theory into Practice*, *41*(2), 116-125.
- [21] Pattinson, E., Cotterill, S., & Leyland, S. (2017). Sources of Self-Efficacy in Springboard and Highboard Diving: A Qualitative Investigation. *Sport and Exercise Psychology Review*, *13*(1), 79-90.
- [22] Perera, H. (2015). *The relationship between coach leadership behavior and team success in sports: An empirical study of state universities in Western Province*. University of Sri Jayewardenepura.
- [23] Perera, H. (2018). Factors affecting coach leadership styles and team success: The mediating role of coach leadership behavior. *Management Social Sciences and Humanities*. *11*, p. 40. Colombo: General Sir John Kotelawala Defence University.
- [24] Perera, H. (2019). Does the Coach Leadership Behavior Mediates the Influence of Factors Affecting Coach Leadership Behavioral Styles on Team Success. *International Journal of Human Movement and Sports Sciences*, *7*(3), 51-57.
- [25] Perera, H., & Pushpakumari, M. (2016). The relationship between Coach Leadership Behavior and Team Success In sports of State universities In Western, Province Sri Lanka. *iNCOTeM*. *1*, pp. 47-51. Colombo: Department of Management of Technology, University of Moratuwa, Katubedda.
- [26] Perera, H., & Pushpakumari, M. (2015). An empirical study of Situational, Leader and Team member characteristics on coach leadership behavior styles Exhibited by the coaches of state Universities in Western Province. *International conference on Multidisciplinary Approaches-2015 (ICMA)* (p. 158). Colombo: Faculty of Graduate studies, University Of Sri Jayewardenepura.
- [27] Perera, H., & Pushpakumari, M. (2015). The perception of athletes on the factors affecting to coach leadership behavior styles: An empirical study of coach leadership styles exhibited by the coaches of State Universities in Western province Sri Lanka. *International journal of Multidisciplinary studies (IJMS)*, *2*(2), 83-91.
- [28] Perera, H., & Pushpakumari, M. (2015). The perception of Athletes on the Factors Affecting to Coach Leadership Behavior styles: An empirical study on leadership styles Exhibited by the Coaches of State

Universities in Western Province- Sri Lanka. *International Journal of Multidisciplinary Studies (IJMS)*, 2(2), 83-91.

- [29] Perera, H., & Pushpakumari, M. (2015). the perception of Athletes on the Factors Affecting to Coach Leadership Behavior styles: An empirical study on leadership styles Exhibited by the Coaches of State Universities in Western Province- Sri Lanka. *International Journal of Multidisciplinary Studies (IJMS)*, 2(2), 83-91.
- [30] Perera, H., & Pushpakumari, M. (2016). THE RELATIONSHIP BETWEEN COACH LEADERSHIP BEHAVIOR AND TEAM SUCCESS IN SPORTS OF STATE UNIVERSITIES IN WESTERN PROVINCE, SRI LANKA. *International Conference in Technology Management (iNCOTeM 2016)*. 1, pp. 47-51. Colombo: University of Moratuwa.
- [31] Perera, H., Jusoh, M., Azam, S., & Sudasinghe, S. (2019). Study of Intrinsic Motivation as a predictor of players' performance in Team Sports. *International Journal of Advance Engineering and Research Development*, 6(1), 155-157.
- [32] Perera, H., Jusoh, M., Azam, S., & Sudasinghe, S. (2019). The Perceived Significance of Spirituality on Sri Lankan National Team Players' Performance. *The Journal of Social Sciences Research*, 5(10), 1501-1506.
- [33] Piermattéo, A., Monaco, G., Reymond, G., & Eyraud, M. (2018). The meaning of sport and performance among amateur and professional athletes. *International Journal of Sport and Exercise Psychology*, 1-13.
- [34] Seneviratne, M. (2011, February 11). I was graced by the spirit of R.J.K. Karunananda Ranatunga. Colombo, Sri Lanka.
- [35] Sklett, V., Lorås, H., & Sigmundsson, H. (2018). Self-Efficacy, Flow, Affect, Worry and Performance in Elite World Cup Ski Jumping. *Front. Psychol.*, 1215(9).
- [36] Su, J., Lee, S., Tsai, S., & Lu, T. (2016). A comprehensive survey of the relationship between self-Efficacy and performance for the government auditors. *SpringerPlus*, 1-13.
- [37] Valiante, G., & Morris, D. (2013). The sources and maintenance of professional golfers' self-efficacy beliefs. *Sport Psychologist*, 27, 130-142.
- [38] Walker, F. (2015, May 27). Effects of perceived coach-athlete relationship quality on perceived performance in youth team football. *Dissertation*. Cardiff Metropolitan University.