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An Exploratory and Confirmatory Examination of Goal Setting Action Scale for Sportsperson

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Abstract

The purpose of the present study was to develop a scale to identify underlying dimensions of goal-setting action used by athletes to enhance their performance in sports. A total of 592 athletes (312 males, 280 females) representing 28 sports were selected. The study was conducted in 5 phases. In phase, I focus group discussions were conducted with 12 experts and 3 elite players to target item selection and content relevance. Phase II set out to identify latent factors and develop their internal consistency. In phase III for further examination of the psychometric properties of the instrument by computing CFA was focused. Phase IV set out to develop differential reliability. In phase, V norms were developed. The results of an EFA provided a two-factor solution that accounted for 39.69 % of the overall variance (a) goal setting action (b) goal resetting action. The results of CFA yielded adequate fit to the two-factor model of goal setting action with the acceptable internal consistency. Differential reliability is proven that the scale is applicable for both genders. The total goal-setting action score was achieved by summing up the scores of all statements on each factor. The Scale seems to be an appropriate psychometric.

Keywords: Exploratory Factor Analysis, Motivation, Goal Setting, Confirmatory Factor Analysis

INTRODUCTION

Goal setting is one of the psychological factors that are the most researched and used as an effective performance enhancement technique in sport psychology (Kyllo & Landers, 1995; Weinberg, Burton, Yukelson, & Weigand, 2000). Burton (1989 cited by Evans & Hardy 2002) maintains that it is still widely regarded as an important fundamental skill and technique that sportspersons, coaches, and applied sport psychology practitioners should regularly employ.

Numerous researchers (Jeff, 2000; Shivetts, 2006; Burton, Naylor, & Holliday, 2001 as cited in Michael, Stephen & Sheldon, 2009; McCarthy, Jones, Harwood, & Devenport, 2010) in their studies concluded that goal setting not only enhance the performance of the sportspersons but also have been linked to positive changes in the psychological state of an athlete on psychological variables such as anxiety, confidence, and motivation. However, the implication of goal-setting strategies has always been a challenge for budding sportspersons.

Locke, Shaw, Saari, and Latham (2002) defined goals as attaining a specific standard of proficiency on a task, usually within a specified time limit. Cox (1994) defined goals in terms of difficulty, specificity, measurability, proximity, and personal orientation. In simple words, we can understand that it gives direction to achieve

something in life. However, Cox (1994) has added many dimensions to define the goal.

Goal setting creates a focus of attention and action by simply identifying what is attempting to accomplish (Harris& Harish, 1984). Goal setting has been identified as an important source of motivation that can enhance performance (Munroe-Chandler, Hall, & Weinberg, 2004; Weinberg, Burton, Yukelson, & Weigand, 2000). Effect of goal-setting interventions in sport settings has been same of the effect have been as increased efforts made by an athlete, higher perceptions of success and self-efficacy (Burton, 1989 cited by Evans & Hardy 2002; Filby, Maynard, & Graydon, 1999; Boyce & Mitchell, 2001). Goal setting has been used in many different contexts to stimulate and maintain behaviour (Lock & Latham, 1990). Lock & Latham (2002) also propose the number of factors which are likely to affect the success of goal setting, including the extent to which the individual participates in setting of the goals, the level of the goal, goal acceptance, commitment and importance, and the feedback which tells about the progress of the performers towards their goals. Furthermore, goal setting may be less effective for complex tasks, where the ability to discover appropriate goal strategies may be more important than the level of goal difficulty. Scholar in the present study has neither considered various dimensions nor the type of aim one is trying to achieve. Rather the present researcher has taken a distinct approach concerning people's attitude in setting a particular goal. There is no dilemma regarding the meaning of goals in the mind of the researcher, but the researcher aims to develop an understanding of the individual attitude involved in goal setting.

Performance is highly influenced by sportspersons focus, motivation, confidence, self-efficacy, performance evaluation, and feedback. High-quality training for the development of skill and sports-specific fitness is required for high-quality performance and needed to be set, monitored, evaluated, and replenished through a systematic process. This systematic process is about setting up targets and goals which are realistic, acceptable to athletes and coaches, measurable, time-specific, and flexible enough to sustain any adverse conditions that arise during the entire process of training. It's an accomplishment that requires an athlete to develop a vision, commitment, belief in setting targets, consistency in focus, and attention. Sportspersons need to possess such cognitive abilities along with enhanced psychomotor proficiency, to be successful. Training systems, methods and tools are pre-requisites to develop sportspersons by considering all these important aspects influencing sports performance. An important aspect more essential than the above is the identification, evaluation, and assessment of the attitude of an athlete which is a prerequisite towards factors required for setting goals that can lead to the enhancement of performance and success as per the potential of an athlete set at its optimum. Identification of sportspersons' attitude and behavioural approach towards such an important aspect of training system can identify the factors which can be a hindrance towards achievement even by having all the physical, psychological, sociological attributes required for high performance. Such identification of attitude towards goal setting is essential for setting realistic targets which otherwise could be overestimated or underestimated by the sportspersons and coaches.

In sum, it has been argued that there is a need to increase the accountability of goal setting in sports by documenting its effectiveness while considering the effect of athlete characteristics such as sportspersons' attitude toward goal setting in sports. In addition, it appears that sportspersons' attitude affects their intentions to set or achieve goals. Furthermore, the present study is different from the previous research that has considered goal setting action as a variable to assess the strategies of goal setting used by athletes in the sporting field.

Goal setting action as an independent factor for scale was not available in the previous literature which is required to train the athletes at the beginning level. Until recently, however, no attempts have been made to establish a valid and reliable instrument to do so.

Therefore, the purpose of the study was to develop and validate the Goal Setting Action Scale for sportspersons by establishing the scientific authenticity of the scale. In addition, sportspersons' attitude toward goal setting in sports would appear to be an important variable of consideration for both researchers and practitioners.

Given the argument presented above, a measure to assess a sportsperson's attitude toward goal setting would be a useful addition to the goal-setting literature in sports psychology for both researchers and practitioners.

METHODOLOGY

The scale was developed in five phases:

Phase - I Construction of the Scale

The purpose of phase I was to construct the scale designed to assess goal-setting strategies used by athletes to enhance their performance. Initially, the goal-setting action variable about goal setting was identified through extensive study of previous work, literature, journals, websites, and other secondary sources. The scale was constructed concerning the specific objective of the study. To form the initial scale, we generated 18 items about goal setting through extensive study of literature. The items were newly crafted and targeted to measure the strategies in goal setting adopted by athletes to enhance their performance. First, 6 members group consisting of psychologists, researchers, sports scientists, and trainers were invited for a focus group discussion and had a discussion on the collective suggestions received from the experts' panel, and a consensus was tried to be obtained on the difference in opinions through logical and systematic debates, discussions. From this procedure, some minor revisions were made according to suggestions. For establishing content validity of the constructed scale 12 experts were consulted who were experts in the field of sports psychology, education, and had experience in teaching physical education, and were involved in psychological research for more than fifteen years. The drafted items were given to individual experts along with objectives set for the study. The suggestions received from the individual experts were recorded and placed collectively for further discussion. Based on the received suggestions, a consensus was made about inclusion, rejection, or revision of each item of the variable of goal setting action. Thus, the initial version of the goal-setting action scale consisted of 15 items with a 7-point Likert-type format. After that, an initial try out was conducted on 30 subjects randomly selected from the students who were pursuing Bachelor of Physical Education (B.P.Ed) course from Delhi University and had represented at the collegiate level to understand the applicability of the test in terms of understanding of the statements, misinterpretation of statements, administrative difficulties. The test was administered to the selected sportsmen who were representative of the population for whom the test was validated, but the samples did not make it into the final samples. The initial try-out helped in the identification of the confusing Jargons were removed, language was simplified for better understanding.

After incorporating all the received suggestions minor revisions were made to the scale. The second tryout was done on thirty (30) randomly selected subjects other than those selected in the initial try out and they were asked for suggestions if any. Based on received suggestions, the final scale was comprised of 13 items after the

approval of the supervisor and members of the research advisory committee.

Phase II

The purpose of the second phase of the study was to test the factor structure of the instrument with the help of exploratory factor analysis. Before conducting the exploratory factor analysis, data screening was employed on each statement of the goal-setting scale using mean, standard deviation, skewness, and kurtosis statistics as Field (2005) suggested that scores of the variables/statements should have a roughly normal distribution for measuring interrelations. Additionally, Initial internal consistency reliability among the items of the subscales were established.

Methods

Participants

Three hundred and twelve sportspersons volunteered to participate in this phase of the study. The sample consisted of 176 (56.41%) males and 136 (43.59%) females. The sportspersons' age ranged from 17to 32 years (M = 20.40, SD = 2.053). The participants were active sportspersons who participated in various individual and team sports. From the sample, 28% were individual sports sportspersons and 72% were team sports sportspersons. The level of participation of sportspersons extended from intercollege to international. Their mean training age was 5.00 years (SD = 2.94).

Administration of the Test

Athletes of different colleges of Delhi and sports clubs were recruited for the present study. They were asked to willingly participate in the study. They were informed regarding the purpose of the study and short instructions were given regarding the procedure of filling the Goal Setting Action Scale. They were assured about the secrecy of the responses. A consent form to fill the scale was signed by each athlete. Upon completion of the administration, the scholar or research assistant debriefed interested athletes concerning the nature of the study and answered any of the athletes' questions about the study.

Scoring

All the items of the Goal Setting Action Scale were rated on a 7-point Likert scale from very true of me (7) to very untrue of me (1).

Statistical Analysis

Exploratory Factor Analysis

Exploratory Factor analysis was used to extract factors influencing an athlete's attitude towards goal-setting action. To determine the adequacy of extraction and number of factors, the following criteria were used: (a) eigenvalues greater than 1.0, (b) scree test, (c) the percentage of variance accounted for by each factor, (d) cumulative percentage of variance accounted for by the derived factors and (e) interpretability of the factors. Initial internal consistency reliabilities and inter-factor correlations were calculated as well, and item analysis was undertaken to eliminate any unnecessary items, items were selected for factors if the rotated components were greater than 0.30, and no cross-loadings were greater than 0.25.

Results: Exploratory Factor Analysis

Table 1 Descriptive Statistics for the Goal Setting Action

Goal Setting Action	N	Mean	S. D	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	S. E	Statistic	S. E
Statement 13	312	4.68	1.95	-0.601	.138	-0.905	.275
Statement 1	312	5.16	1.86	-1.021	.138	-0.145	.275

Statement 2	312	5.37	1.62	-1.153	.138	0.776	.275
Statement 3	312	5.75	1.39	-1.424	.138	1.954	.275
Statement 4	312	5.66	1.52	-1.136	.138	0.726	.275
Statement 5	312	5.65	1.41	-1.135	.138	1.074	.275
Statement 6	312	5.35	1.54	-1.036	.138	0.613	.275
Statement 7	312	5.37	1.58	-1.093	.138	0.676	.275
Statement 8	312	5.45	1.57	-1.254	.138	1.220	.275
Statement 9	312	5.43	1.49	-1.160	.138	1.093	.275
Statement 10	312	5.40	1.37	-0.790	.138	0.321	.275
Statement 11	312	5.75	1.43	-1.297	.138	1.440	.275
Statement 12	312	5.84	1.38	-1.658	.138	3.023	.275
Valid N (listwise)	312						

Table 1 reveals the descriptive statistics for statements of goal-setting action. Statement evaluating that sportspersons write their goals to keep focused has shown the mean value of 4.68 +1.95, whereas the statement evaluating that goals are based on their needs has shown the mean value of 5.16+1.86, statement evaluating that an athlete set time frame for their goals has a mean value of 5.37+1.62, statement evaluating that athlete analyze the reason for failing to achieve the goal has a mean value of 5.75+1.39, similarly the statement measuring that they use composite goal setting action has shown mean 5.66+1.52, statement measuring that after reaching their goal they wish to be rewarded/recognized in some way has a mean value of 5.65+1.41, similarly statement measuring that athlete reset their goal when it is required has shown the mean value of 5.35+1.54. Statement measuring that they set priority on their goals when their coach formulates several of goals for them has mean 5.37+1.58, the statement evaluating that they monitor their progress regularly to meet target line having a mean value of 5.45 +1.57, statement formulated to measure athlete set goals that are difficult but attainable has a mean value of 5.43+1.49, similarly statement 24 has shown the mean value of 5.40+1.37 which was formulated to measure sportspersons overcome all obstacles in their way to achieving goals. Statement evaluating sportspersons are fully aware of their strength and weaknesses while setting their goals has shown the mean value of 5.75+1.43, the statement measuring sportspersons feel knowledge of result is important to achieve the goal has a mean value of 5.84+1.66.

Table 1 also reveals the value of the skewness of goal setting action statements range from -0.601 to -1.658 (mean skewness value = 0.983) and the value of kurtosis for the statements of goal setting action range from - 0.145 to 3.023 (mean kurtosis value = 1.163) which are less than the cutoff point 3 for skewness and 7 for kurtosis (West, Finch, & Curran, 1995 cited in Zervas, Stavrou, & Psychountaki, 2007). Therefore, it may be concluded that scores of statements were normally distributed.

Exploratory Factor Analysis

To determine the latent constructs, an exploratory factor analysis using the principal component method with varimax rotation was performed on the goal-setting action on a sample of 312 athletes, including Correlation Matrix, KMO and Bartlett's test, Factor Loadings, Communalities, Eigenvalues, Percentage of Explained Variance of goal setting action variable which has been presented here:

Exploratory factor analysis produced an initial solution of three factors (with Eigenvalues greater than 1.0) which accounted for 45.287 % of the variance. The final determination of factors was based on the interpretability as the scree plot analysis

suggested that two solutions were possible, and the third factor also contained only one item that loaded greater than .30. Therefore, one item was removed from the 13 goal-setting action items. 12 items were again factor analyzed and results about these items are presented below.

The determinant value was .119 which was greater than the necessary value of 0.00001(Field, 2005). All items of goal setting action correlate well and none of the correlation coefficients were particularly large, therefore, there was no need to consider eliminating any item at this stage

The Kaiser-Meyer-Olkin test of sampling adequacy was very good (.832). Bartlett's test of sphericity was 650.812 which is highly significant (p<.00001, df 66). Therefore, it may be concluded that factor analysis is appropriate for this data.

Table 2 Exploratory Factor Analysis: Factor Loading, Communalities, Eigenvalues, Percentage of Explained Variance of the Goal Setting Action Items

	Factor loadings		
Statements	**Factor 1**	**Factor 2**	**Communalities**
Statement 5 After reaching my goals I wish to be rewarded/recognized in some way.	**0.70**		0.50
Statement 4 I use composite goal-setting strategies, i.e., improving all components of the game, and not a single aspect.	**0.65**		0.51
Statement 3 I analyse the reason for failing to achieve the goal.	**0.60**		0.43
Statement 6 I reset my goal when it is required.	**0.57**		0.33
Statement 7 I set priority on my goals, when my coach formulates several of them for me.	**0.51**		0.32
Statement 9 I set goals that are difficult but attainable.	**0.46**		0.25
Statement 12 I feel knowledge of the result is important to achieve goal.		**0.74**	0.56
Statement 11 While setting a goal, I am fully aware of my strengths and weaknesses.		**0.67**	0.45
Statement 8 I monitor my progress regularly to meet target line.		**0.63**	0.50
Statement 10 I overcome all obstacles in my way to achieving goals.		**0.55**	0.44
Statement 1 My goals are based on my needs.		**0.45**	0.21
Statement 2 A timeframe is set for my goals.	0.33	**0.42**	0.29
Eigenvalues	**3.60**	**1.15**	

% Explained Variance	**20.11**	**19.50**

Note. Factor loadings < .30 are not reported in the table.

The results of Table 2 reveal that the commonalities of the goal-setting action statements are ranging from 0.21 to 0.56 (mean statement communalities = 0.40). Exploratory factor analysis of goal-setting action statements resulted in an interpretable two-factor solution with Eigenvalues of 3.60 and 1.15 respectively, which accounted for 39.69 % of the total variance in 12 retained statements. The first factor contains 6 statements with the loadings ranging from 0.46 to 0.70. The second factor also contains 6 statements and factor loadings are ranging from 0.42 to 0.74.

The statements load highly on the first factor seems to all relate to strategies used by the sportspersons after failing to achieve their goals. Therefore, the scholar has labeled this factor as Goal Resetting Action. The statements that load highly on the second factor all seem to relate to strategies used by the sportspersons to set or achieve their goals to improve their performance. Therefore, the scholar has labeled this factor as Goal Setting Action.

To test the internal consistency reliability of the subscales, the Alpha coefficient was computed after EFA.

The internal consistency reliability was 0.67 for the six-statement goal resetting action subscale and 0.67 for the six-statement goal setting action subscale which is higher than the acceptable value of 0.6. the values of Cronbach alpha indicated that there is internal consistency.

Phase III

The validity of the two factors named goal setting action and goal resetting action influencing goal setting action were examined by considering fit indices and standardized factor loadings produced by confirmatory factor analysis (CFA) using LISREL. To test the internal consistency of the subscale, the Alpha coefficient was again computed after CFA. For validity index of reliability was used.

Methods

Participants

Two hundred and eighty sportspersons participated in phase III of the study. The sample involved 136 (48.57%) males and 144 (51.43%) females. The age of the sportspersons ranged from 17 to 32 years (M= 20.07, SD= 2.57). 36.1% were individual sports sportspersons and 63.9% were team sports sportspersons. The level of participation of sportsperson extended from intercollege to international. The mean training age is 4.75 years (SD= 3.07). In addition, a total of 28 sports were represented in the sample.

Administration of the Test

Athletes of the different colleges of Delhi and sports clubs were recruited for the present study. They voluntarily participated in the study. They were informed regarding the purpose of the study and short instructions were given regarding the procedure of filling the goal-setting action scale. They were assured about the confidentiality of the responses. A consent form to fill the scale was signed by each athlete. Upon completion of the administration, the investigators or research assistant debriefed interested athletes concerning the nature of the study and answered any of the athletes' questions concerning the study.

Confirmatory Factor Analysis

To support the factor model defined by the Exploratory Factor Analysis (EFA),

Confirmatory Factor Analysis (CFA) was employed. The value of x2/df ratio lower than 2.0 suggests a good fit, whereas Fulop, (2007) and a few other researchers recommended x2/df ratio values < 3.0 for a good fit. The NNFI and CFI values above 0.90 are considered for an acceptable fit of the model. The GFI indices range from 0 to 1, with values close to 1 representing a perfect fit, and the values close to 0 representing a poor fit. The SRMR and RMSEA values close to or lower than 0.08 and 0.09 respectively demonstrate an acceptable fit. The loadings of the items on the appropriate factors should exceed the cutoff criterion of 0.30.

Reliability

Alpha coefficients to test inter-item correlation were employed.

Results: Confirmatory Factor Analysis

Another sample (N= 280) from the population was selected and data were used for further development of the goal-setting action subscale using confirmatory factor analysis (CFA), results are presented in Table 3.

Table 3 Fit Indices of the Two Measurement Models of the Goal Setting Action Scale

Model	**x^2**	**df**	**x^2/df**	**CFI**	**GFI**	**NNFI**	**SRMR**	**RMSEA**
Model 1: Two Factor	153.60*	52	2.95	0.90	0.92	0.88	0.06	0.08
Model 2: One Factor	176.73	54	3.27	0.88	0.90	0.86	0.07	0.09

Note. x^2=chi-square, df= Degree of Freedom, CFI = Comparative Fit Index, GFI= goodness of fitness index, NNFI=Non-Normed Fit Index, SRMR= Standardized Root Mean Square Residual, RMSEA =Root Mean Square Error of Approximation.

Table 3 indicates the fit indices of the two measurement models. The two-factor measurement model (model 1) of goal setting action subscale reveals that the overall model fits well. The x^2 (df = 52, N=280) value is 153.60 ($p<.001$) and x^2 /df ratio is 2.95. The NNFI value is 0.88, the CFI is 0.90, the GFI value is 0.92, the SRMR is 0.06 and RMSEA is 0.08. The x^2 /df represents an acceptable fit to the data. Although the x^2 value is not a good fit index, this is perhaps due to the sample size (Tabachnick & Fidell, 1996, cited in Zervas, Stavrou, & Psychountaki, 2007). The CFI has reached the criteria of 0.90 whereas the NNFI is close to 0.90. The SRMR has reached the desirable cutoff criteria of 0.08 and the RMSEA succeeded in attaining the criteria of 0.09. The factor loadings range from 0.30 to 0.73 (mean factor loadings = 0.51). Modification indices suggested that statement 9 should remain in goal setting action subscale rather than goal re-setting action as the factor loadings on goal setting action is more significant than on goal re-setting action as can be experienced in the modeling structure depicted in Figure 1.

To further examine the factor structure of goal setting action scale, another alternative measurement model was tested. In model 2, the single-factor model was set, specifying that all statements loaded on a single goal setting action subscale. The single-factor measurement model of the goal setting action subscale reveals a poor fit, based on the fit indices. The CFI and NNFI have not

reached the cutoff criterion of 0.90. Additionally, the RMSEA, as well as the SRMR values are high. The factor loadings range from 0.30 to 0.68 (mean factor loadings = 0.47).

The fit indices and significant factor loadings of the goal-setting action in the measurement models have indicated that model 1 is better than model 2 as model 1 represents the overall model fit well to the data. The model depicted in Figure 1 below further shows that the correlation between the two factors in goal setting action is 0.74 which is significantly higher therefore, a total of their two factors is a measure for goal setting action.

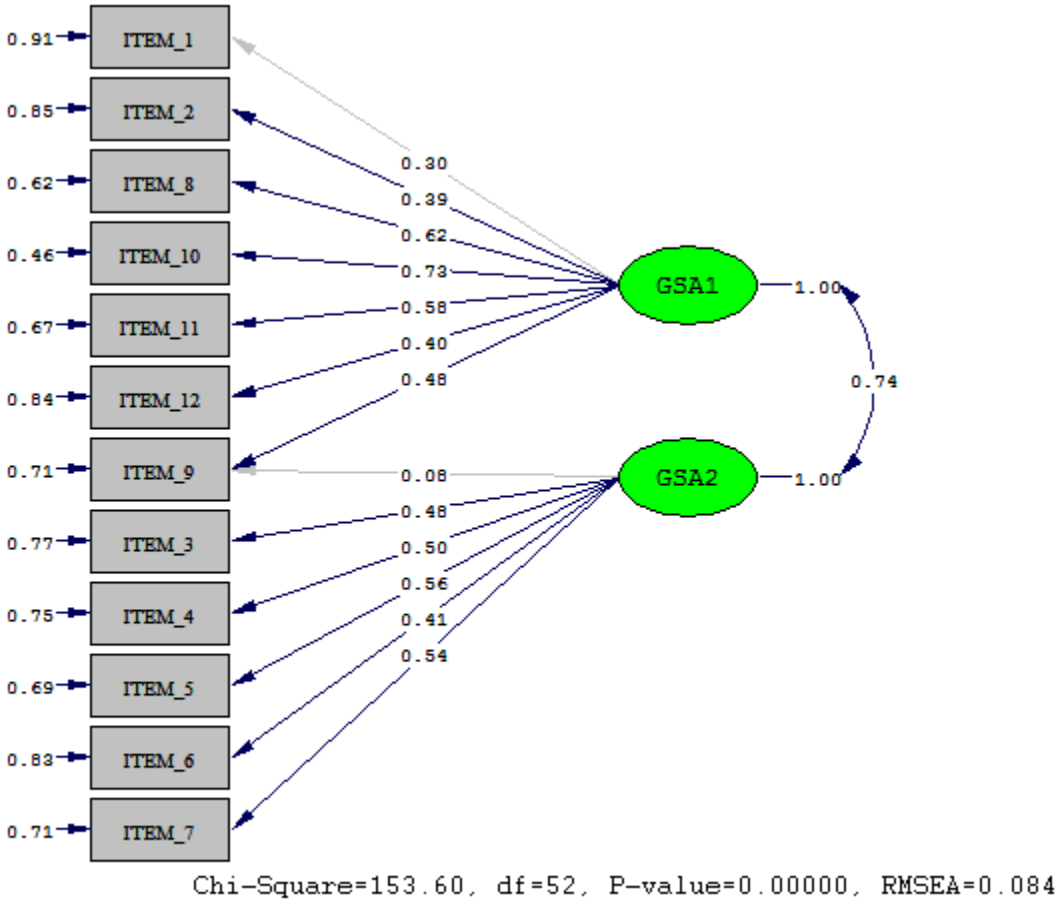

Figure 1: Factor loadings of the 12 statements of Goal Setting Action Subscale

To test the internal consistency reliability of the subscales, the Alpha coefficient was again computed after CFA.

Results indicated that the Cronbach alpha (α) values of goal setting action and goal resetting action are 0.70 & 0.63 and 0.78 for the total goal setting action scale resulting that all coefficients are acceptable for good internal consistency reliability in each selected subscale.

Index of reliability is a measure of statistical validity. To test the statistical validity that computes the index of reliability, the instrument was validated. The literature says that if the value is more than 0.50 the test is said to be valid. Results indicated that in this instrument the index of reliability range 0.84 to 0.79 for subscales and 0.88 for total scale which indicates that experimentally also the

scale is valid to use as an instrument on the population.

Phase IV

Differential reliability

The T-ratio value of independent groups on goal-setting action is 1.69 which is not significant at 0.05 level with df = 590. The t-test indicates that genders do not influence the goal-setting action.

Phase V

Norms

Descriptive analysis including mean and standard deviation was employed to construct the norms. Keeping in mind the range of scores the norms were developed on a 3-point scale for the Goal Setting Action Scale, for which the total scores of all items on both subscales and total of all items on a goal-setting action scale were utilized (Verma & Ghufran, 2012). Norms are presented in Table 4.

Table 4 Norms on Goal Setting Action

GRADES	GOAL SETTING ACTION VALUES
Good	$\geq$ 76
Average	55 to 74
Below Average	$\leq$ 54

DISCUSSION

Studies have shown that athletes using goal-setting intervention enhance performance and find a positive change in psychological states like self-confidence, anxiety, motivation, and self-efficacy. However, goal setting is an easy concept, but it requires ore thought and proper planning to make it effective. The purpose of the study was to develop a scale to measure the attitude of the athletes towards goal-setting action. The study was conducted in five phases.

The results produced by the exploratory factor analysis (EFA) of the initial 13 statements of the goal setting action scale yielded a three-factor solution. The third factor contains only one statement; therefore, the statements were dropped and again 12 statements were factor analysed and found a two-factor solution. The first factor represents strategies planned by sportspersons when they fail to achieve their goals to enhance their performance in sports. The second factor represents the planning of strategies to set or achieve their goals in sports. The findings were in line with the studies of a few researchers (Jeffrey, Neil, & Laurie, 1996) who revealed certain principles to apply while setting goals. Reliability analysis provided evidence regarding the good internal consistency of the subscales of goal setting action scale. Exploratory factor analysis was used to establish the factorial validity. Results support the Reliability analysis provided evidence regarding the internal consistency of the scale and subscales. The scale and subscales revealed good internal consistency reliabilities.

Another sample from the population was selected and data were for further development of the goal setting action subscale using confirmatory factor analysis (CFA) indicated that the two-factor model of goal setting action scale provides an adequate fit to the data. The internal consistency reliability showed the acceptable coefficient value for good internal consistency reliability.

On the other hand, the relatively high correlation between goal re-setting action and goal setting action suggested a composite goal setting action score (sum of goal re-setting action and goal setting action). Summing up the scores of all

statements on each factor produces a total goal-setting action score, ranging from 12 (very low goal setting action) to 84 (very high goal setting action). A low score could be interpreted as sportspersons are not utilizing the principles of goal setting, and hold an unfavourable attitude towards goal setting action, while a high score indicates a favorable attitude of sportspersons towards goal-setting principles.

CONCLUSIONS

Within the limitation of the study the following conclusions were drawn:

1. Exploratory factor analysis on 12 statements of Goal Setting Action yielded two-factor solutions i.e., a) goal resetting action b) goal setting action with their internal consistency of 0.79 and 0.80 respectively.
2. Confirmatory factor analysis yielded adequate fit to the two-factor model of goal setting action with the internal consistency of .63 and .70 respectively.
3. The internal consistency of the whole goal-setting action scale is good as the obtained alpha (α) value for the Goal Setting action Scale for Sportspersons is 0.78.
4. The goal-setting action scale is applicable for both genders as results of differential reliability using t-test indicated that genders do not influence goal-setting action.

FUTURE IMPLICATION

The development of the scale will be of immense importance to the sportspersons as it can serve as an essential tool for evaluating their performance accomplished concerning the goals set. The scale will be extremely useful to set appropriate goals depending upon the level of the sportsperson's performance by the coaches or trainers. The scale may help the professional and amateur trainers engaged in the training of the sportsperson to understand the individual athlete's goal-setting pattern. Furthermore, the goal-setting scale may help the sportspersons not only to evaluate themselves but also equip them to understand the importance of goal setting required for excellence. The scale constructed may be based on the Indian population especially the sportsperson and hence will be an important psychological instrument in the Indian context. The scale constructed may help the coaches to understand the individual athlete's goal perception so that an individual training programme may be developed to change the perception. The scale constructed may help the coaches to understand the individual athlete and their pattern of setting goals. The scale constructed will be a promising psychometric instrument for research in goal-setting areas and for the planning of psychological intervention programmes.

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