

## **AN INTERVENTION: APPLICATION OF GOAL SETTING THEORY TO ELEVATE WEIGHTLIFTER'S POST-COVID PERFORMANCE**

Saqib Fayyaz<sup>1</sup>, Sabahat Afsheen<sup>2</sup> and Rabia Karim<sup>3</sup>

### **ABSTRACT:**

*During the Covid-19 lockdown domestically the young weightlifters of a Lion's Heart Weightlifting Club located in northeast Lahore Pakistan were forced to limit their regular systematic training which results in lost interest and intrinsic motivation to elevate their desired performance targets in a post-covid era. The objectives of the study were (a) to examine the impact of Goal Setting Theory on young weightlifters' post-covid performances, and (b) to engage the young weightlifters in the routine mental practice strategy of setting and procurement of short-term goals for daily training predetermined performance. An experimental method based on pre and post-intervention was employed to compare the results of the sample. The result of an experimental group's Paired Sample t-test, using the statistical package SPSS version 23, showed a significant impact of 'GST' (short-term goal-setting skills) on an elevation of the young weightlifter's post-covid performance. Therefore, it is concluded that to keep young weightlifters intact and focused on elevating their performance standards, coaches should help young weightlifters by allocating their daily performance training targets (i.e. short-term goal acquisition) moreover, teaching and giving them time for mental practice and strategy for the fulfillment of allocated daily training targets.*

**Keywords:** *Goal setting theory, Short-term goals, Goal setting strategy, Lion's Heart Weightlifting Club, Weightlifting performance, young weightlifter*

### **Introduction:**

Goal-setting theory is related to a motivation theory that attempts to explain why people do poorly in work-related tasks? It is based on the findings of hundreds of scientific investigations and asserts that individual success is strongly tied to the objectives they

---

<sup>1</sup> National Coach of Pakistan Weight Lifting Federation, Lahore. E-mail: [saqibfayyazpk@gmail.com](mailto:saqibfayyazpk@gmail.com)

<sup>2</sup> Senior Lecturer, Bahria University, Islamabad. E-mail: [sabahat.buic@bahria.edu.pk](mailto:sabahat.buic@bahria.edu.pk)

<sup>3</sup> Assistant Director Sports, University of Home Economics, Lahore

set for themselves [1]. The intensity (difficulty or amount of work necessary to attain one's objective) and the substance (target of activity) are both important [1]. For more than two decades, goal-setting theory has been used to describe how to inspire individuals to perform better in work-related activities by defining and monitoring objectives [1]. "Experts in field sports are left in doubt that for a unique personality is not enough for a person to be simply genetically gifted or possess certain inborn traits alone, but also to develop in himself an ability to struggle not just for servable for supremacy" [2]. Sports performance is difficult to describe in practical terms especially in a sports setting, yet it is inductive of the seeds of exceptional performance [2]. Goal setting is a vital part of any sport and sportsperson intact oneself towards the achievement of decided goals [3]. Setting goals is related to one's mind and thinking process that enhances one's ability to set realistic and achievable goals in a professional career [3]. Moreover, goal setting theory's SMART principle further glorifies one's focus on the attainment of a set goal [4]. While setting a goal by a pursuer the abbreviation 'SMART' principle shows some directions for the acquisition of set goal's positive outcomes, 'S' (be specific); emphasizes a goal should be simple, sensible, and significant, 'M' (measurable); points out the pursuer's goal should be meaningful and motivating, 'A' (achievable); reflects a goal should be agreed and attainable based on realistic approach, 'R' (relevant); a pursuer consider the reasonability, realistic, resourced and result-based of a goal and lastly, 'T' (time-bound); a goal should pursue keeping a time-limited, time/cost sensitivity in mind to achieve it [4].

The Olympic-style weightlifting sport is completely based upon the human strength ability; it carries the individual sports performance type intending to win the counterpart by lifting maximum weight to the best of the contestant's ability [5]. During the peak pandemic Covid-19 period years (i.e. 2020 and 2021), where the governments around the globe have imposed the smart lockdown strategies to control the increased number of Covid-19

cases and banned all types of indoor as well as outdoor sports activities for their population, intended to secure population from pandemic disease. In these circumstances, the young athletes were forced to limit or stop their targeted sports training outcomes due to the unavailability of the routine training program within the clubs and scheduled weightlifting competitions domestically; which was considered a huge drawback in their sporting career. The same dilemma was reported and experienced by the local club young weightlifters of Lion's Heart Weightlifting Club (LHWC) i.e. located in the northeast, Lahore Pakistan. Subsequently, during the post-covid-19 era normalization, it was observed by the researcher that after reinstating these athletes (affected by Covid-19 lockdown span) into the regular phases of 6-month systematic weightlifting training, these young athletes were even unable to acquire their pre-covid-19 performance standards as well.

The credentials of the researcher belong to the weightlifting sport, out of 22 years, 16 years experience as an athlete (from club to national level) and since last 6 years serving as a coach (at the club, district, and university level). Thus to tackle this flaw a routine meeting with LHWC members was held and after interviewing the affected members of the club, based on the researcher's experience an observable reason for this flaw was assumed by the researcher that during covid lockdown period due to the irregularities of planned and scheduled weightlifting training the young weightlifters had lost interest/intrinsic motivation for their performance elevation. In the post-covid era, it may be the psychological factor that is affecting badly to their short-term goal-setting skills towards the attainment of their sports performance predetermined targets. Therefore, keeping in view the scope and delimitation of the study; its primary focus was the application of the GST specifically short-term goal-setting adopting the 'SMART' principle whereas, the secondary focus was an intervention pattern i.e. to keep the sample size intact and focused on the elevation of their performance standards. Furthermore, the researcher help

participants by assigning their daily training targets (i.e. short-term goals) and allocating time for their mental practice strategy to achieve assign targets positively. Daily accomplishments of predetermined short-term goals ultimately cause an achievement of long-term career goal for athletes [6].

The significance of the study is related to the understanding of a coach, motivator, instructor, reinforcer that despite of knowing the physical needs of the young weightlifter's (i.e. adequate nutrition, proper hydration, scientific training methods, stretching session for flexibility and resting periods for recovery etc) there are other influencing factors as well that belongs to the subject's emotional and psychological needs. In this study, a factor identified by the researcher which was badly affecting the post-covid performance of these young weightlifters was the lack of skills that could involve these young weightlifters in a healthy mental practice strategy of setting short-term goals based upon the procurement of daily assigned training targets by a coach. It could elevate the desired performance of the participants.

## **CONCEPTUAL FRAMEWORK**

The Goal Setting Theory (GST) was introduced by Locke and Latham in 1990, 2002, and 2019), a GST is considered the most significant when it comes to conceptualization of targets and attaining the best result in any field of life. GST is the key tool for a practitioner to establish the relationship between the setting realistic goals and contributing of an effort to achieve it [6]. [6] [7] [8] Emphasizes that GST can be used in several possible domains such as; medicine, sports, exercise, and business because these domains are directly related to the accomplishment of the task/performance/project with high accuracy and perfection to get maximal result outcomes. In GST, Goals are conceptualized by a practitioner as an end mental state; attempts to the accomplishment of these conceptualized goals; it is considered the aim of an action by the practitioner [6] [9]. It is evident that the GST has four mechanisms to enhance the task-related performance of an

individual through the goal-setting interventions [6]. First, GST instructs the practitioner to ignore irrelevant activities in surroundings and the practitioner's all-time focus must be on the efforts that lead toward goal-related actions [6] [10]. Second, for the pursuance of a set goal, the GST motivates intrinsically to input positive and meaningful efforts by an individual [6] [10]. Third, goals are the key source for the development of stamina in an individual, whereas tough target goals require a true dedication, capability of intrinsic motivation, resilience, and focus towards achievement of one's determined goals. Lastly, in the line of predetermined goals, fulfillment of the effort that requires throughout actually helps an individual in the development of the task-relevant strategies [6] [10].

[6] [11] Emphasizes on the GST's five characteristics directly through which goal can be easily understood and pursued accurately, it includes (1) the difficulty of a goal, (2) specificity of a goal, (3) proximity of a goal, (4) source of a goal and lastly (5) the types of a goal. As far as the first characteristic of a GST is concerned, so it communicates that the set goals are always hard and difficult to achieve but based on a realistic approach, setting goals should be achievable that results in high performance [6] [11]. Second, a goal should always be specific e.g. if an athlete has set a goal of completing 100 pushup in a single go then an individual should plan and practice pushup rather than practicing running or other type of training [6] [11]. Third, there are further two distributions of GST a proximal refers to (short term goals) and distal refers to (long term goals), both these types of goals are interlinked with each other and play an important role in goal acquisition in positive means e.g. short-term goals are the footsteps of stairs which ultimately gives a pathway for an individual to achieve long-term set goal towards top desired performance. There would be number of short-term goals which lead to achieve single long-term goal [6] [11]. Fourth, this part of the GST discussed the source of a goal which means that there are three different sources

of a goal; self-set goal, participator/partner goal, and assigned goals. Self-set goals are constantly set by the pursuer h/herself e.g. an athlete self-set a goal to be achieved a target of lifting 20kgs more in h/her best lift/total by the end of a macro-cycle phase following the periodization training rules whereas, a participator/partner goal target always accepted as a competition by an individual in a shape of a challenge given by h/her training counterpart, partner or colleague e.g. training partners always give a challenges to each other before the start of daily training which always results in scoring good performance [6] [11]. Assigning goals is used in almost every sport; these types of goals are commonly assigned by the coaches, bosses, or owners to their potential athletes, workers, or employees. Fifth, the theorists have further divided the GST into two types, performance goals refers to the individual who always keeps themselves in a mental process to achieve the best possible results of a particular task or performance, on the other hand, learning goals emphasize on the learning of the task-related strategies, it includes the learning of simple to complex task rather than vice versa [6] [11].

GST also takes into account the moderators that affect the link between goal setting and performance; such as ability, goal commitment, feedback, task complexity, and task knowledge and resources [12] [13]. At first, An individual's learning capability of a sporting skill which is complex in learning (e.g. sports specific technical abilities that need to execute a task properly) is much near to achieving a goal instead of those individual's abilities of sporting skill that is simple in learning [12] [13]. At second two key factors that influences one's commitment to their set goals needs to be highlighted i.e. self-efficacy and goal importance, these are important in a sense; the effectiveness of one's goal setting and it considered by those people who are more often enthusiastic towards their set goals [12] [13]. Third in line, is to have feedback/admiration from stakeholders on the individual's progressive attainment of set goal(s), it impacts on the effects of

one's performance pursuance of h/her set goals, it also gives guidance and future directions to fulfill the individual's goals in the best possible way [12] [13]. In fourth place goal setting would be less effective in a condition; if the task is complex and it was first offered as a moderator for goal effectiveness because it is a common factor that the new task before learning is beyond one's capability. Fifth, when individuals have the resources they need to achieve the work; objectives are more likely to be translated into performance [12] [13].

## **METHODS**

An applied, deductive type, interventional research method, specifically involving before and after performance results were adopted to investigate the hidden cause of declined performance measures by an affected group in a post-covid phase of training. The quantitative mode was applied to collect, analyze and interpret the data. In this study, the sample of 24 young weightlifters was selected using a simple random sampling technique. The reason; the researcher has chosen 24 participants in a single group followed by the before and after experiment approach was because the problem of being unable to perform well in the post-covid training phase was badly affecting this whole group. The experimental group included registered participants of 16-21 years of age at Lion's Heart Weightlifting Club (LHWC i.e. located in northeast Lahore, Pakistan). These young weightlifters were having 4-6 years of sporting experience moreover, those who were preparing for inter-club and inter-district level competitions whereas, participants of the same club other than these conditions i.e. beginner and senior weightlifters were excluded from this study because, the beginners were in drill-learning phase, however, majority of the seniors were not reported to experience the observed problem. After selecting the sample size, the researcher took all 24 consented participants into an experiment and also announced that informing the researcher; anyone can discontinue this study at any time and stage without reflecting on the problem

any individual may face. In this study, the weightlifting performance assessment instrument i.e. 'the weightlifting score sheet' was employed for before and after group participants' performance records. It was developed by the International Weightlifting Federation (IWF) and followed by all the affiliated country's weightlifting federations including Pakistan [5].

In the execution of a 12-week experiment; the same planned systematic training program was followed, which was applied to them earlier, during the diagnosis of an assumed research problem. The same venue was chosen by the researcher i.e. LHWC for the conduct of an experiment intended that these 24 athletes were used to practice at the same club in past years and changing the venue factor could affect their possible performance outcomes. The procedure of an experiment; initially, a control competition was conducted within the club, and the performance results of the selected sample were recorded. Secondly, the intervention was introduced for 12 weeks i.e. before starting a training session the researcher allocated all participants with their daily training targets, then a 15 minutes session was arranged for all participants collectively and engaged them into visualize the achievement of their allocated short-term goal-setting mental practice before starting the warm-up exercises. Lastly, to examine the objectives of the study, a control competition of the selected sample was conducted again to record post-intervention performance results.

## **DATA ANALYSIS & DISCUSSION**

A tool SPSS version 23 was used for the data analysis. This study intended to compare the results of before-intervention and post-intervention competition performance and analysis of both the experimental group result consists of 24 sample size hence; by comparing the mean values using Paired Sample *t*-test to analyze the pre-intervention and post-intervention competition performance results of experimental group participants that is as follows.

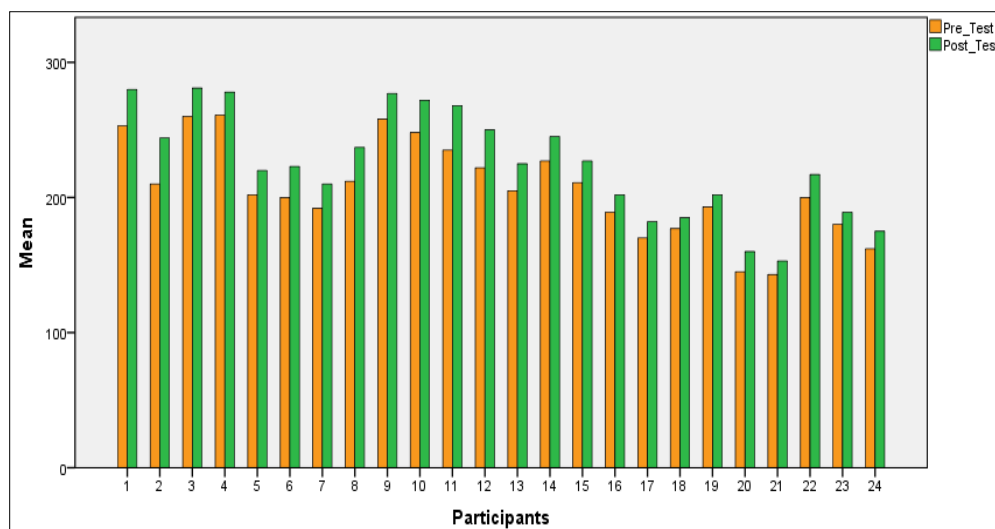


### Paired Sample t-test

Table 1: Paired Samples Correlations								
				N		Correlation		Sig.
Pre & Post Competition				24		.989		.000
Table 2: Paired Samples t-Test Results								
	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pre & Post Competition	-18.625	7.234	1.477	-21.680	-15.570	-12.613	23	.000

It was noted that the correlation between the two conditions were estimated at  $r = 0.98$ ,  $p < .001$ , suggesting that the paired sample  $t$ -test was appropriate in this case. The null hypothesis of experimental group means was rejected,  $t(23) = -12.613$ ,  $p < .001$ . Thus the post-intervention competition performance results mean was statistically significantly higher than the pre-intervention competition performance results mean of the experimental group. Figure no. 1 shows the graphical representation of Paired Sample  $t$ -Test results.

**Figure No. 1:**  
Experimental group participant's pre and post intervention competition performance results bar graph (with 95% CIs)



This study's result is evident along with the personal observation of the researcher and statistical analysis outcome that one psychological factor may affect and results in unsatisfactory performance could be lacking the goal-setting skills by an athlete. To deal with this problem effectively GST plays an important role in one's sporting career and it further enhances the performance standards of an athlete. Moreover, it is evident from this study that achievements of the short-term goals are the key footsteps to the acquisition of the long-term goal. Before starting daily training, coaches of the local weightlifting clubs should help athletes by allocating the daily training targets to the athletes and regularly arrange the mental practice session for athletes to visualize their goal attainment strategy before every training session. Lacking goal-setting skills may affect the performance of an athlete and it can further leave a negative impact on an individual's sporting career furthermore, getting rid of such conditions, coaches should promote the mental practice of setting athletes short-term goals skills among young weightlifters within the clubs.

## **CONCLUSION**

With the rise of the Covid-19 situation where people were getting infected with the deadly disease and the medical industry was busy in the testing phase of its vaccination. As a preemptive measure, governments around the globe have imposed lockdown/smart lockdown strategies domestically to deal effectively with this communicable infectious disease. Furthermore, several SOPs (standard operating procedures) were also introduced for people to follow, and to break the pandemic infectious cycle governments stepped ahead had banned all types of indoor as well as outdoor sporting activities. In these circumstances, young athletes were pushed to limit/stop their sports training due to the unavailability of systematic training programs and domestic competitions. The same dilemma was also reported and experienced by a Lion's Heart Weightlifting Club located in northeast Lahore Pakistan. The researcher himself was a

weightlifter and have coaching experience was observed the problem of non-compliance with young weightlifters' performance standards in the post-covid era while they were performing in the pre-covid era. After a detailed meeting with club members, the researcher assumed a problem i.e. athletes were lacking implementing short-term goal-setting skills and mental practice for accomplishments of daily training predetermined targets. Therefore, pre and post-intervention experiment was conducted followed by an intervention i.e. allocation of daily training targets (short-term goal setting) and time for mental practice strategy for its fulfillment was given. The result of the study shows that implementation of GST specifically short-term goal-setting skills have a significant impact on the performance elevation of those young weightlifters who lost interest and intrinsic motivation for the elevation of their performance standards during covid lockdowns.

## REFERENCES

- Hardy Prem Sukh and Lennart E. Nacke Gustavo F. Tondello, "A Theory of Gamification Principles Through Goal-Setting Theory," in *51st Hawaii International Conference on System Sciences (HICSS)*, 2018, Hawaii, 2018, p. 14.
- Kreepa Sharma, Sahil Sharma, Dr. Pavitar Parkash Singh and Dr. Manish Gupta Dr. Neelam Sharma, "Analysis of Goal Setting among Elite and Non-Elite Sports Persons," *European Journal of Molecular & Clinical Medicine*, vol. 07, no. 07, pp. 3954-3958, 2020.
- Joaquín Gómez-Miñambres, Roberto Hernán-González Brice Corgnet, "Goal setting in the principal-agent model: Weak incentives for strong performance," *Games and Economic Behavior*, vol. 109, pp. 311-326, October 2016.
- Megan L Hammersley, Rachel A Jones, Philip J Morgan, Clare E Collins and Anthony Okely Abigail Fisher, "Goal setting for weight-related behavior change in children: An exploratory study," *Nutrition and Health*, pp. 1-8, 2008.

- IWF Editor. (2019, January) International Weightlifting Federation. [Online].  
[https://iwf.sport/weightlifting\\_/rules/](https://iwf.sport/weightlifting_/rules/)
- Laura Catherine Healy and Desmond McEwan Yoon Hyuk Jeong, "The application of Goal Setting Theory to goal setting interventions in sport: a systematic review," *International Review of Sport and Exercise Psychology*, pp. 1-26, March 2021.
- Simon Rosenbaum Christian Swann, "Do we need to reconsider best practice in goal setting for physical activity promotion?," *BJSM*, vol. 0, no. 0, pp. 1-3, September 2017.
- Heather Gatten, Inbal Perry, Ye Wang, Sibak Sung, Gershon Tenenbaum Jean-Charles Lebeau, "Is failing the key to success? A randomized experiment investigating goal attainment effects on cognitions, emotions, and subsequent performance," *Psychology of Sport & Exercise*, 2018.
- Edwin A.J. van Hooft, Annelies E.M. van Vianen Gerald M. Weltevreden, "Parental behavior and Adolescent's achievement goals in sport ," *Psychology of Sport & Exercise*, 2018.
- Andrew Hooper, Matthew J. Schweickle, Gregory Peoples, Judy Mullan, Daniel Hutto, Mark S. Allen, Stewart A. Vella Christian Swann, "Comparing the effects of goal types in a walking session with healthy adults: Preliminary evidence for open goals in physical activity," *Psychology of Sport & Exercise*, pp. 1-10, January 2019.
- Lee Crust, Christian Swann, Patricia C. Jackman Rebecca M. Hawkins, "The effects of goal types on psychological outcomes in active and insufficiently active adults in a walking task: Further evidence for open goals," *Psychology of Sport & Exercise*, vol. 48, pp. 1-11, January 2020.
- Johnmarshall Reeve, Yong-Gwan Song Sung Hyeon Cheon, "Recommending goals and supporting needs: An intervention to help physical education teachers communicate their expectations while supporting students' psychological needs," *Psychology of Sport & Exercise*, December 2018.
- B Zepka, A Ernst, C West, G Grode and C Miller V Karamanian, "Goal-setting program improves nutrition and physical activity among Supplemental Nutrition Assistance Program eligible adults," *Public Health Nutrition*, vol. 23, no. 11, pp. 1924-1930, April 2020.