

The Role of Goal Setting in Sports Rehabilitation



Goal Setting in Rehabilitation

Rehabilitation goal setting can serve many purposes for an athlete:

- It can impact an athlete's cognitive appraisal of their injury and subsequently their emotional response (Wiese-Bjornstal et al., 1998)
- Motivate and build confidence by providing clear objectives and identifying short-term goals towards achieving those objectives.
- It can have a positive effect on the athlete's recovery from injury - successful appraisal/acceptance of injury, overall confidence in recovery and adherence to the rehab programme (Armatas et al., 2007)



Goal Setting in Rehabilitation

There are three types of goals:

- **Outcome goals** are focused on a result such as winning, recovering from an injury. Only partially within an athlete's control
- **Performance goals** are focused on achieving a specific standard or performance objective. This goal type is more flexible and within an athlete's control.
- **Process goals** are focused on required tasks or actions.

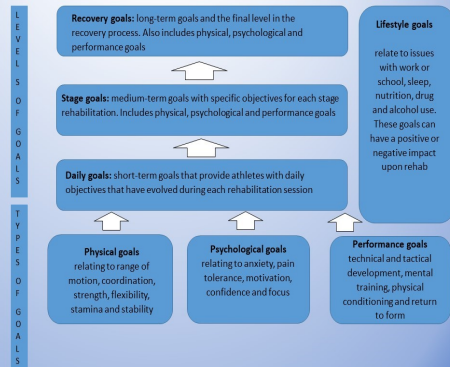


A combination of all three goals can help to facilitate an individual's successful rehabilitation from injury and their subsequent return to sport (Burton et al., 2001)

The theory that underpins goal setting

The rehabilitation from injury can be a long-term process. To ensure that athletes adhere to the rehabilitation process, they need daily encouragement.

Model adapted from Taylor and Taylor, 1997.



The theory that underpins goal setting (cont..d)

Self-determination theory (Deci & Ryan, 2000) is used to explore psychological readiness post injury. Basic psychological needs theory (a mini SDT) has been applied to injury recovery. Athletes returning to sport may experience difficulties in three areas:

Competence: ability to do something successfully and efficiently
Autonomy: an internal sense of control

Relatedness: a sense of connectedness and belonging

The theory proposes two main types of motivation:

Extrinsic – associated with negative feelings and is driven by external rewards e.g. awards, rankings

Intrinsic – associated with positive outcomes and is driven by internal rewards e.g. interests and values

An athlete is more likely to successfully return to their sport because they enjoy it rather than because they are pressurised by their coach or team mates to return for competition.



Applied Example

An athlete has been training for a marathon and acquires an Achilles injury 3 weeks before her event. The sports therapist's role is to help the athlete successfully rehabilitate and recover from the injury. Goal setting can be utilised to help the athlete, using the following four phases:

Phase 1: Rehabilitation profiling can help assess and identify the athlete's view of their personal and physical needs e.g. where they currently are and where they want to be. The athlete has a serious injury and wants to be fully rehabilitated and recovered to run a marathon in 3 weeks time. Rehab profiling can also set the agenda for goal setting.

Phase 2: The therapist identifies and sets short-term and long-term physical, psychological and performance goals. The goals must be specific, measurable, attainable, realistic and time-based. A short-term goal for the athlete would be to complete a programme of home exercises e.g. eccentric stretching on a stair step, slowly lowering two feet from the step for 3 counts and raising for 3 counts, to be repeated 15 times, twice daily for 1 week.

Phase 3: The therapist considers and identifies factors that could affect the goal setting process e.g. poor communication, unrealistic goals, lack of understanding of the injury and rehabilitation process. The therapist regularly monitors, evaluates and adjusts goals and prepares a written contract to ensure commitment and adherence to the programme by the athlete.

Phase 4: The therapist discusses goal setting with the athlete and sets a step by step programme for integration into injury rehabilitation e.g. improving strength, stability and flexibility of Achilles, phased return to running on grass for 800-1600 metres 3 times per week etc. Rehab profiling can identify athlete's psychological needs e.g. covering athlete's fear of re-injury on return to running.

Current Research

The theory of goal setting by Locke and Latham (1985, 1990) was originally applied in industrial and organisational environments. Sports psychologists began to examine the application of goal setting in rehabilitation about 30 years ago. Goal setting has been shown to benefit injured athletes:

- Kylo and Landers (1995) conducted the first quantitative review of goal setting in sport and exercise. It found a consistent relationship between goal setting and performance.
- A review by Burton & Weiss, (2008) and surveys conducted by Sullivan & Nashman (1998) and Burton et al., (2010) all demonstrated goal setting as a powerful technique for enhancing performance.

To date no other method has been found to be as effective in enhancing adherence to sport injury rehabilitation as goal setting (Evans & Hardy 2002a; Evans & Hardy 2002b).

Gap in the research literature

There is lack of consensus in the literature on the best goal-setting approach (Alexanders, Kaye & Perry, 2019). The literature suggests that goals are more likely to be successful if they are difficult to achieve (Wade, 2009), however the 'goal setting paradox' (Burton et al., 1998) puts forward the theory that athletes feel less satisfied when a difficult goal has been achieved. Alexanders and colleagues (2019) recommend further research to explore the 'goal setting paradox' and whether it causes long-term or short-term effects on an athlete's psychological state.



Conclusion

Goal setting is a core component of the sports injury rehabilitation process. The research literature demonstrates goal setting as a powerful technique for enhancing performance. For rehabilitation to be successful and beneficial to the athlete however the process needs to be organised and follow a set sequence of events e.g. identifying athletes physical needs, setting the short-term and long-term goals, identifying barriers and developing a step by step programme of rehabilitation.

The relationship between the athlete and the therapist is key to ensure successful rehabilitation:

- Good communication and positivity. Develops rapport and trust.
- Communication with the coaching team and team mates. Ensures athlete is not isolated from their social network.
- Educating the athlete about their injury and rehabilitation. Increases understanding of the process.
- Monitor, evaluate and adjust goals regularly. Encourages commitment and adherence to the rehabilitation programme. Gives the athlete autonomy and control of their recovery to facilitate a successful return to sport

References

- Alexanders, J., Kaye, J.A., & Perry, J. (2019). Setting Higher Goals May Make Athletes Feel Worse: The Goal Setting Paradox and Potential Solutions. *Athletic Training & Sports Health Care*, 21(2), 51-52.
- Armatas, V., Chondrou, E., Yamakos, A., Galazoulas, C., & Vellopoulos, C. (2007). Psychological Aspects of Rehabilitation Following Serious Athletic Injuries with Special Reference to Goal Setting: A review study. *Physical Training*, January.
- Burton, D., Pickering, M., Weinberg, R., Vukelson, D., and Weigand, D. (2010). The Competitive Goal Effectiveness Paradox Revisited: Examining the Goal Practices of Prospective Olympic Athletes. *Journal of Applied Sport Psychology*, 22, 72-86.
- Burton, D., & Weiss, C. (2008). *The Fundamental Goal Concept: The Path to Process and Performance Success*. In: Horn, T. *Advances in Sport Psychology*, 3rd Ed (pp. 339-376). Champaign, IL: Human Kinetics.
- Burton, D., Naylor, S. & Hilliday, B. (2001). *Goal Setting in Sport: Investigating the Goal Effectiveness Paradox*. In R. N. Singer, H.A. Hausenblas & C. M. Janelle (Eds.), *Handbook of Sport Psychology 2nd Ed* (pp. 497-528). New York, USA: Wiley.
- Burton, D., Weinberg, R., Vukelson, D., & Weigand, D. (1998). The Goal Effectiveness Paradox in Sport: Examining the Goal Practices of Collegiate Athletes. *Sport Psychologist*, 12, 404-414.
- Evans, L. & Hardy, L. (2002a). Injury Rehabilitation: a Goal-setting Intervention Study. *Res Q Exercise Sport*, 73(3), 310-319.
- Evans, L. & Hardy, L. (2002b). Injury Rehabilitation: a Qualitative Follow-up Study. *Res Q Exercise Sport*, 73(3), 320-329.
- Kylo, L.B. & Landers, D. M. (1995). Goal Setting in Sport and Exercise: A Research Synthesis to Resolve the Controversy. *Journal of Sport and Exercise Psychology*, 17, 117-137.
- Locke, E.A. and Latham, G.P. (1990). *A Theory of Goal Setting and Task Performance*. Englewood Cliffs, NJ: Prentice-Hall.
- Locke, E.A. and Latham, G.P. (1985). The Application of Goal Setting to Sports. *Journal of Sport Psychology*, 7, 205-22.
- Ryan, R.M. and Deci, E.L. (2000). Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being. *American Psychologist*, 55(1), 68-79.
- Sullivan, P.A. & Nashman, H.W. (1998). Self-perceptions of the Role of USOC Sport Psychologists in Working with Olympic Athletes. *The Sport Psychologist*, 12, 95-103.
- Taylor, J. and Taylor, S. (1997). *Psychological Approaches to Sports Injury Rehabilitation*. Gaithersburg, MD: Aspen.
- Wade, D. T. (2009). Goal Setting in Rehabilitation: an Overview of What, Why and How. *Clinical Rehabilitation*, 23, 291-295.
- Wiese-Bjornstal, D. M., Smith, A. M., Shaffer, S. M., & Morrey, M. A. (1998). An Integrated Model of Response to Sport Injury: Psychological and Sociological Dynamics. *Journal of Applied Sport Psychology*, 10(1), 46-69.