



The Application of Goal Setting Strategies in Sport and Exercise

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Aims of the Session.

- ▶ To provide a definition of goals and goal setting
- ▶ To explore how goal setting has been applied in sports and exercise.
- ▶ To explore studies that have examined goal setting in sports.

Aims of the Session.

- ▶ To examine theoretical explanations of the goal setting / performance relationship.
- ▶ The application of goals – to explore the principles of effective goal setting.
 - ▶ Including strategies for coaches.
- ▶ To discuss common problems with goal setting.

Goal Setting in Sports and Exercise

- ▶ Alongside Imagery, Goal Setting is one of the most frequently used techniques in sport and exercise.
- ▶ Stereotypical view of the role of the applied sport and/or exercise psychologist.
- ▶ Like Imagery, it is not just Sport and Exercise Psychologists who adopt goal setting strategies with athletes and exercisers.
 - ▶ Coaches (Gould, 2013)
 - ▶ Physiotherapists (Arvinen-Barrow et al, 2010).
 - ▶ Self developed goals by the athletes and exercisers.

However

- ▶ Goal Setting is not always an effective intervention.
- ▶ Setting of inappropriate goals by the athlete.
- ▶ Lack of evaluation / follow up by the coaches.
- ▶ Gould (2013) – Important for all parties to understand the goal-setting process for it to be effective.

Defining Goals

- ▶ Much applied research into goal setting originally derived from occupational psychology.
- ▶ Locke and Latham (2002) – widely accepted definition of a goal.
 - ▶ A goal = “objective or aim of action”
 - ▶ “a specific standard of proficiency on a task, usually within a specified time limit” (pp.705)

Goal Setting Research.

- ▶ 90% of studies show Goal Setting to have a consistent and powerful effect on behaviour (Weinberg and Gould, 2003).
- ▶ Goal Setting research has covered many different areas. Although it originated from studies in Business.

Goal Setting Research.

- ▶ Relatively Little research on the process of Goal Setting. E.g. How?, What Goals are important?, What Barriers are there? Personality and Goal Setting?
- ▶ Weinberg et al. (1993, 1997, 2000) did find.
 - Almost all Athletes use some type of goal setting strategy to improve performance.
 - Top 3 Goals for Athletes.
 - Improving Performance → Older Athletes
 - Winning → Collegiate
 - Enjoyment → Youth
 - Athletes prefer moderately difficult → difficult goals.

Defining Goals and Types of Goals.

- ▶ Subjective vs Objective Goals.
- ▶ Subjective Goals.
 - General Statements of intent.
 - Not precise or specific.
 - E.g. "Have Fun", "I want to do well", "I want to find a Sport I enjoy"

Defining Goals and Types of Goals.

► Objective Goals.

- More Precise and Specific, Specific to task and within a time limit.
- E.g. Lose 8lbs of weight within 3 months.
- Return to full fitness before the season's end.
- Halving the number of unforced errors by the end of the season.

Defining Goals

- ▶ Types of Goals
- ▶ Outcome goals – standards and performances based on results (e.g. winning the gold medal, losing 6 stone in a week) – Martens (1987)
- ▶ Performance Goals - Focus on achieving standards of performance or objectives independently of other competitors (Martens 1987)
 - ▶ E.g. Attaining a personal best or seasons best performance in running.

Defining Goals

- ▶ Hardy, Gould and Jones (1996) – Process Goals = focus on specific procedure that the athlete will engage with during performance.
 - ▶ A tennis player focusing on continually moving on his/her feet when fatigued.
- ▶ Weinberg and Gould (2011) – Group Goals = “specific standards of group (not individual) proficiency, usually within a specified time” (pp 355)
 - ▶ Important for teams to set group and individual goals (Widmeyer and DuCharme, 1997)
 - ▶ Burke et al (2010) – Group goals more effective than individual goals for a team.

Types of Goals and Behaviour Change.

- ▶ All 3 Individual Goal Types (Outcome, Performance, Process) play a role in behavioural change.
- ▶ Important to know where and when to focus (prioritise) each goal.
- ▶ Outcome Goals.
 - In the off season = ↑ Short term Motivation
 - Just prior to Competition = ↑Anxiety ↑ Distraction.

Types of Goals and Behaviour Change.

- ▶ Performance AND Process Goals
 - More precise / less dependent on others.
 - Useful prior and during competitions
 - Over focus on very specific performance and outcome goals can create anxiety.
 - E.g. Running a Personal Best time.

Effectiveness of each type of goal?

- ▶ Kingston and Hardy (1997) – Assigned Golfers into 3 groups.
 - ▶ Performance goal group
 - ▶ Process goal group
 - ▶ Control (no goal setting).
- ▶ Measured skill improvement and development of psychological skills.
- ▶ 54 week training period.
- ▶ Both performance and process groups had significantly superior improvement abilities than control group.

Kingston and Hardy (1997)

- ▶ Interestingly the authors reported differences between performance and process goals in relation to the implementation and development of psychological skills
- ▶ Process group superior in anxiety management and selecting appropriate psychological skills.

Effectiveness of each type of goal

- ▶ Burton et al (1998) – Examined Collegiate athletes views on goal effectiveness.
- ▶ 570 Collegiate athletes.
- ▶ Categorised based on self-perception as “less effective” or “more effective” in terms of goals setting.
 - ▶ “more effective group” revealed that process goals were more effective than a combination of performance and outcome goals.

However

- ▶ Fliby et al (1999)
 - ▶ A) No goals (control)
 - ▶ B) Outcome goals only
 - ▶ C) Process goals only
 - ▶ D) Outcome and Process goals
 - ▶ E) Outcome, Performance and Process goals.
- ▶ Five weeks of training – groups d and e (Multiple goal strategy) showed greater gains than other three groups.
 - ▶ Group a and b were the weakest.
- ▶ Similar findings reported in other studies (e.g. Steinberg et al, 2000)

Explanations for how Goal Setting Improves Performance.

- ▶ Locke and Latham (2002) – Mechanistic Theory
- ▶ Directed Attention
- ▶ Effort Mobilisation
- ▶ Enhancing Persistence
- ▶ Developing Learning Strategies.

Directed Attention

- ▶ According to Locke et al (1981) – One aspect of Goal Setting is that causes the person to focus his/her attention upon the task.
- ▶ No Goal = Attention can wander.
- ▶ Task-Focused Behaviour.
- ▶ Remember the research of Nideffer (Lecture 1)

Effort Mobilisation

- ▶ As an athlete now has a goal to focus towards (or attend to) – it is necessary for the athlete to put forth the effort to achieve that goal.
- ▶ This mobilising effort will improve performance.
- ▶ Needs to make the effort to attain the target, although the target needs to be improvement.

Persistence

- ▶ According to Locke et al (1981) – Persistence is a by produce of effective goal setting.
- ▶ Long term goals particularly prevalent in obtaining persistence.
- ▶ A key element to elite athletic performance.

Developing new learning strategies

- ▶ Setting new goals also forces the athlete to learn new and better ways to accomplish a skill or task.
- ▶ E.g. A Tennis player might have an excellent serve and volley approach which does well on grass court surfaces, but to win on clay will need to adapt his/her game.
- ▶ E.g. An exerciser who might want to win “slimmer of the week” might need to think of additional strategies to lose weight (or strategies to remind him/her to attend the fitness class).

Mechanistic Theory (Locke and Latham, 2002).

- ▶ A number of factors may mediate the goal setting – performance relationship according to the Mechanistic Theory.
 - ▶ Self-Efficacy
 - ▶ Feedback (evaluation)
 - ▶ Task Complexity.

Cognitive Theory (Burton, 1983)

- ▶ As opposed to Locke and Latham's Direct Mechanistic Theory – The Cognitive Theory is considered an indirect theory on how Goal Setting improves performance.
- ▶ According to the Cognitive Theory Goals can influence performance indirectly.
 - ▶ Linked to psychological factors
 - ▶ Anxiety, Motivation, Confidence and Satisfaction.
 - ▶ Particularly outcome goals.

Cognitive Theory (Burton, 1983)

- ▶ As an example setting unrealistic outcome goals might result in ↓confidence
↑ cognitive anxiety ↓Effort
 - ▶ ↓ Performance
 - ▶ Outcome goals
- ▶ Burton (1989) – Swimmers
 - ▶ Realistic Performances goals =
 - ▶ ↓ Anxiety, ↑ Confidence, ↑ Satisfaction
 - ▶ ↑Performance



Burton and Naylor (2002) / Burton and Weiss (2008) – Goal Setting Styles model

- ▶ Athletes goal motivation orientation interacts with the perceived ability to produce three goal styles.
 - ▶ A performance orientation
 - ▶ Athlete defines success based on self-improvement and learning
 - ▶ A success orientation
 - ▶ Athlete defines success on winning and social comparison
 - ▶ High perceived ability
 - ▶ Failure orientation
 - ▶ Defines success also on winning and social comparison
 - ▶ Low perceived ability

Goal Setting Styles Model

- ▶ Model hypothesises that goal setting should best increase performance for performance orientated athletes
- ▶ Moderately increase performance for success orientated athletes
- ▶ DECREASE performance for failure oriented athletes

Burton et al 2013

- ▶ Burton et al (2013) – 338 Olympic Athletes (various sports)
- ▶ A Battery of questionnaires (Goal Setting Styles / Self Confidence Questionnaires etc.)
 - ▶ Findings = Consistent with Goal Setting Styles model – failure orientated athletes = ↓ Confidence ↑ Anxiety
 - ▶ Performance Orientated = ↑ Confidence ↓ Anxiety
 - ▶ One of the first studies to report that Olympic level athletes could be failure oriented.

Goal Setting and Positive Affect

- ▶ Positive affect = The extent to which an individual subjectively experiences positive moods such as joy, interest, and alertness.
- ▶ Positive affect is linked to increased commitment, motivation and performance (McCarthy et al, 2010).
- ▶ McCarthy et al (2010) – Multi-event young athletes
 - ▶ Multiple Base-Line Design
 - ▶ Goal Setting = ↑Positive affect
 - ▶ Indirectly linked to commitment, motivation and performance.