In what way or when (under which circumstances) will goal setting be effective in motivating athletes/teams, and in what way or under which circumstances will it not be effective?

The most widely accepted definition of the term **goal** is "attaining a specific standard of proficiency on a task, usually within a specified time limit" (Locke, Shaw, Saari & Latham (1981) in Gould, 2001, cited in Williams, J. M. 2001). Goal setting is a cognitive-behavioural strategy (Cox, 1998) that may be a valuable tool in sport for enhancing motivation and performance (Locke & Latham, 1990). Also 'goal setting has not only been shown to influence the performance of athletes..., but has also has been linked to positive changes in important psychological states such as anxiety, confidence and motivation... however, it as falsely assumed, for example, that because athletes set goals on their own these goals will automatically facilitate performance' (Gould, 2001, cited in Williams, 2001). Depending on the sporting situation, goals can be made for individuals e.g. a marathon runner to beat a personal best in competition, or teams e.g. a football team to qualify for automatic promotion to a higher division.

There are 3 main types of goals outlined by Weinberg and Gould (1999): Outcome Goals, Performance Goals and Process Goals. *Outcome goals* are associated with the result of an event, e.g. winning the University College's League, *performance goals* focus on achieving standards or performance objectives independently of other competitors, usually making comparisons to one's own previous performances, e.g. when shooting at goal aim to raise the percentage of times

the target is hit, and *process goals* are concerned with the actions an individual must engage in during performance to execute or perform well, e.g. to get you head over the ball and strike it with the laces of your boot when taking a penalty kick.

It has been suggested that it would be more beneficial to set performance and process goals to individuals and teams, as these goals emphasise personal quality and greater athlete control and adaptability, in comparison to outcome goals where they rely on the performance standard of others, therefore making goal achievement an external factor. Consequently, Burton (1989) argues that performance goals ensure higher motivation, lower anxiety and greater success than outcome goals. This is supported by recent research by Kingston and Hardy (1997, cited in Weinberg & Gould, 1999) in that process goals are particularly effective in positively influencing golfer's self-efficacy, cognitive anxiety and confidence.

Goal setting could be a valuable tool for College football players to enhance their performance. Locke and colleagues (1981) stated that "the beneficial effect of goal setting on task performance is one of the most robust and replicable findings in the psychological literature. Ninety percent of the studies showed positive or partially positive effects. Furthermore these effects are found just as reliable in the field setting as the laboratory" (cited in Gould, 2001, in Williams, 2001). Enhanced performance from the players may result from greater acquisition of skill, increased motivation levels, and increased adherence to training and stress. Although it is widely accepted that goal setting can be effective, it can also have adverse effects if the theories behind goal setting are not applied properly. For example, Football is a team game, therefore; both team and individual goals may prove important in this context. If players neglect to set team goals and concentrate solely on personal goals, they may not function well

as a team, and despite possible individual performance enhancement, overall team cohesion could be lost and performance may not improve, and in fact, may deteriorate.

There have been many goal setting principles proposed and the ones highlighted in this discussion are those that were regarded as key for effective goal setting by several researchers (Locke & Latham, 1990; Kingston & Hardy, 1997; Cox, 1998; Weinberg & Gould, 1999; Gould 2001). All of the researchers stressed the need for each and every goal to be specific. A football striker aiming to improve his heading would too general because the player would be unable to measure whether or not the goal has been achieved. However, if the player aimed to get between 70%-80% of headers at goal on target, or 80%-90% of headers to a member of his own team would be a much better goal because the specificity has a particular aim. Goals should be specific and difficult, however they must remain attainable. The reason the goals must be challenging is to keep the athlete interested and motivated to achieve. Goals that are unattainable can have detrimental effects on an athlete's motivation and confidence while increasing cognitive anxiety, thus leading to a decrease in performance. Goals that are set for an individual should be both long-term and shortterm goals. The goals set should follow a strategy to achieve an ultimate goal, for instance, for a season long goal for a goalkeeper to improve his shot-stopping, shortterm goals should be set within that context to help him achieve the long-term goal. The goalkeeper should set short-term goals of increasing flexibility, muscular strength (both upper and lower body), speed and concentration. These short-term goals can be done in training, giving the player constant feedback and evaluation on his progress,

and this can be evaluated as a whole at the end of the season. This sort of goal is difficult, but realistic, measurable as well as adaptable.

It is important that the theory behind goal setting is understood before setting goals to anyone because if goals are set inappropriately adverse effects may result as opposed to the positive effects desired. The three main theories associated with goal setting are those of 'Goal Setting Theory' (Locke & Latham, 1985); 'Self-Efficacy Theory' (Bandura, 1986) and the 'Indirect Thought Process' explanation (Burton, 1984; Garland, 1985). Locke & Latham (1990) proposed a mechanism by which goal setting enhances performance, including four main components: Directing attention; Mobilizing Effort; Enhancing persistence and; developing new learning strategies (cited in Gill, 2000). Their investigation also stressed the need for specific goals to be set, as well as difficult goals. Burton (1993) applied Locke & Latham's model to sports goal setting, listing four major attributes that influence goal effectiveness: Goal Difficulty; Goal specificity; Goal temporality and; Goal collectivity. In goal difficulty Locke & Latham (1990) propose a linear relationship arguing that the more difficult the goal the better the performance. Meta analysis reviews consistently confirm this prediction (Tubbs, 1986; Mento et al., 1987; Wood et al, 1987) and suggest moderate effect sizes. Goal specificity, as mentioned before, is the cornerstone but Locke & Latham argue that difficult, specific goals are better. Specific easy goals do not enhance performance. Temporality refers to short-term and long-term goals. Some (e.g. Bandura, 1986) argue that short-term goals are more effective permitting more frequent evaluation developing confidence. However, Kirschenbaum (1985) argues that although short-term goals are more flexible and with frequent evaluation they can

foster loss of control and detract from intrinsic motivation. Collectivity group goals enhance performance just as much as individual goals (cited in Gill, 2000).

Bandura's (1986) Self-efficacy theory highlights the role of self-efficacy and the impact it has on goal setting, motivation and performance. Self-efficacy is task-specific situation-specific confidence. It is the perception of one's ability to perform a task successfully (Bandura, 1986) and is fundamental to proficient performance. The greater the self-efficacy an individual has, the greater the probability that their goal/task will be achieved. There are four main inputs to self-efficacy:

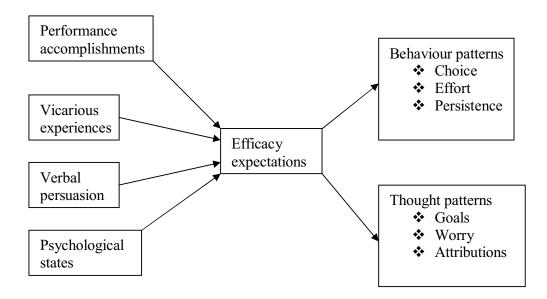


Figure 1: Relationship between major sources of efficacy information, efficacy expectations, and behaviour and thought patterns as predicted by Bandura's theory. (Gill, 2000, pg. 79).

Self-efficacy has a direct bearing on goal difficulty and goal achievement, for example, if an athlete has low self-efficacy they will not be motivated to achieve a difficult goal because they would not perceive it to be attainable. (Kyllo & Landers,

1995). The Indirect Thought Process explanation arose following studies conducted by Burton (1984, 1989) and Garland (1985) which highlighted the relationship between athlete's psychological states, including anxiety, motivation, and confidence levels, and the type of goals set. The external locus of control associated with outcome goals restricts athlete control and goal achievement depends on the performance of others. Conversely, an athlete has complete control over performance goals and achievement of the goal lies solely in the behaviour of the performer and not of others. Consequently, it is hypothesised that athletes who primarily set performance goals experience lower anxiety and superior self-confidence in comparison to those who primarily set outcome goals (Kyllo & Landers, 1995).

The literature surrounding the effectiveness of goal setting is vast within the business context (Locke & Latham, 1990; Kyllo & Landers, 1995) yet remains highly debated with in the sport, exercise and performance context due to inconsistency of results between studies (Locke, 1991; Weinberg & Weigland, 1993). Locke (1991) stated that this was due to methodological flaws in previous studies. Such problems included failure to makes goals difficult; failure to match groups by ability; failure to inhibit 'do-best' groups from setting their own goals; failure to measure personal goals, commitment or self-efficacy. Lerner & Locke (1995) conducted a study that aimed to eliminate such flaws. The study looked at the potential effects of goal setting, self-efficacy, competition, and personal traits on the performance completing as many sit ups as possible in one minute. To attain an equal starting ability the participants (volunteer university undergraduate athletes) were assigned into three task groups by means of stratified random sampling: 'Do best' group; medium goal group; and a hard goal group. The difference found between the 'do best' group and

both the medium goal (p=0.003) and the hard goal (p=0.001) groups was significant in the act that the harder the goal, the more it was achieved. The do best group were prevented from setting spontaneous goals between the trials by counting aloud numbers in multiples of 3 back from 100 so that they could not count how many situps they had completed in each session. The results show that setting goals, whether they are medium or hard enhances performance in comparison to not setting goals, or 'doing your best'. Although this study was conducted on university undergraduates from both team and individual events, the goals that were set were not set for a group goal, only individuals. The results gained therefore may not extrapolate to a team setting, such as football. However, Lerner & Locke (1995) do highlight that the goals set enhances endurance performance, so this in turn could be related to football, in that it is an intermittent sport over 90 minutes which requires a good level of cardiovascular endurance.

Kingston & Hardy's (1997) study attempted to control the effects of spontaneous goal setting, motivation, competition, while examining the effects of two different goal-setting training programs on performance of a complex task – a round of golf. Thirty seven golf club members of various abilities (handicap range of 0-28) took part in the season long study in which both long-term and short-term goals were set. The golfers were set into three test groups: Control; Process orientated goals; and Performance orientated goals, by means of stratified random sampling, very similar to that observed in the study by Lerner & Locke (1995). In the study the data collection occurred in three phases; pre-season, week 23, and week 54, with the goal-setting training in between. The purpose of the investigation was to determine the relative efficacy pf process and performance goals over a voluntary control condition on terms

of affective, motivational and other performance-related variables (Kingston & Hardy, 1997). Follow up tests indicated that the process-orientated group improved their skill level (as indicated by handicap) significantly from week 0 to week 23 (p<0.01), whereas the performance-orientated group did not show any significant improvement on skill during that time, however there was a significant improvement between week 0 and 54 (p<0.05). The control group showed no significant improvement across the tests.

Skill development is an essential prerequisite for any sport, especially football, which requires not only gross motor skills as running and jumping to head a ball, but also intricate skills such as the adjustment of one's foot for a wider base of support when standing in a wall to defend a free-kick. The data obtained in the investigation by Kingston and Hardy (1997) could therefore be transferred to a football squad, teaching them how to set and evaluate both long-term and short-term process goals to enhance performance. It should however be noted that the players used by Kingston & Hardy had a mean age of 44.15 years (standard deviation 10.87) and were of mixed ability, whereas University college footballers would normally be aged between 18-25 and would be of a similar mediocre standard.

Kingston & Hardy (1997) also discovered that cognitive and somatic anxiety was reduced in those who were trained to set either process goals or performance goals in comparison to the control group, who showed no such significant change. Significant improvements were also observed within the process goals group in self-efficacy, cognitive anxiety control and concentration following their goal-setting training. Cox (1998) stated that athletes who demonstrate high levels of self-efficacy

often or are more likely to achieve at higher levels than athletes with low levels of self-efficacy, as these athletes try harder with increased persistence. This is congruent to Bandura's (1986) Self-Efficacy Theory, in that achieving a goal leads to higher/increased self-efficacy levels, as well as decreased anxiety leading to enhanced performance. George & Feltz (1995) argued that teams with a high level of 'united self-efficacy' are also more likely to perform at a higher level than teams demonstrating a lower level of 'united self-efficacy'. This could be interpreted as a team with a higher morale and/or confidence is more likely to achieve than a team that has no belief in itself. This can be related to University College football due to the bonded nature of teams. At this level it is very common for teams to not only play together but to also socialise and even live together. If the team had low confidence levels as a whole, it would definitely affect team performance. As yet there is very little literature to suggest that a team with individuals reaching their own goals and self-efficacy improvement can lead to a team improving, as mentioned before, this could actually detract from the team performance and poor attainment of results could possibly be an outcome. However, combining the results from the investigations of Lerner & Locke (1995) and Kingston & Hardy (1997) and taking into consideration the general principles of goal setting described earlier in this discussion, it would seem viable to suggest that a team should set specific, medium-hard process goals, with continuing subsequent evaluation to enhance performance and achieve at a higher level. This would also not only improve team confidence, but possibly also higher individual levels of self-efficacy.

The effectiveness of goal-setting among collegiate athletes representing eighteen different individual (334 athletes) and team (236 athletes) sports in the USA

was studied by Burton et al. (1998). It was found that the athletes preferred moderate to very difficult goals to be set, which is congruent to the Goal-Setting Principles laid out by Locke & Latham (1985). It should be stated that the goals set should be attainable and specific in order to be effective (Kingston & Hardy, 1997; Cox 1998; Weinberg & Gould, 1999). Goals that are too difficult, or unrealistic to achieve would lead to a sense of failure, thus decreasing motivation and self-confidence levels, and possibly increasing levels of cognitive and somatic anxiety, which would result in depletion of performance (Cox 1998; Weinberg & Gould, 1999).

The Indirect Thought Process explanation links an athlete's psychological state (such as motivation, anxiety, and confidence levels) with the type and difficulty of goals set. This theory states that in order for goals to be effective, the athlete must be in control of their goals and believe that the goals set are attainable. Bandura's (1986) Self-Efficacy Theory illustrates how failure to achieve a goal can lead to a decrease in self-confidence, motivation, with an increase in cognitive and somatic anxiety therefore likely leading to a decrease in performance levels. In order for a University college football team to achieve at higher levels and improve together as a team, they should set team goals of moderate to difficult, attainable goals that are within their control. This could be done by increasing two training session a week to three, with two being specific to fitness and the third to ball skills, drills and setpieces to improve on fitness and skill levels. Thus, hopefully with the right application of training and goal setting, team performance will improve.

Despite the lack of data evidence surrounding University College level football, it would be viable to suggest that goal setting could enhance performance, if

applied according to the goal setting principles of Locke & Latham (1985), however, having discussed the surrounding literature there are instances where goal setting would not work, i.e. if the goals set are unattainable or unrealistic. For goal setting to be most efficient, it must be taught to the players/coaches at the University college level of football. The type of goals that would work best for this level, having taken into account the results from the surrounding literature, would be process goals, set to a specific, realistic aim (perhaps by finishing 3 places higher in the league than the previous year), that is within the control of the team. This would be a long term goal, in order to achieve it, there must be a strategy, for example to increase training from twice to three times a week. This way there are short term-goals set which constant feedback will be given to the players on their progress, achievement of this type of goal would lead to increased motivation, confidence, and persistence as well as decreased anxiety levels. Due to the scarcity of literature in this precise context the data collected from other sports settings demonstrating the effectiveness of goal setting can only be extrapolated and hypothesised to University College football. As a whole, team goal setting needs to be researched further to explore the effectiveness of the principles beyond the individual. Further research is needed in this context to rectify misconceptions and provide evidence specific to this context.

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