Problems With Goal-Setting Research in Sports—and Their Solution

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The efficacy of goal setting in improving task performance is one of the best established findings in management and psychology. The effectiveness of goal setting has been verified by narrative reviews and meta-analyses; further, the generality of goal setting has been established across tasks, subjects, performance measures, time spans, countries, settings (laboratory and field), levels of analysis (individual, group, and organizational), and methods of setting goals (self-set, assigned, and participative). The research to date, based on over 500 studies, is summarized and integrated in Locke and Latham’s (1990) recent book.

In view of this, it is anomalous that several studies on goal setting in sport and exercise psychology have obtained null results, despite the expectation that goal setting should work in these realms just as well as, if not better than, in other realms (Locke & Latham, 1985).

However, if one reads the studies that obtained null results closely, it is clear that these results are due to methodological flaws, many of which have been made repeatedly. In this article, I summarize the main errors in methodology that have been made in these studies and suggest antidotes. The first 3 points are major flaws that I have observed in goal-setting research in sports. Additional, if less fundamental, problems that should be mentioned follow (4–7).

1. **Manipulation failure of “do best” condition:** One of the most common findings in goal-setting research is that specific, difficult goals lead to better performance than do-your-best goals. I noted over 20 years ago that when subjects are given feedback about their past performance, they may use it to set specific goals (Locke, Cartledge, & Koeppel, 1968). This means that subjects in the do-best condition, if given feedback, may set specific goals for themselves unless they are specifically prevented from doing so. The best methods of preventing goal setting by these subjects are (a) to withhold feedback, or (b) to give feedback based on work periods of varying lengths but whose lengths are not revealed to the subjects so that they cannot calculate their average rate (e.g., per minute; Locke et al., 1968). When one or more of these precautions are not taken, do-best subjects, especially in laboratory settings, typically do set goals.

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Barnett (1977, p. 22) noted that a "large number" of subjects in her no-goal conditions had set goals although no exact percentage was given. Hollingsworth (1975, p. 166) acknowledged that some subjects in his study may have set goals on their own but, again, did not give an exact percentage. Hall, Weinberg, and Jackson (1987) did not ask their do-best subjects if they had set goals. Similarly, Weinberg, Bruya, Jackson, and Garland (1987) failed to ask their do-best subjects in Study 2 whether they had set specific goals. The same was true of Weinberg, Bruya, and Jackson's (1985) Study 1. But Weinberg, Bruya, and Jackson (1985) found that 83% of their do-best subjects in Study 2 had set goals, and Weinberg, Bruya, and Jackson (1990) found that 32% of their do-best subjects had set specific goals. Weinberg, Bruya, Garland, and Jackson (1990) noted that 22% of their control and do-best subjects set long-term goals and 41% set short-term goals in Study 1. In Study 2, 24% of the do-best subjects set goals. In all these studies, do-best subjects were given feedback, and, when asked, many acknowledged using it to set goals. It is perhaps no coincidence then that none of these studies obtained significant performance differences between the specific and do-best goal groups.

Hall and Byrne (1988) did find significant goal effects despite 55% of the do-best subjects setting goals; these authors did try (not entirely successfully) to reduce the amount of competition between subjects, which they argued was typical of previous studies. The Weinberg, Bruya, and Jackson (1990) study was an attempted replication of Hall and Byrne's but used the same experimenter for both conditions. (Hall and Byrne had used different experimenters.) However, they offered no independent evidence that experimenter effects caused Hall and Byrne to get significant results.

In contrast to their other studies, Weinberg, Bruya, Longino, and Jackson (1988) found a significant goal effect with grade school children. It appeared that in this study (p. 87) the do-best subjects did not set specific goals. Their Table 1 showed that these do-best subjects improved relatively little compared to the specific-goal groups. No special pains seem to have been taken to eliminate specific goal setting among these do-best subjects. In contrast, Giannini, Weinberg, and Jackson (1988) gave some of their subjects do-best goals without feedback in two separate studies. In both studies, the do-best/no-feedback groups showed the lowest performance improvement over baseline. In Study 1, the overall MANOVA was not significant but no planned comparison was made between the do-best/no-feedback condition and the combined specific-goal groups. In the second study, the MANOVA was significant; the do-best/no-feedback groups showed significantly poorer performance than one of the specific-goal groups. (Again, no combined test was made.)

Finally, Boyce (1990) found a significant goal effect when comparing specific-goal and do-best groups. She found that only 5 out of 30 (16.7%) of the do-best subjects had set goals, a figure lower than those in almost all the other studies noted previously in which feedback was given to the do-best subjects.

In sum, it seems clear that when do-best subjects either, for some reason, do not set goals or are prevented from doing so then the specific, hard goal versus do-best goal difference emerges. Only Hall and Byrne (1988) found an effect when a substantial number of do-best subjects set goals. Thus the first rule of good procedure in goal-setting research is make sure that do-best subjects do not set specific goals.