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Enhancing the Benefits and Overcoming the Pitfalls of Goal Setting

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INTRODUCTION: GOAL SETTING THEORY

The beauty of a well-developed theory in the behavioral sciences is that it provides a framework for scientists to conduct research. The findings from these studies provide a framework to predict, understand and influence our own actions and the actions of others. For example, more than 1,000 studies conducted by behavioral scientists on more than 88 different tasks, involving more than 40,000 male and female participants in Asia, Australia, Europe and North America, show that specific high goals are effective in significantly increasing a person's performance – regardless of the method by which they are set. Assigned goals by a manager, for example, are as effective as self-set or participatively set goals if they are accompanied by logic or a rationale from a manager.

Why are goals so effective? A goal is a level of performance proficiency that we wish to attain, usually within a specified time period. Thus goal setting is first and foremost a discrepancy-creating process, in that the goal creates constructive discontent with our present performance. For example, if people discover that their performance is below the goal that has been set, countless studies show that, given commitment to the goal, they are likely to increase their effort or change their strategy in order to attain it.

The core premise of goal setting theory on which those studies have been conducted is that goal-directed action is an essential aspect of human life. Without goal-directed action, people cannot attain the values that make their survival and happiness possible.

Our research has shown that if a person has the adequate knowledge and skill, there is a linear relationship between the degree of goal difficulty to which a person is committed to attaining and that person's subsequent job performance. High goals lead to greater effort, focus and persistence than moderately difficult or easy goals. This is true for such diverse groups as loggers, engineers, scientists, entrepreneurs, professors and students. It is also true for unionized hourly workers. Moreover, a high goal makes self-satisfaction, one's judgment of one's success, contingent upon a higher level of performance than the attainment of an easy goal. People with high self-efficacy set their goals high, because they are not satisfied with less.

The maxim to ''do your best'' certainly implies a high level of motivation. Yet a second core aspect of our theory of goal setting is that goals that are specific and difficult lead to a higher level of performance than a vague goal, or no goal at all. A limitation of a vague goal, such as to do one's best, is that it allows people to give themselves the benefit of the doubt in evaluating their performance. There is a wide range of performance levels that may be interpreted as being aligned with doing their best. On the other hand, when a specific high goal is set, goal attainment provides an objective, unambiguous basis for judging one's effectiveness.

Experiencing success does not depend on the absolute level of performance that is attained, but rather on performance in relation to one's goals. As noted earlier, a goal is the value standard that people use to appraise their performance. If they exceed their goal, they experience success; if they do not attain their goal, they experience displeasure and dissatisfaction. The most straightforward prediction then, about the relationship of goals to an individual's subjective well being is this: The greater an individual's success in attaining high goals that this person deems to be important, the greater the individual's subjective well-being in terms of pleasure, satisfaction and happiness.

When people perform well, they not only feel satisfied with their performance, they generalize this positive affect to the task; they like the task more than they did previously. In short, people see themselves as a success in the workplace to the extent that they are able to grow and meet job challenges by pursuing and attaining goals that are important and meaningful to them.

Challenging goals provide a basis for increasing an individual's personal effectiveness. Thus, in addition to goal attainment leading to a person's sense of achievement, the attainment of challenging goals is likely to lead to rewards such as recognition, promotions, and/or a monetary raise or bonus in the workplace. Even though setting high goals means setting the bar higher to obtain self-satisfaction, it has practical payoffs.

Still another upside of goal setting is that it relieves boredom, because a goal provides people with a sense of purpose. It increases their mental focus on tasks. The outcome is usually a heightened sense of efficacy (personal effectiveness) as well as the pleasure inherent in being purposeful.

Goal Setting in Action

The senior vice president of Weyerhaeuser Company's research and development (R&D) wanted the engineers and scientists to attain a level of excellence so high that it would eliminate the desire of senior management to seek cutbacks in R&D as a way of reducing costs. Step 1 required a job analysis whereby excellence was defined in behavioral terms. Step 2 involved a 3 (assigned goal, participative goal, do best) × 3 (praise, public recognition, monetary bonus) experiment plus a 10th group consisting of engineers and scientists who were unaware that they were involved in this project. The results showed that the people in the do-best conditions performed no better than those in the 10th group – despite the fact that they received praise, public recognition, or a monetary bonus, and despite the fact that they knew the people in groups 1–6 had either specific high assigned, or participatively set goals. This finding is consistent with goal setting theory, which states that these three variables – praise, public recognition, and money – have no effect on a person's performance unless they lead to the setting of and commitment to a specific high goal. Participative goals in this study led to the highest performance, yet goal commitment was the same across all six goal-setting conditions. This is because goal difficulty was higher in the participative than in the assigned goal condition. Consistent with the theory, the higher the goal, the higher the performance. Subsequent research has shown that employee participation is also important to the extent that it leads to the discovery of effective task strategies and hence increases a person's self-efficacy that the goal is attainable. Conversely, a high self-efficacy increases our belief that an effective strategy will be found.

A study in press in Germany revealed that only those adults who perceived their work goals as difficult reported increases in their positive emotions, job satisfaction, and feelings of occupational success over a 3-year period. There was no evidence of feelings of exhaustion among the people who had set high goals. Among the most interesting findings is that lack of goal attainment in one's personal life was related to higher degrees of subjective well-being when the person experienced goal progress on the job. Compensatory switching occurred so as to enable these people to concentrate their focus and emotion on their work.

Goal setting and feedback are the core of self-management. For example, many people find it difficult to come to work. Unionized hourly people who set a specific goal for job attendance, wrote a behavioral contract with themselves as to self-administered rewards (e.g., going to a ball game) for attaining their goal and punishments (e.g., cleaning out the garage) for not attaining their job attendance goal, and then kept a daily log of their job attendance had significantly lower absenteeism than their colleagues who did not engage in this self-regulation exercise.

Goal setting also works at the firm level. CEO entrepreneurs in the architectural woodworking business set growth goals for their business. In two and 6-year follow-up studies, goal difficulty level was significantly associated with venture growth.

In summary, the benefits of goal setting include the fact it affects our choices and gives direction to our pursuits. Moreover, a goal increases our effort, prolongs persistence, and cues us to search for appropriate strategies to attain it. A goal is a regulatory mechanism for monitoring, evaluating, and adjusting our behavior. A goal can provide meaning to an otherwise meaningless task. Most important, goal attainment gives us a sense of accomplishment; accomplishment increases our sense of personal effectiveness, a psychological need within all of us.

Context Factors and Potential Pitfalls in Goal Setting

There are contextual factors and potential pitfalls for virtually all behavioral science interventions, and that includes goal setting. First, when people lack the knowledge and skill to attain a performance goal, giving them a difficult goal sometimes leads to poorer performance than telling them to do their best. A performance goal may misdirect their cognitive resources to sheer effort and persistence, which proves futile for goal attainment in the absence of knowledge on how to attain it. In such cases, assigning specific high learning goals – to discover specific ways to master the task – often leads to the highest performance.

For example, we found that entering M.B.A. students who set specific difficult learning goals (e.g., learn to network, master specific course subject matter) subsequently had higher satisfaction with their M.B.A. program, and had higher grade point averages (GPAs) than people who only set a goal for their GPA at the end of the academic year. Why? It would appear that a learning goal facilitates or enhances purposeful cognition, namely regulation of one's thoughts. This involves planning, monitoring, and evaluating progress toward goal attainment when one is in a learning mode because the requisite task skills have yet to be acquired. Meta-cognition is particularly necessary in environments with minimal structure or guidance. Thus learning goals appear to be effective because they prompt people to generate solutions to an impasse, implement them, and monitor their effectiveness. As Einstein was fond of saying, ''knowledge of what is, does not open the door to what should be.''

A second potential problem is that a performance goal can have a detrimental effect on a group's performance if there is conflict among group members. When two or more people believe that their goals are competitively rather than cooperatively related, they are likely to be tempted to pursue their own goals single-mindedly. For example, Stentor, the former alliance of telephone companies in Canada, quickly fell apart because employees took actions that were in the best interest of the provincial company (e.g., Alberta Government Telephone Company) where they were employed, rather than for the good of the alliance as a whole.

The pursuit of one's own goals, however, does not have to preclude collaboration. The way the goals are framed in presenting them to us determines how we will subsequently behave. Goals may be presented as cooperatively or competitively related, or as unrelated (independent). Cooperation is likely to occur if two or more people view the attainment of their respective goals as interrelated, that is, as you reach your goals, I will attain mine. Competition is likely to occur if you and I view the attainment of our respective goals as negatively related; I perceive the attainment of your goal as decreasing the probability that I will attain mine. Goals are viewed as independent if the attainment of your goal has little or no bearing on whether I attain mine.

When goals are viewed as competitive, people are likely to withhold information and ideas from one another. One person may even look for ways to obstruct another individual's progress in attaining his or her goal. We see this in M.B.A. and law schools where grades are given on a forced distribution. There is a perceived linear relationship between where individuals rank in their graduating class and a job offer from a prestigious firm. Hence some students rip key pages from a journal article, and feed one another false information. Faculty members who view their goals as independent of other faculty often withdraw from interaction with others, and become indifferent to their interests. How our accounting colleagues in the Business School perform, is admittedly, of little interest to either of us. Hence we continue to have minimum interaction with them except out of curiosity or good will.

The solution to this potential drawback is to set a superordinate goal or vision. A shared vision unites people by giving them a cause to rally around which in turn reduces opportunistic behavior, and replaces it with cooperative interdependence. An example is Jack Welch's vision of ''a boundaryless organization'' for the General Electric Company. Once executives in GE saw their interests as positively and mutually beneficial, they were less likely to work against one another, especially because their bonuses were heavily affected by the performance of the company as a whole. The superordinate goal of a boundaryless GE strengthened cooperative goal setting by drawing a boundary line around one ''in-group,'' namely GE's myriad divisions, thereby reducing the out-group feelings that often occur in one or more divisions of a company. Findings from a study of a merger of two companies in China revealed that a superordinate goal, accompanied by specific high goals that made the superordinate goal concrete, gave people a reason to work with one another openly for mutual benefit.

A third potential problem with goal setting is that it may be viewed as a threat rather than a challenge. A study in Israel showed that when people view a goal as threatening (don't mess-up on more than 3 of these 15 problems), their performance drops. The solution is to frame a goal positively (find the answer to 12 or more of these 15 issues). When this was done, performance increased.

Related to this third issue is a fourth one. Goals may have an adverse effect on risk-taking, if failure to attain a specific high goal is punished. Thomas Edison said that of the 600 light bulb filaments that didn't work, every failure was useful, because he now knew one more thing that would not work. Failure and false starts are usually precursors to success.

Errors and failures inevitably occur in the pursuit of high goals. Michael Frese's research in Germany suggests a solution – encourage them: ''The more errors you make, the more you learn.'' His research on error management shows that providing us with (a) ample opportunity to make mistakes and (b) explicitly encouraging us to learn from our errors, improves our performance. Moreover, positive self-talk regarding an error (''I have made an error, great. I have learned something.'') helps to keep our attention on the task rather than on ourselves (''How can I be so stupid?). On complex subject matter, the time frame for attaining the goal needs to be a reasonable one. A breakthrough can take years of hard work. But, if organizational decision-makers view errors and setbacks as transitory and as part of the learning process, high learning goals will be repeatedly set. Conversely, if failures are judged severely, less difficult or vague abstract goals are likely to become the norm.

A fifth potential problem with goal setting is, paradoxically, goal attainment. Past successes quite naturally increase strategic decision-makers' satisfaction. Their satisfaction can lead them to continue to draw upon their previously successful strategies. High satisfaction typically leads to increasingly high self-confidence and the setting of even higher goals to attain. This in turn frequently leads to dysfunctional persistence of previously used strategies if there is a radical change in the business environment. There are at least two antidotes to this problem.

First, in dynamic situations, such as a natural disaster or hostile takeover of an organization, it is critical to actively search for feedback and react quickly to it. Errors in a dynamic environment are reduced if a goal is broken down into sub-goals. Sub-goals increase error management. This is because errors, as Thomas Edison observed, provide information as to whether our picture of reality is congruent with goal attainment. There is an increase in information feedback when sub-goals are set relative to pursuing a distal goal only.

A second solution is to encourage constructive conflict. For example, Clairvest, a merchant investment group in Toronto, appoints and rotates ''nay sayers.'' The nay sayers are instructed to find the flaws in a proposed decision. Doing so prevents ''group think'', that is, people agreeing with that which they think is wrong in order to be seen as a supportive member of a team. People are rotated in and out of this role. If the same people are the nay sayers again and again, they will lose their credibility within the group.

A sixth possible problem with goal setting sometimes occurs when money is tied to its attainment. Some managers ship unfinished products in order to reach their sales goals; some accountants ''manage earnings,'' particularly in the fourth quarter, to meet stock analysts' expectations. Both research and our own observations have revealed that people who come close to, but fail to attain their goals, are more likely to overstate their performance than those who are not so close to attaining their goals, or those who were urged to do their best. Donald Peterson, a former CEO for Ford Motor Company, said it was his experience that tying money to goal attainment was a prescription for very smart people to find ingenious ways to make easy goals appear difficult, so as to ensure the receipt of their bonus. Jack Welch recently explained to the first author that the purpose of goal setting at GE is to stretch an employee's imagination, so as to foster the discovery of great ideas. The downside of doing so, Welch explained, is that a manager often gets hammered for not attaining this stretch goal. The solution, he said, is two-fold. First don't punish managers for not attaining stretch goals, so long as certain minimum performance standards are met. Second, with respect to minimum goals, hold a manager accountable for how well the person's division performs relative to an agreed-upon competitor, such as Pratt-Whitney's aircraft engine division.

An alternative solution is to implement a continuous linear bonus system (e.g., a 2% bonus for every 1% increase in sales). In this way there is no loss for falling short of a high goal, and an employee is paid for exactly what was accomplished. A minimum goal that is acceptable to the organization is set before the monetary bonus system takes effect. For example, the minimum might be a 7% rate of sales growth and the above bonus would kick in after exceeding that goal.

Where comprehensive metrics (e.g., dollars generated, costs saved) are lacking, judgment on the part of a panel of subject matter experts is required (e.g., members of a senior management team who are aware of what the person did in a given economic cycle). At J.P. Morgan Chase, an employee who does not attain a high goal, but nevertheless persists in the pursuit of it under very difficult conditions is awarded a higher bonus than a colleague who exceeded what was initially believed to be a difficult goal, but turned out to be relatively easy due to factors beyond a person's control (e.g., a drop in fuel costs). An executive committee makes this assessment. Consequently, bias on the part of any one individual manager is minimized. The committee, in making its appraisals, takes into account performance dimensions for which no goals were set (e.g., ethics).

There are at least two additional solutions to mitigate dishonesty. First, make sure there are organizational control systems in place, as is done at GE. Second, the CEO must create and model an ethical culture and show no tolerance for deviations from it. Unethical employees should be fired regardless of any revenue streams they generate or costs they reduce.

A seventh potential shortcoming with goal setting was described in a previous issue of *Organizational Dynamics*, namely an idealized goal that a leader, group, or organization ties to identity. This can lead to irrational, risky actions aimed at attaining the goal regardless of possible costs and consequences.

What does it mean to tie your identity to a goal? We believe that it means tying goal attainment to self-esteem. This applies to groups and organizations too, because they are composed of individuals. The outcome is a ''desperate'' over-commitment, that is, a reluctance to abandon a goal regardless of the facts or circumstances, and a temptation to act irrationally when goal attainment is threatened.

What's wrong with basing self-esteem on goal attainment? Self-esteem is a fundamental human need. Few people can live with the conviction that they are ''no good.'' So if they do not have high self-esteem, most people engage in defensive maneuvers to maintain a pretense of it. For example, they base their self-esteem on the wrong things. Basing self-esteem on goal success – divorced from any wider context – means making goals more important than reality and reason, i.e., facts, objectivity. Doing so is bound to be disastrous. The antidote is to always put reality first, even if the facts one has to face are unpleasant to accept. The potential risks of goal pursuit should always be examined. No matter what their prior investment, people need to be willing to be adaptable. This includes abandoning the goals and/or plans if the evidence (e.g., feedback) shows that things are not working out as planned within an established time period.

An eighth potential drawback with goals is that nongoal performance dimensions sometimes get ignored. This is a double-edged sword, as this is also an upside of goal setting. Goals are designed to direct thought and action. Performance dimensions for which goals are not set do not get the same attention as dimensions for which goals are set. If a certain outcome or action is critical, a goal should be set for it.

A ninth potential issue is that goals may increase a person's stress, especially if they are challenging and there are 37 goals rather than a reasonable number, such as 3 to 7. The solution is to ensure that employee self-confidence is commensurate with the difficulty level of the goal. Before assigning 3–7 goals, give employees the training and resources necessary for them to be prepared for the challenges they will encounter in pursuing these goals.

A tenth potential pitfall, pointed out by Jack Welch, is that employees who reach or exceed challenging goals, may be assigned goals for the following year that are impossible to attain. As performance gets progressively higher, it typically becomes progressively harder to improve. So if the most successful employees or teams are assigned progressively higher goals, they are, in effect, being punished for their past success. This not only leads to increased stress, it can lead to people leaving the organization. We believe that high performing individuals and teams should set their own goals and the strategies to attain them.

In summary, goals affect the facts people choose to act on. Goals regulate the direction of action by focusing attention on goal-relevant behavior. Second, goals affect the intensity of our actions and our concomitant emotions, dependent upon the importance of the goal to us. The more difficult a valued goal, the more intense our effort to attain it, and the more success we experience following attainment. Third, a valued goal affects our persistence. Committed people don't quit until the goal is attained. Fourth, goals encourage people to search for task relevant knowledge. Finally, like all behavioral science interventions, goal effectiveness is based on context factors; thus goals have potential drawbacks. With sufficient foresight, however, these potential problems can be overcome or prevented.

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