

Chapter Fifteen

Goal Setting and Goal Striving

Gabriele Oettingen and Peter M. Gollwitzer

In this chapter we focus on the determinants and processes of goal emergence and goal implementation. We first address personal and situational variables leading to the formation of behavioral goals and what kind of psychological processes help or hinder goal setting. In the second part of the chapter, we discuss how set goals of different qualities predict goal attainment and which self-regulatory strategies help successful goal striving. Goal effects on cognition are discussed as possible mediators of the goal-behavior link.

The History of the Goal Concept

Behaviorists recognize goal-directed behavior by its features. Goal-directed behavior is *persistent*. A hungry rat persists in searching a maze until the pellets are reached (Tolman, 1925). Goal-directed behavior is *appropriate*. When one path is blocked, another path to the same goal is taken, or if the goal moves, the organism readily follows it. Finally, goal-directed organisms start *searching* when exposed to stimuli associated with the goal.

A behaviorist's statement that a certain piece of food is a goal for the hungry organism means (1) that the food qualifies as an incentive for the organism, and (2) that the researcher has chosen to describe the behavior of the organism relative to the food stimulus rather than relative to any other object or event. Skinner (1953) referred to goal-directedness as a shorthand description of behavior resulting from some kind of operant conditioning. Thus in the behaviorist tradition, the reference point for goal-directed behavior is not the intention or the goal set by the organism itself.

In contrast, the reference point of modern goal theories is the internal subjective goal. Goal-directed behavior refers to goals held by the individual (e.g. a person's goal to stop smoking serves as the reference point for his or her efforts to achieve this goal). Research questions focus on how and in what form goals are set and how goal setting affects behavior.

The behaviorist distinctions between needs (motives), incentives, and goal-directed behavior are, however, still present in modern goal theories which consider needs (e.g. the need for approval) as forces that narrow down classes of incentives (e.g. being popular or accomplished), and see behavioral goals in the service of these incentives. For example, Geen (1995) defined an incentive as a desired outcome that subsumes several lower order goals. Incentives (e.g. being popular or accomplished) are considered to be a product of a person's need (i.e. the need for social approval) and the perceived situational opportunities (i.e. the person's friends or scientific community, respectively). Intentions to attain popularity or to accomplish outstanding scientific achievements are understood as higher order goals served by many lower order behavioral goals (e.g. intending to use the weekend to visit friends or to write an outstanding scientific article, respectively).

The modern perspective of analyzing goal-directed behaviors in relation to subjective goals has its own precursors: William James and William McDougall in America, and Narziß Ach and Kurt Lewin in Europe. In his *Principles of Psychology* (1890/1950) James held that behavior can be regulated by resolutions (i.e. intentions, subjective goals), even though this may be difficult at times. However, if certain preliminaries are fulfilled, behavior specified in resolutions comes true. McDougall (1908/1931) postulated that goals guide behavior through cognitive activity that pertains to the analysis of the present situation and the intended goal. Progress towards, and the attainment of, the goal are seen as pleasurable and thwarting and failing as painful.

In Europe, the scientific debate on goal striving was dominated by controversy between Ach and Lewin. Ach (1935) assumed that mental links between an anticipated situation and an intended behavior create what he called a determination, which urges the person to initiate the intended action when the specified situation is encountered. The strength of a determination should depend on how concretely the anticipated situation is specified and on the intensity of the intention. Determination was seen as directly eliciting the behavior without conscious intent. Lewin (1926) critically referred to Ach's ideas as a "linkage theory of intention" and proposed a need theory of intention. Goals (intentions), like needs, are assumed to assign a valence (*Aufforderungscharakter*) to objects and events in one's surroundings. Similar to basic needs (e.g. hunger) which can be satisfied by a variety of behaviors (e.g. eating fruit, vegetables, or bread), the quasi-needs associated with intentions (e.g. to be popular) may be satisfied by various behaviors (e.g. inviting one's friends for a party, buying birthday gifts). The tension associated with the quasi-need determines the intensity of goal striving. This tension depends on the strength of relevant real needs (i.e. superordinate drives or general life goals) and how strongly these are related to the quasi-need. Lewin's tension-state metaphor accounts for the flexibility of goal striving.

Many of the ideas on goal-directed behaviors as presented by James, McDougall, Ach, Lewin, and the behaviorists, have been absorbed into modern goal theories, whereby goal implementation has received much more theoretical and empirical attention than goal setting. Karoly (1993, p. 27) states that "the study of goals as dependent variables remains infrequent" and Carver & Scheier (1999) conclude that "the question of where goals come from and how they are synthesized is one that has not been well explored." We will start, then, with the question of what factors determine goal selection and which psychological processes promote goal setting.

Goal Setting

Determinants of goal setting

Assigned goals Goals are often *assigned* by others (e.g. employers, teachers, parents). It matters who assigns goals to whom, and how the persuasive message is framed. Relevant variables may include attributes of the source, the recipient, and the message (McGuire, 1969). Locke & Latham (1990) report that source variables, such as legitimacy and trustworthiness, play an important role in the transformation of an assigned goal into a personal goal. For recipients of such assignments, perception of the goal as desirable and feasible, personal redefinition of the goal, and integration with other existing goals are important (Cantor & Fleeson, 1994). Finally, relevant message variables may be the discrepancy between the suggested goal and the recipient's respective current goal (e.g. when a very low calorie diet is suggested to a person with a moderate dieting goal), and whether fear appeals are used (e.g. information on the dramatic medical consequences of health-damaging behavior is provided). Effective sellers of goals must also consider the processing ability and motivation of the recipient as a moderator of the effects of source, recipient, and message variables on accepting assigned goals as personal goals (Petty & Cacioppo, 1986; Chaiken, 1987).

Self-set goals Goals do not need to be assigned, as people also set goals on their own. Self-set goals, however, are often influenced by others, for example, when goals are conjointly set (e.g. in participative decision making and employee involvement; Wilpert, 1994), or when goals are adopted from highly respected models (e.g. adopting standards for self-reward: Mischel & Liebert, 1966). Cantor & Fleeson (1994) point out that social context cues, such as normative expectations of the social community, also influence goal selection.

The personal attributes that most strongly determine goal choice are perceived desirability and feasibility. People prefer to choose goals that are desirable and feasible (Ajzen, 1985; Heckhausen, 1991; Gollwitzer, 1990; Locke & Latham, 1990). Desirability is determined by the estimated attractiveness of likely short-term and long-term consequences of goal attainment. Such consequences may pertain to anticipated self-evaluations, evaluations by significant others, progress toward some higher order goal, external rewards of having attained the goal, and the joy/pain associated with moving towards the goal (Heckhausen, 1977). Feasibility depends upon people's judgments of their capabilities to perform relevant goal-directed behaviors (i.e. self-efficacy expectations; Bandura, 1997), their belief that these goal-directed behaviors will lead to the desired outcome (i.e. outcome expectations; Bandura, 1997), or the judged likelihood of attaining the desired outcome (i.e. generalized expectations; Oettingen, 1996) or desired events in general (general optimism; Scheier & Carver, 1985). The information source for efficacy expectations, outcome expectations, generalized expectations, and optimism is past experiences: one's own past performances, the observed performances of others, received relevant persuasive messages, and one's previous physiological responses to challenge (Bandura, 1997). Proper assessment of the feasibility and desirability of a potential goal also requires seeing the goal

in relation to other potential goals. A goal associated with many attractive consequences may suddenly appear less desirable in light of a superordinate goal, or it might seem more feasible in connection with other, compatible goals (Cantor & Fleeson, 1994; Gollwitzer, 1990).

Estimated desirability and feasibility determine the choice of a goal's difficulty level. Festinger (1942), in his theory of resultant valence, argued that people choose goal difficulty levels where the resultant expected valence is the highest – this being a multiplicative function of the probability of success or failure and the valence of success or failure. Atkinson's (1957) risk taking model modified and extended Festinger's reasoning to make separate predictions for individuals with hope for success versus fear of failure. The latter prefer low and high difficulty levels, whereas the former choose goals of medium difficulty.

Set goals may also differ in other structural features (e.g. abstract vs. concrete) and in content (e.g. materialistic vs. social integrative). People generally prefer to set themselves abstract goals, and adopt concrete goals only when they run into problems attaining an abstract goal. According to act identification theory (Vallacher & Wegner, 1987), people conceive of their actions in rather abstract terms (e.g. cleaning the apartment) and only drop down to lower, concrete levels (e.g. vacuuming the carpet) when difficulties in carrying out the activity as construed at the higher level arise. Some people typically think of their actions in low-level terms, whereas others prefer high-level identifications (Vallacher & Wegner, 1989). This general preference for either an abstract or a concrete level of identifying actions should be reflected in the choice of abstract versus concrete goals.

Goals can be framed with a positive or negative outcome focus (i.e. goals that focus on establishing and keeping positive outcomes as compared to avoiding and ameliorating negative outcomes). Higgins (1997) argues that people construe their self either as an ideal self that they intrinsically desire to be, or as an ought self that they feel compelled to be. The former orientation focuses on promotion, whereas the latter focuses on prevention. Part of the promotion orientation is a predilection for setting goals with a positive outcome focus, whereas part of the prevention orientation is a predilection for setting goals with a negative outcome focus.

Goals can also be framed as performance versus learning goals (Dweck, 1996), also referred to as performance versus mastery goals (Ames & Archer, 1988), or ego involvement versus task involvement goals (Nicholls, 1979). Goals in the achievement domain, for example, can either focus on finding out how capable one is (performance goals) or on learning how to carry out the task (learning goals). Dweck (1996) reports that implicit theories on the nature of ability determine the preference for performance versus learning goals. If people believe that ability is fixed and cannot be easily changed (i.e. hold an entity theory of ability), they prefer performance goals. However, if people believe that ability can be improved by learning (i.e. hold an incremental theory of ability), they prefer learning goals. Similar implicit theories concerning the malleability of moral character affect the selection of punitive versus educational correctional goals.

The content of set goals is influenced by needs, wishes, and higher order goals. Ryan, Sheldon, Kasser, & Deci (1996) argue, for example, that the content of people's goals reflect their needs. Autonomy, competence, and social integration needs are expected to promote goal setting focused on self-realization rather than materialistic gains. Markus & Nurius (1986; Oyserman, chapter 23, this volume) argue that people conceive of

themselves not only in terms of what they are (i.e. the self-concept), but also what they wish to become in the future (i.e. the possible self). These possible selves should give people ideas on what kind of personal goals they may strive for.

Once higher order goals are formed (e.g. to become a physician), they determine the contents of lower order goals. The contents of such "Be" goals determine the contents of respective "Do" goals which in turn determine the contents of respective "motor-control" goals (Carver & Scheier, 1998, p. 72; Carver, chapter 14, this volume). "Be" goals have been described by using terms such as current concerns (Klinger, 1977), self-defining goals (Wicklund & Gollwitzer, 1982), personal projects (Little, 1983), personal strivings (Emmons, 1996), and (individualized) life tasks (Cantor & Fleeson, 1994). Whereas choosing higher order "Be" goals should be determined by their perceived desirability and feasibility (Klinger, 1977), choosing the respective lower order "Do" goals also depends on the commitment to the respective "Be" goals (Gollwitzer, 1987).

Processes of goal setting

Reflective processes So far we have discussed which variables determine the choice of goals with certain structural and thematic features. We now consider the question of what triggers goal setting. Bandura (1997) suggests that having successfully achieved a set goal stimulates the setting of ever more challenging goals, due to a person's heightened sense of efficacy which is based on having successfully attained the prior goal. Others have pointed out that the core processes of goal setting involve committing oneself to achieving a certain incentive (Klinger, 1977). Heckhausen & Kuhl (1985) argued that the lowest degree of commitment to an incentive is a mere wish to attain it. A wish that is tested for feasibility becomes a want which carries a higher degree of commitment. To develop a full goal commitment (i.e. to form the intention or goal to achieve the incentive), a further relevance check must be carried out relating to necessary means, opportunities, time, relative importance, and urgency.

In their Rubicon model of action phases Heckhausen & Gollwitzer (1987; Heckhausen, 1991; Gollwitzer, 1990) assume that people entertain more wishes than they have time or opportunities to realize. Therefore they must select between wishes in order to accomplish at least some of them. The criteria for selection are feasibility and desirability. Wishes with high feasibility and desirability have the best chance to become goals. The transformation of wishes into goals is a resolution, resulting in a feeling of determination to act. Through this resolution the desired end state specified by the wish becomes an end state that the individual feels committed to achieve. To catch the flavor of this transition from wishing to willing, the metaphor of crossing the Rubicon is used.

What are the preliminaries of crossing the Rubicon? The model of action phases (Gollwitzer, 1990; Heckhausen, 1991) states that the realization of a wish demands the completion of four successive tasks: deliberating between wishes to select appropriate ones (predecision phase), planning the implementation of chosen wishes (i.e. goals or intentions) to help get started with goal-directed behaviors (preaction phase), monitoring goal-directed behaviors to bring them to a successful ending (action phase), and evaluating what has been achieved as compared to what was desired to terminate goal pursuit or to restart