

pursue leads to improved hedonic tone and satisfaction with life, it is easy to imagine how improved health and well-being might result. Similarly, insofar as perceiving the good things in one's life as the result of the intentional benevolence of another person or persons makes those benefits even more enjoyable, it is easy to imagine how one might be happier and healthier as a result.

Obviously, much of daily life occurs without conscious control and without a second thought. Nonetheless, some people may stop periodically to savor their lives, thereby (perhaps) extracting meaning and purpose from what they are doing or what is happening to them. This capacity for mindful attentiveness and the resulting ability to make positive meaning from goal pursuits, from the benefits we receive in life, and other life activities and events may be useful terrain to explore in future work not only on hope and gratitude, but also on other positive psychological traits and virtues as well.

Notes

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Turning Hope Thoughts Into Goal-Directed Behavior

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A large amount of research amply supports C. R. Snyder's (2000) hope theory. People who momentarily or chronically believe that they energetically pursue and attain their goals, who see themselves as being pretty successful in general, and believe in a past that has prepared them well for the future, do well in their academic and interpersonal life as well as in achieving physical and mental health. This is particularly true for people who also believe that they have access to many ways to get out of a jam and around any kind of problem, and who can think of many ways to reach their goals.

The theory refers to the first type of beliefs as agency-related hope thoughts, whereas the second type of beliefs are called pathways-related hope thoughts. High agency-related and pathways-related hope thoughts create emotional orientations (e.g., friendliness, happiness, interest) that are conducive to goal attainment. Moreover, barriers and hindrances (i.e.,

stressors) are seen as challenges that need to be overcome or circumvented. People who entertain such beliefs chronically or in a given situation (i.e., high-hope persons) thus differ in their goal pursuits from people who lack such beliefs (i.e., low-hope persons). Low-hope individuals experience negative emotions during goal setting and goal implementation, and they are burdened with self-critical rumination and off-task cognition. Impediments are experienced as stressors and not as challenges, and thus goal pursuit is quickly derailed.

There is no doubt that both agency-related and pathways-related hope thoughts affect goal attainment. The question remains, however, when and how hope thoughts unfold their influence on behavior. In our view, agency-related hope thoughts play a prominent role in setting binding goals that facilitate determined goal pursuit and goal attainment, whereas pathways-related hope thoughts affect the smooth imple-

mentation of set goals.

Agency-Related Hope Thoughts and the Setting of Binding Goals

Hope theory conceives of high agency-related hope thoughts as beliefs that one can effectively strive for and attain one's goals, and that, in general, one is pretty successful in life. Therefore, high agency-related hope thoughts should make people readily set themselves goals that guide determined goal pursuit. It seems, however, that certain prerequisites have to be met so that high agency-related hope thoughts are turned into binding goals. Oettingen (1999, 2000) pointed to mode of self-regulatory thought as one such prerequisite. Three modes of self-regulatory thought are differentiated: Mentally indulging in a desired future, dwelling on impeding reality, and mentally contrasting the desired future with impeding reality.

A person who mentally indulges in a positive, desired future (e.g., about successfully entering professional life) or dwells on negative aspects of impeding reality (e.g., about not yet having graduated) should fail to integrate his or her agency-related hope beliefs into goal setting. As a consequence, relevant goal commitment only reflects the implicit push of indulging in the positive future or the implicit pull of dwelling on the negative reality, respectively. If, however, people manage to mentally contrast the desired future with aspects of reality that stand in the way of realizing the desired future, agency-related hope beliefs become an issue for goal setting. This is because such mental contrasting, by linking the desired future to impeding reality, triggers a necessity to act that activates expectations of success (i.e., agency-related hope beliefs). If agency-related hope beliefs are high, a binding goal commitment to realize the desired future should emerge (e.g., a strong goal commitment to successfully enter professional life). In other words, mentally contrasting a desired future with impeding reality helps turn high agency-related hope beliefs into binding goal commitments with subsequent determined goal pursuit.

Mental contrasting has been shown (Oettingen, 2000; Oettingen, Pak, & Schnetter, 2001) to effectively translate high expectations to realize the desired future (i.e., high agency-related hope beliefs) into strong goal commitments in the laboratory with college students (e.g., to get to know a fellow student, to combine work and family life, to study abroad, to stop smoking) as well as in various other institutional settings with samples of different age groups. For example, in school settings, mental contrasting facilitated strong goal commitment to excel in academic achievements (e.g., in learning a foreign language, Oettingen,

Hönig, & Gollwitzer, 2000, Study 4; in mathematics, Oettingen et al., 2000, Study 1), and strong goal commitment to integrate students from foreign countries (Lorenz, 1999). In organizational settings, mental contrasting promoted strong goal commitment to participate in training programs providing further education (Janetzke, 1999). In hospital settings, mental contrasting furthered strong goal commitment to apply best practice guidelines in nurses, and it increased their efforts to better their relationships to patients' family members (Brinkmann, 2000, Studies 1 and 2). Finally, health care professionals at the middle management level profited from being trained in mental contrasting in terms of increased readiness to make decisions, effective time management, and delegating authority to others (Brinkmann, 2000, Study 3).

Mental contrasting strengthened goal commitment no matter whether it was measured by cognitive, affective, or behavioral aspects; in the short-term or the long-term (up to 6 months); and via self-report or by direct observations. More importantly, in all of these studies mental contrasting triggered goal setting by making people respect existing high expectations of success rather than by raising the level of expectations (i.e., agency-related hope beliefs). Mental contrasting turned out to be an easy-to-apply self-regulatory tool, as the described effects were obtained even if participants elaborated the future and the reality only very briefly (i.e., were asked to imagine one positive aspect of the desired future and then move on to imagining one impeding aspect of reality).

In summary, mental contrasting can be used as a powerful self-regulatory tool when it comes to turning high agency-related hope thoughts into strong goal commitments. As pointed out in hope theory, however, having committed oneself to a goal is just a first step on the often intricate and effortful way to its realization. Various aspects of the context (i.e., stressors) in which the critical goal is to be implemented may hinder attainment. It is here where hope theory suggests that pathways-related hope thoughts unfold their beneficial effects.

Pathways-Related Hope Thoughts and Goal Striving

Hope theory speaks of pathways-related hope thoughts in terms of beliefs that one can get out of a jam, overcome barriers, and knows of many alternative ways to attain set goals. It might be theoretically profitable, however, to differentiate thoughts about pathways in terms of their content and structure, as some types of plans might be more effective than others. Gollwitzer (1993, 1999) focused on a certain type of plan called *implementation intention*. It is proposed that such plans that come in the form of "If I encounter critical situation y, then I will perform goal-

directed behavior will increase the rate of attainment of a set goal, as (a) the critical situation becomes more readily attended to and more easily detected and recalled; and (b) the intended goal-directed behavior is initiated immediately, efficiently, and without the necessity of a conscious intent once the critical situation is encountered. The critical situation can be a temporary good opportunity to be seized immediately, may entail a distraction or temptation to be avoided, or a barrier that needs to be overcome.

Laboratory research has focused on analyzing how implementation intentions work. Findings suggest that the critical situations specified in implementation intentions become highly accessible (summarized in Gollwitzer, 1999) and that action initiation in these critical situations carries features of automaticity as it occurs immediately, efficiently, and without the necessity of conscious intent (immediacy: Gollwitzer & Brandstaetter, 1997, Study 3; efficiency: Brandstaetter, Lengfelder, & Gollwitzer, 2001; no conscious intent required: Lengfelder & Gollwitzer, 2001).

Field experiments, on the other hand, have attempted to explore what kind of goals benefit from being furnished with implementation intentions. It is demonstrated that goal projects that need to be performed at inconvenient times benefit strongly from forming implementation intentions. For example, when people intend to write a report during holidays, goal completion rate raises from approximately 30% to 70% (Gollwitzer & Brandstaetter, 1997). Second, implementation intentions help completing unpleasant-to-perform goals. This was demonstrated in numerous studies examining different kinds of health promoting and disease preventing behaviors, such as regular breast self-examination (Orbell, Hodgkins, & Sheeran, 1997), cervical cancer screening (Sheeran & Orbell, 2000), and resumption of functional activity after joint replacement surgery (Orbell & Sheeran, 2000). Third, implementation intentions were found to facilitate the attainment of goals when it is easy to forget to perform the respective behaviors (e.g., the regular intake of vitamin pills, Sheeran & Orbell, 1999; the signing of worksheets with very old people, Chasten, Park, & Schwarz, 2001), and the performing of academic projects within deadlines and at certain points in time (Oettingen et al., 2000, Studies 2 and 3).

A meta-analysis of all the published studies on the effects of implementation intentions on the facilitation of goal attainment reveals that implementation intentions do not produce their effects via an increase in the strength of expectations of success or agency-related hope beliefs (Sheeran, 2001). This suggests that implementation intentions do not facilitate action toward the goal by recursively strengthening a person's confidence to reach the goal. Also, implementation intentions do not increase a person's commitment to the goal and thus facilitate goal attainment via strengthening goal commitment. Rather, the forming of implementation intentions is a conscious act of will that prepares a per-

son for effective goal striving. Once the critical situations are encountered, effortful reflections on how to effectively pursue one's goal are no longer needed, as goal-directed behavior is triggered automatically. This line of thought is supported by observations that individuals who have trouble with the conscious control of an ongoing goal pursuit (e.g., heroin addicts during withdrawal, schizophrenic patients) also benefit from forming implementation intentions (Brandstaetter et al., 2001, Studies 1 and 2), as do frontal lobe patients (Lengfelder & Gollwitzer, 2001).

The latter findings suggest that forming implementation intentions is not only a very effective self-regulatory tool, but also an easy-to-use technique. Finally, it does not matter whether implementation intentions are assigned or self-set, formed publicly or privately, written down or not, and whether people imagine themselves to act on their implementation intentions or not. What is important, however, is that people are committed to reaching their goal and that they commit themselves to their if (situation)-then (behavior) plans in the sense of strongly intending to perform the critical behavior once the specified situation is encountered.

Implications for Psychotherapy

Hope theory suggests that psychotherapeutic interventions to help people attain desired future outcomes should be geared at strengthening agency-related hope thoughts (Snyder et al., 2000; Snyder & Taylor, 2000). No matter how the strengthening of hope thoughts is achieved (e.g., via persuasion or changing people's performance), there remains the issue of translating hope thoughts into setting binding goals with subsequent determined goal striving. Mental contrasting is an easy-to-apply self-regulatory strategy that facilitates the translation of hope thoughts into goal-directed behavior. Accordingly, therapeutic interventions geared at helping people to meet desired outcomes should not stop after having increased hopefulness, but should also instruct people in how to use the self-regulatory strategy of mental contrasting, so that the strengthened agency-related hope thoughts become relevant to behavior.

Therapeutic interventions based on hope theory also focus on creating pathways-related hope thoughts pertaining to circumventing barriers, getting out of jams, and reaching the goal in many ways. Such pathways-related hope thoughts should be particularly effective in facilitating the attainment of set goals, if they are translated into if-then plans. To achieve this, people should (in advance) mentally link a select goal-directed behavior to an anticipated critical situation or barrier. As a consequence, an effective goal-directed response is initiated in an automatic fashion once the

critical situation is encountered, and does not have to be effortfully remembered and initiated in situ. Accordingly, therapies geared at helping people to meet set goals should not only create pathways-related hope thoughts, but also instruct clients to use the self-regulatory tool of forming implementation intentions that link anticipated critical situations and effective goal-directed responses.

Conclusion

We have described two self-regulatory strategies that facilitate the translation of hope thoughts into hope behavior. First, mentally thinking a desired future with impeding reality leads people to consider agency-related hope thoughts when it comes to setting binding goals and striving for them. Second, mentally linking an anticipated barrier with a relevant goal-directed response makes people act effectively on their pathways-related hope thoughts. Therefore, the self-regulatory tool of mental contrasting, by linking future and reality, makes people respect agency-related hope thoughts; whereas the self-regulatory tool of forming implementation intentions, by linking a goal-directed response to an anticipated barrier or hindrance, makes people respect pathways-related hope thoughts.

Note

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