

9

GOAL PURSUIT IN THE CONTEXT OF CULTURE

GABRIELE OETTINGEN^{*,†}, A. TIMUR SEVINCER[†]
AND PETER M. GOLLWITZER^{*,‡}

^{*}*Department of Psychology, New York University, New York, USA*

[†]*Department of Psychology, Universität Hamburg, Germany*

[‡]*Department of Psychology, Universität Konstanz, Germany*

To one who comes from Germany, the degree of freedom and independence of children and adolescents in the United States is very impressive. Especially the lack of servility of the young child toward adults or of the student toward his professor is striking.

—Lewin, 1936, p. 269

Goal pursuit implies that people have the freedom to set themselves goals they want and can reach, and that they can strive for at their own pace using their own means. As cultures and political systems vary widely regarding the freedom they allow for such goal setting and goal striving, socio-cultural contexts should influence whether and how goal setting and goal striving occurs. For example, in a culture with binding norms of social reciprocity, accepting a dinner invitation implies that the guest will reciprocate in a form that matches the original event. To the contrary, in a culture where such norms have been fading, accepting such an invitation leaves the guest with the freedom to invite the host back or not; and even if she commits to returning the favor, she still has full freedom of when, where, and how to enact it.

The role of culture in goal pursuit may thus be discussed at various levels of analysis. First, cultural norms and values might affect the determinants of goal setting and goal striving, desirability, and feasibility. Does culture affect what future outcomes and behaviors are perceived as desirable and thus qualify as

potential aspired to goal states? And does culture affect how people perceive the feasibility of realizing these desired futures? One also wonders whether and how culture influences the processes that lead people to commit to goals, and whether it influences the translation of set goals into action (i.e., goal striving). In the present chapter, we will address these questions starting with research on perceived desirability and feasibility, and ending with a focus on the role of culture in the formation of goal commitments and in the translation of set goals into action.

CULTURE AND THE DETERMINANTS OF GOAL PURSUIT

Goal pursuit starts by committing oneself to goals or adopting goals suggested by others. Most theories of motivation (e.g., Atkinson, 1957; Gollwitzer, 1990; Locke & Latham, 1990; Bandura, 1997; see Oettingen & Gollwitzer, 2001, for review) assume that people prefer to commit to or adopt goals they perceive as desirable and feasible. Perceived desirability is commonly 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 of significant others, progress toward some higher order goal, external rewards of having attained the goal, and the joy/pain associated with moving toward the goal (Heckhausen, 1977). Perceived feasibility depends on people's judgments of their capabilities to perform relevant goal-directed behaviors (i.e., self-efficacy expectations, Bandura, 1997), their beliefs that these goal-directed behaviors will lead to the desired outcome (i.e., outcome expectations, Bandura, 1997; instrumentality beliefs, Vroom, 1964), or the judged likelihood of attaining the desired outcome (i.e., general expectations, Oettingen & Mayer, 2002). It is assumed that perceived feasibility and desirability may not only affect what goal a person commits to pursuing, but also the intensity of subsequent striving for goal attainment (i.e., the intensity of goal striving is assumed to be stronger the higher the respective feasibility and desirability beliefs).

CULTURE AND DESIRABILITY

Members of different cultures are attracted to different goals. For instance, people in individualist cultures prefer to pursue goals that are directed at achieving personal success, seeking social independence, and influencing and persuading others, whereas people in collectivist cultures prefer to pursue goals that are directed at achieving success of one's group, seeking social interdependence, fitting in, and finding social harmony (Triandis, 1989; Hofstede, 2001; Oishi & Diener, 2001; Kitayama et al., 2008). It has long been assumed that the values and motives that are prevalent in a given culture inform the desirability of goals (Benedict, 1934). Reviewing literature on cross-cultural differences in goal-content, Nurmi

(1991) reports that adolescents in societies that emphasize modern values set goals relating to personal happiness, future family, and leisure activities, whereas adolescents from cultures that emphasize traditional values set goals relating to their parents' family, the health and marriage of others, and to societal topics (Gillespie & Allport, 1955).

As motive dispositions such as achievement, affiliation, and power affect the kind of goals a person chooses (i.e., understanding issues, getting close to others, influencing others; Brunstein et al., 1998), cultures may affect what kind of goals their people commit to by fostering some motive dispositions and hampering others during socialization (McClelland, 1965). Moreover, growing up in a given culture may affect how a certain motive disposition is expressed (Bond, 1986; Heine et al., 1999). For example, individuals in Asian cultures can be expected to express an achievement motive in terms of interpersonally oriented achievements (i.e., achievements that meet expectations of others), but less so in terms of personally oriented achievement (i.e., achievement that meet one's own expectations), whereas the reverse is true for Western cultures.

CULTURE AND FEASIBILITY

Even though there is ample research suggesting that the values prevalent in a given culture determine which goals the members of this culture consider to be desirable (e.g., Markus & Kitayama, 1991), few studies have examined the role of cultural variables for appraising the feasibility of desired outcomes. Examining how culture affects perceived feasibility is important, because successful goal attainment requires that people commit to goals in line with their feasibility in that they commit to goals that can be attained and refrain from committing to futile goals.

Perceived feasibility of goals primarily depends on whether one expects to be capable of performing actions that are instrumental to goal attainment (efficacy expectations; Bandura, 1997). Thus in order to understand how culture might affect perceived feasibility of goals it is necessary to take a closer look at how individuals appraise their efficacy. Individuals rely on mainly four information sources in forming their efficacy beliefs. First, individuals' *performance experiences* are most influential. Successes foster a strong sense of efficacy, whereas failures result in a weak sense of efficacy. Second, people use *vicarious experiences*, in which they model achievements of similar others, in forming their efficacy beliefs. Successes attained by similar others raise the observer's sense of efficacy, whereas failures diminish it. Third, *verbal persuasions* by others also influence one's sense of efficacy. Others trusting one's capabilities can strengthen one's sense of efficacy, whereas doubt expressed by others can diminish it. A fourth information source results from the *physiological reactions* that one experiences when confronted with difficult performance situations. For example, feeling one's heart beating during an important test would indicate a weak sense of efficacy, whereas "staying cool" would indicate a strong sense of efficacy.

When appraising their efficacy, individuals attend to, sample, weigh, and integrate the information available in their preferred manner. For instance, individuals may differ in the extent to which they attend to attempts of verbal persuasion by others and how much they weigh these attempts in comparison to their own performance experiences. In sum, forming efficacy beliefs is a complex appraisal process which entails attending to, selecting, weighing, and integrating information from multiple sources. We assume that it is in this appraisal process that culture may play its influential role.

But how does culture affect this complex efficacy appraisal process? Culture may be defined as “a meaning and information system shared by a group and transmitted across generations” (Matsumoto & Yoo, 2006, p. 235). Cultural meaning systems are largely transmitted through social institutions, such as child-rearing and educational systems (e.g., families, school), that exist in virtually all human societies. These institutions may influence how individuals attend to, sample, weigh, and integrate efficacy relevant information by (a) differentially emphasizing the four sources of efficacy formation (e.g., valuing personal attainments more than evaluation by others), and (b) differing in the information that is provided (e.g., providing individual performance feedback rather than group feedback).

Cultural Values and Efficacy Appraisal

Past research has identified various dimensions of values by which cultures can be differentiated (e.g., individualism/collectivism, power differential, uncertainty avoidance; Hofstede, 2001). These dimensions are not dichotomous classifications of cultures but rather represent a continuum along which cultures can be classified. In the following, we explore how the cultural values of collectivism versus individualism, high versus low power differential, and strong versus weak uncertainty avoidance might influence the formation of efficacy beliefs.

In *collectivist* cultures individuals are bound and mutually obligated in groups. Because collectivist cultures value behavior that conforms to the norms of the in-group (Kim & Markus, 1999), social institutions in these cultures should emphasize evaluation by in-group members and modelling of in-group members (van Baaren et al., 2003) as important sources of efficacy formation. Furthermore, because members of collectivist cultures focus on playing their role in the society (Markus & Kitayama, 1991), performance outcomes in educational systems are often public and evaluated by the collective. Such public performance feedback by in-group members permits less leeway for personal interpretation than private performance feedback (Janis, 1968) and thus prevents self-enhancing interpretations (Taylor, 1989). Therefore, members of collectivist cultures should closely follow the evaluations of their in-group members, and relatively low efficacy beliefs should be observed.

Individualist cultures focus on the personal and marginalize the social (Oyserman et al., 2002). Because individualist cultures adhere to values that promote personal success, personal uniqueness, and personal control, these cultures

should emphasize personal performance attainments as a source for efficacy formation. Furthermore, because social institutions focus on teaching individuals to realize their own potential rather than to play their role in society or to meet the approval of their in-group, performance feedback is often personal and private. Such private performance feedback allows for personal and self-enhancing interpretations. Therefore, by basing their efficacy appraisal on personal performance histories, members of individualist cultures should only loosely follow the evaluations of others and relatively high efficacy beliefs should be observed.

The cultural value of power distance may also affect efficacy appraisal. Members of cultures with *large power differential* accept inequality of power and respect authorities and rarely question them (Hofstede, 2001). Thus, performance evaluations by authorities such as parents and teachers should be especially selected and weighed in efficacy appraisal and these authorities should be readily modelled. Moreover, performance evaluations by these authorities should rarely be contradicted or criticized. Unquestioned performance evaluations by authorities, however, permit less personal and self-enhancing interpretations. Therefore, members of cultures with large power differential should tightly link their efficacy appraisal to the evaluations provided by the clearly identified and highly respected authorities, and be characterized by relatively low efficacy beliefs.

Members of cultures with *small power differential* value a more equal distribution of power. In these cultures it is more common to question authorities. In educational contexts students are expected to initiate communication, speak up, criticize, and express their own opinions. Individuals who sample information comparatively free of authorities' influences have more leeway for personal interpretation than do individuals who readily accept performance evaluations by authorities. Therefore, members of cultures with a small power differential should only loosely base their efficacy appraisal on the evaluations of the authority which is perceived as questionable, and thus efficacy beliefs should be relatively high.

Lastly, uncertainty avoidance may affect efficacy appraisal as well. Members of cultures of *strong uncertainty avoidance* are easily distressed by new, unstructured, unclear, or unpredictable situations. They try to avoid such situations by maintaining strict codes of conduct and a belief in absolute truths. In the educational contexts of these cultures, regular and frequent feedback on the same assignments is given. Highly structured, unidimensional teaching strategies (Rosenholtz & Rosenholtz, 1981) where materials are predefined and explicit are prevalent. These teaching strategies entail unambiguous feedback that allows for an exact comparison of performance on the same tasks (Simpson, 1981; Mac Iver, 1987), thereby permitting little personal interpretation. Therefore, members of cultures with strong uncertainty avoidance should base their efficacy appraisal on performance feedback that entails unambiguous information, and thus relatively low efficacy beliefs should be observed.

Members of cultures of *weak uncertainty avoidance* tend to be open to new experiences, tolerant, risk-accepting, and comparatively relaxed when confronted

with unpredicted situations. Educational institutions in these cultures often use multidimensional teaching strategies that entail only partially structured learning materials, general instructions, and flexible, individualized pacing. Feedback from these teaching strategies is often highly ambiguous because performance on multiple different tasks cannot directly be compared. Ambiguous performance feedback permits individuals more personal interpretation. Therefore, members of cultures with weak uncertainty avoidance, by basing their efficacy appraisal on ambiguous performance feedback, should evidence relatively high efficacy beliefs.

In sum, values of collectivism, large power differential, and strong uncertainty avoidance should be associated with relatively low efficacy beliefs that are strongly based on unambiguous performance evaluations by a defined in-group and respected authorities, whereas values of individualism, small power distance, and weak uncertainty avoidance should be associated with relatively high efficacy beliefs that are only loosely based on the ambiguous evaluations of peers and authorities.

Differences in Efficacy Beliefs between East and West Berlin Children

Oettingen et al. (1994) tested these assumptions by comparing efficacy beliefs in two societies located at the opposite poles of the three cultural dimensions (individualism/collectivism, power distance, uncertainty avoidance): East Berlin versus West Berlin in 1990, right after the fall of the wall and before reunification. The socialist–totalitarian system of the former East Germany was collectivist, large in power differential, and strong in uncertainty avoidance. Specifically, it emphasized the community of the people, inequality of power between party officials and common citizens (i.e., citizens had limited human rights, e.g., they had little freedom of speech), and its economic system adhered to long-term economical plans that the government determined in advance. The citizens' professional and social perspectives were clearly spelled out with limited freedom of choice.

To the contrary, the capitalist–democratic system of West Germany was comparatively individualistic, small in power differential, and weak in uncertainty avoidance. As a capitalist system, it relies on values such as autonomy, self-fulfilment, and personal success. In democratic systems, citizens have comparatively more rights and possibilities to influence government policy. Furthermore, the government only remotely controls the economy, and it allows citizens to decide their own professional and interpersonal pathways. According to the reasoning above, individuals in East Germany should have mapped their efficacy expectations more closely to the evaluations of authorities and the in-group, and thus should have evidenced weaker efficacy beliefs than individuals in West Germany.

In June 1990, before unification of the two Germanys, Oettingen and colleagues assessed efficacy beliefs of more than 300 East Berlin children from two schools, grades 2–6. The data were compared to a matched sample in West Berlin, involving over 500 children. Children's sense of academic efficacy was

operationalized as their judgments pertaining to whether they thought they could try hard, be smart, and have luck when it came to their school performance (Control, Agency, Means-Ends Instrument, CAMI, by Skinner et al., 1988).

Indeed, efficacy beliefs correlated stronger with course grades in East Berlin than in West Berlin students, reflecting the consensual construction of self-efficacy in the East Berlin rather than in the West Berlin school system. Already in the second grade-level correlations in East Berlin students ($r = 0.79$) were stronger than in West Berlin students ($r = 0.61$). At the same time, East Berlin children had a lower sense of academic efficacy than West Berlin children. That is, they had less confidence in their ability to exert effort in school, they considered themselves to be less smart, and they thought they would attract less luck. The lower sense of efficacy of the East Berlin children started in third grade and was pervasive throughout the sixth grade.

East and West Berlin Children of Varying Raven Scores

In 1991, 1 year after the first assessment, but still before the East Berlin school system adopted West Berlin's educational policies, Oettingen and Little (1993) returned to the East Berlin schools in an effort to replicate the original findings. At this point, they also administered Raven's Progressive Matrices test. They hypothesized that the observed differences between East and West Berlin children's self-efficacy and conformity would be driven by the children with lower Raven scores because once these children entered school, they were more frequently confronted with negative performance feedback that contradicted the naïve optimism with which children typically enter school. Therefore, the children with lower scores on the mental measure may have needed to revise their initial naïve performance optimism to a greater extent than would the children who obtained higher scores. Moreover, because of the initial negative performance feedback, lower scoring children should have more readily accepted future failure feedback than higher scoring children. Most importantly, this effect should have been particularly pronounced in school systems aiming at "adequate" self-evaluation, that is, more in East Berlin than in West Berlin. These hypotheses were confirmed: The differences in mean levels of self-efficacy and in conformity of efficacy appraisal were particularly due to the children with lower Raven scores.

Differences in efficacy beliefs between East and West Germany were also found in other samples and when using different instruments. For instance, students with low academic performance from various schools in East Germany were less convinced of their academic potential than their counterpart comparison group from West Germany, whereas there was no difference among students with strong academic performance (Hannover, 1995); also, East German school children conformed more readily to their teachers' evaluations than did the West German children. These differences in efficacy expectations were found in adults as well. A representative sample of adults in Dresden (East Germany) scored

lower in work-related efficacy expectations than a matched sample from Mainz (West Germany, Frese et al., 1996).

Differences in Explanatory Style between East and West Berlin

Perceived feasibility may also be affected by general expectations, that is, expectations whether certain positive and negative events will occur in the future or not. One indirect way to assess such expectations is to measure optimism versus pessimism in explanatory style (Abramson et al., 1978). Optimism versus pessimism in explanatory style was extracted from East and West Berlin newspaper reports of the 1984 Olympic Games. There was more pessimism in East Berlin than in West Berlin newspapers, despite East Germany having achieved many more Olympic victories than West Germany (Oettingen & Seligman, 1990).

Pessimism in East Germany was not restricted to the cognitive side of expectations. In the mid-1980s, bar patrons in East Berlin showed more behavior consistent with depressive affect (i.e., turned-down mouths, hunched posture, sheltered bodies, as well as lack of expressive behavior and lack of smiles and laughs) than those in West Berlin (Oettingen & Seligman, 1990). Seven years later, in 1991, with the changing political system in East Germany the behavior consistent with depressive affect had waned in East Berlin to the level of West Berlin (Oettingen, 1995a).

Differences in Efficacy Beliefs Across Cultures: How Political System and Cultural Values Interact

Because for centuries East and West Berlin shared their historical, linguistic, philosophical, and religious background, the observed differences in efficacy beliefs, explanatory style, and depressive affect most likely resulted from the different political systems (socialist–totalitarian versus capitalist–democratic). However, both the political system and the original cultural values of a society as they are reflected in its historical, linguistic, philosophical, and religious background should influence the social institutional context that determines the formation of perceived feasibility. The values emphasized by a political system and the cultural values originally adhered to may either concur or collide in their impact on perceived feasibility. Thus, societies that are governed by a capitalist–democratic system and at the same time emphasize cultural values of individualism, small power distance, and weak uncertainty avoidance should especially foster the emergence of high perceived feasibility. In contrast, societies that are governed by a socialist/communist–totalitarian system and at the same time emphasize cultural values of collectivism, large power differential, and strong uncertainty avoidance, should foster low perceived feasibility. Finally, in societies where political system and cultural values oppose each other, a moderate level of perceived feasibility should emerge (Oettingen, 1995b; Oettingen & Maier, 1999).

These predictions were tested (Little et al., 1995) by comparing efficacy beliefs in a society in which both political system and cultural values should foster strong efficacy beliefs (i.e., the United States) with a society in which both the values of the political system and the cultural values should foster weak efficacy beliefs (i.e., East Germany). In addition, two societies were selected in which political system and cultural values collide and thus should produce efficacy beliefs lying in between (e.g., West Germany and USSR).

We chose the USSR as a comparison to East Germany, and the United States as a comparison to West Germany, because the USSR matched East Germany in political system but not in cultural values, while the United States matched West Germany in political system but not in cultural values. Thus to investigate the role of cultural values in light of similar political systems, the USSR is a valid comparison group to East Germany, and the United States is a valid comparison group to West Germany.

As for the comparison of the United States and West Germany, cultural values in the United States are more individualist, show smaller power differential, and weaker uncertainty avoidance than in Germany (Hofstede, 2001; Kitayama et al., 2007). Indeed, already in 1936, Lewin observed “The natural relation of adult and child is in the United States not considered that of a superior (*Herr*) to the subordinate (*Untergebener*) but that of two individuals with the same right in principle” (p. 269). These differences may partly originate in the history of voluntary settlement of the United States. According to the voluntary settlement hypothesis (Lewin, 1936; Kitayama et al., 2006), people who aspire to take challenges and seek wealth and freedom choose to immigrate to an unsettled country.

As for the comparison of the USSR and East Germany, cultural values in Eastern Europe (including the USSR) are more individualist, and they show less power differential and less uncertainty avoidance than in Germany. For instance, in comparison to East Germany, countries of the former Eastern Bloc and the USSR scored considerably higher on utilitarian involvement, an indicator for individualism and small power distance (Smith et al., 1996). This finding is supported by anecdotal and historical evidence. For example, Heinrich Mann in his novel *The Subject* or Carl Zuckmayer in his play *The Captain of Köpenick* vividly describe the readiness with which the German society complied to the power structures of the Wilhelmina period. A similar spirit did not exist in Russia where poems, novels, and proverbs tended to express disrespect for authority and low willingness to obey. For example, Alexander Puschkin in his poems or Nikolai Gogol in his novel *Dead Souls* ridicule governmental authorities. Low obedience is also expressed in the popular proverb *The sky is high and the Tsar is far!* In sum, cultural values of individualism, low power distance, and low uncertainty avoidance characterized both the USA and the USSR as compared to Germany.

Based on the considerations above, Little et al. (1995, summary by Oettingen & Maier, 1999) hypothesized that school children in Los Angeles (capitalist–democratic political system concurs with values of the culture) have the highest efficacy beliefs

and the least conformity with the teachers' evaluations, whereas those in East Berlin have the lowest efficacy beliefs and most conformity (socialist–totalitarian political system concurs with the values of the culture). School children in West Berlin (democratic–capitalist political system collides with the values of the culture) and Moscow (communist–totalitarian political system collides with the values of the culture) were assumed to range in between. By testing 2000 school children from grades 2–6 in Los Angeles, Moscow, and East and West Berlin, Little et al. (1995) confirmed their hypotheses.

Further evidence that the interplay of collectivist values and a socialist–totalitarian system fosters the formation of especially low efficacy beliefs was provided by Oettingen and Maier (1999). When efficacy beliefs of more than 700 children from Prague and almost 200 children from Warsaw were compared to the children from East Berlin, children in Prague and Warsaw had a stronger sense of efficacy and lower conformity with their teachers' evaluations than children in East Berlin.

Summary

Perceived feasibility differs across cultures in line with political system and cultural values. Whereas the cultural values of collectivism, large power differential, and strong uncertainty avoidance are associated with low efficacy beliefs, the cultural values of individualism, small power distance, and weak uncertainty avoidance are associated with high efficacy beliefs. Most of the presented studies investigated efficacy expectations in school children. Here, low efficacy beliefs strongly impede scholastic performances (Schunk, 1991; Zimmerman & Kitsantas, 2005). Low scholastic performance in turn will hamper professional success, and thus may even suppress economic success on a societal level, as a nation's wealth is also based on its people's skills (Heckman, 2006). But it is not only academic and professional skill development that should be diminished by low efficacy beliefs but also non-cognitive skills such as perseverance and tenacity. Accordingly, individuals with low efficacy beliefs should be more reluctant to commit to challenging long-term goals geared at economic success (e.g., opening one's own business, persistently pursuing a professional career) and thus further deprive a society of a vital motor of economic development.

One may argue that the high efficacy beliefs, especially those in West Berlin children with low Raven scores may be simply unrealistic and thus detrimental in their effects on people's everyday lives. However, Taylor (1989) has convincingly argued and observed that optimism, even if illusory, benefits motivation and success in the central life domains, such as achievement, interpersonal relations, and health. The latter findings imply that children who need support by strengthened efficacy beliefs the most (e.g., children with low Raven scores) gain this essential motivational support to a greater extent in the cultures and political systems that tend toward individualism, low power distance, and weak uncertainty avoidance (e.g., in West Berlin more than in East Berlin). Supporting our finding of less optimism in cultures with relatively more collectivism, power

distance, and uncertainty avoidance, other researchers also observed less illusory optimism in Eastern cultures than in Western cultures (e.g., Shuper et al., 2004; summary by Heine & Lehman, 1995).

CULTURE AND THE PROCESSES OF GOAL PURSUIT

Recent research has moved away from the analysis of the determinants of goal pursuit, such as desirability and feasibility, to exploring the underlying psychological processes. Specifically, processes underlying goal setting and processes underlying goal implementation have been distinguished. Regarding goal setting, it was discovered that the way in which people mentally approach goal setting affects the strength of goal commitment. More specifically, whether perceived feasibility will affect the strength of goal commitment depends on the person's mode of thinking about the desired future (Oettingen, 2000). Process-focused research on goal implementation showed that strong goal commitments do not yet guarantee successful goal attainment as a host of problems may be encountered on the way to the goal (e.g., failing to get started, becoming derailed by distractions). Whether these problems will be ameliorated depends on people's efforts to plan out goal implementation in advance (Gollwitzer, 1999). In the following, we will first present the recent research on the processes of goal pursuit (i.e., goal setting and goal implementation) before we turn to discussing potential cultural influences on these processes.

COMMITTING TO GOALS: MENTAL CONTRASTING OF FUTURE AND REALITY

As outlined before, self-efficacy expectations are an important determinant of goal setting as they facilitate goal commitment. However, the commitment-facilitating role of self-efficacy expectations depends on people's self-regulatory thought. Specifically, the model of fantasy realization by Oettingen et al. (2001) differentiates three self-regulatory modes of thought. When people engage in the mode of thought called mental contrasting, they first imagine a desired future (e.g., improving in math, becoming a lawyer) and then reflect on the respective negative reality (e.g., being easily distracted; having yet to take the LSAT). The conjoint elaboration of the positive future and the negative reality makes both future and reality simultaneously accessible and it activates the relational construct of negative reality standing in the way of realizing the desired future. Consequently, a necessity to change the present reality into the desired future emerges that activates perceived feasibility (efficacy expectations, outcome expectations, or general expectations of success). When expectations of success are high, people will strongly commit to attaining the goal of changing the status quo toward the desired future, when expectations of success are low they form a weak goal commitment or none at all.

Using the terminology of Newell and Simon's (1972) theory of problem solving, the problem space of the mentally contrasting person is objective as it entails both the positive future to be reached and the negative reality to be overcome. As a consequence, the person will recognize that she needs to act on the status quo in order to reach the desired future. Therefore, perceived feasibility (expectations) of turning the present reality into the desired future will determine the person's goal commitment. However, if the subjective problem space entails only part of the objective problem – either only the positive future (indulging) or only the negative reality (dwelling) – the person will fail to recognize that she needs to improve the status quo in order to arrive at the desired future. As a consequence, expectations are not consulted and goal commitments stemming from solely focusing on either the positive future or the negative reality fail to be expectancy-dependent. The level of goal commitment is determined by the a priori commitment that the person holds with respect to attaining the desired future. Thus it is only mental contrasting that succeeds in strengthening commitment when expectations of success are high and in weakening commitment when expectations of success are low.

A series of experimental studies measuring goal commitment as the dependent variable supports these hypotheses. In these experiments, participants are randomly assigned to one of three conditions. They either mentally elaborate both the desired future and negative reality (mental contrasting condition), only the desired future (indulging condition), or only the negative reality (dwelling condition). In one experiment (Oettingen et al., 2001, Study 4), adolescent students had to mentally contrast the positive future of excelling in math (participants imagined, e.g., feelings of pride, increasing job prospects) with the respective negative reality (participants reflected on, e.g., being distracted by peers, feeling lazy). Two weeks after the experiment, students in the mental contrast condition who initially had high expectations that they could improve the present reality in the direction of the desired future (i.e., of excelling in math) received better course grades and teachers rated them as exerting more effort than those in the indulging (positive fantasy only) and in the dwelling (negative reality only) conditions.

The same pattern of results emerged with individuals who wished to learn a foreign language (Oettingen et al., 2000, Study 1), to solve an interpersonal problem (Oettingen et al., 2001, Studies 1 and 3), to get to know an attractive stranger (Oettingen, 2000, Study 1), to self-actualize (Oettingen et al., 2005, Study 1), to communicate with foreigners (Oettingen et al., 2005, Study 2), to reduce cigarette consumption, to obtain the help of others, and with pediatric intensive care nurses who wished to improve the relations with their patients' relatives (Oettingen & Thorpe, 2006).

In these experiments, goal commitment was assessed by cognitive (e.g., making plans), affective (e.g., feeling responsible for the wished for ending), motivational (e.g., feelings of energization), and behavioral indicators (e.g., effort and achievements). The indicators were measured via self-report or observations either

immediately or weeks after the experiment. Throughout, mental contrasting proved to be an effective problem solving strategy of translating expectations of success into goal commitment and subsequent goal striving. Importantly, in line with the theory, mental contrasting, indulging, and dwelling did not differentially affect the mean level of expectations. Rather, the self-regulatory modes of goal setting affected the degree to which participants respected expectations of success in forming their goal commitments (summary by Oettingen & Thorpe, 2006).

The notion that mental contrasting is a problem-solving strategy is also supported from a neuro-cognitive point of view: A study which examined the neural correlates of mental contrasting and indulging via continuous magnetoencephalographic activity (MEG; Achtziger et al., in press) evinced greater activity during mental contrasting (but not indulging) compared to resting in prefrontal, frontal, parietal, and temporal areas, indicating that mental contrasting involves strong intention formation, working memory, and episodic memory. In addition, heightened activity of occipital areas was observed during mental contrasting compared to resting and indulging, suggesting that mental contrasting more so than indulging and resting entails purposefully creating mental images. Taken together, these findings indicate that mental contrasting is indeed a purposeful problem-solving strategy respecting one's performance history.

IMPLEMENTING GOALS: MAKING IF-THEN PLANS

Having discussed modes of self-regulatory thought related to forming goal commitment, we will now turn to self-regulatory thought that facilitates goal implementation. The model of action phases (Heckhausen & Gollwitzer, 1987; Gollwitzer, 1990) assumes that getting started on one's goals and bringing goal-directed behavior to successful completion is facilitated by planning. Gollwitzer (1999) has referred to such planning as forming implementation intentions that link a critical situational cue with an intended goal-directed behavior: "If situation x is encountered, then I will perform behavior y!" Implementation intentions refer to the realization of the goal as people plan to respond to an anticipated critical situation in a certain goal-directed manner. They are distinguished from goal intentions (goals) that only specify a desired goal (outcome or behavior) and have the format of: "I intend to reach z!" or "I intend to perform behavior z!"

Implementation intentions have been found (meta-analysis of 94 independent studies by Gollwitzer & Sheeran, 2006) to facilitate the attainment of all kinds of goals that are difficult to control (e.g., writing a research report during Christmas break), easy to forget (e.g., taking of vitamin pills), or unpleasant to perform (e.g., performing cervical smear tests). They also facilitate the shielding of one's goal pursuit from unwanted influences (e.g., temptations, bad habits, adverse self-states). Implementation intentions seem to achieve their beneficial effects on goal attainment by delegating action control to the specified situational cues thus creating ad hoc or instant habits. For instance, Webb and Sheeran (2003) observed that the facilitation of goal attainment by implementation intentions

is achieved without depleting a person's self-regulatory resources. Participants who used implementation intentions to achieve a difficult task goal (i.e., high performance on the Stroop task) showed no deficits in the successful regulation of a subsequent demanding cognitive task (i.e., tracing puzzles). Moreover, the initiation of the responses specified in the then-component of an implementation intention was found to be immediate (e.g., Gollwitzer & Brandstätter, 1997, Study 3), efficient (e.g., Brandstätter et al., 2001, Studies 3 and 4; Parks-Stamm et al., 2007), and did not require a further conscious intent (e.g., Webb & Sheeran, 2007).

By forming implementation intentions one can strategically switch from top-down control of one's actions by set goals to bottom-up control through specified situational cues as is typical of habitual or automatic behavior. In a recent fMRI study conducted by Gilbert et al. (2008), brain activity in the lateral area 10 was observed to move toward the medial area 10 when participants switched from performing an executive functions task by the guidance of a goal intention to performing the very same type of task by the guidance of an implementation intention; on the basis of an extensive meta-analysis on various executive function tasks it is known that lateral and medial area 10 are implicated in top-down and bottom-up action control, respectively (Burgess et al., 2007).

Moderators of the effects of implementation intentions on goal attainment pertain to characteristics of the superordinate goal, the implementation intention itself, and the individual. For instance, as implementation intentions are subordinate to goal intentions, the strength of implementation intention effects depends on the strength of commitment to and activation state of the goal (Sheeran et al., 2005). Further, commitment to the implementation intention itself also matters; when people do not commit to the pre-decided way of implementing the goal as laid down in an implementation intention (because they want to stay open to unexpectedly arising opportunities and means; Seehausen et al., 1994), no goal attainment enhancing effects are observed. Characteristics of the individual moderate the relationship between if-then planning and goal attainment as well: A recent implementation intervention study geared to help college students' class attendance (Webb et al., 2007) showed that students low in conscientiousness benefited from the intervention, but not the high conscientious students who showed perfect class attendance to begin with. In sum, characteristics of the goal (e.g., difficulty, commitment, activation), the implementation intention (commitment), and the individual (e.g., conscientiousness) all manage to moderate implementation intention effects on goal attainment.

What, however, spurs the formation of implementation intentions? More research is needed to explore the circumstances under which people are most likely to form if-then plans. It seems reasonable to assume that the anticipation of difficulties in striving for one's goal will influence whether people can and want to make plans (i.e., whether implementation intentions are formed or not). Indeed, Oettingen et al. (2001) observed that high expectancy individuals induced to engage in mental contrasting as compared to indulging and dwelling

spontaneously produced more if-then plans regarding the implementation of the desired future.

SUMMARY: MENTAL CONTRASTING AND IMPLEMENTATION INTENTIONS

Findings supporting the model of fantasy realization show that perceiving the envisioned future as desirable (positive attitude or high incentive value) and feasible (e.g., high efficacy expectations) are just prerequisites for the emergence of strong goal commitments. To create strong goal commitments, people need to translate these positive attitudes and high expectations into binding goals, a process which is facilitated by mentally contrasting the positive future with negative reality. Such mental contrasting has been found to benefit behavior change in widely different life domains (e.g., interpersonal, achievement, and health), and it has been linked to brain activity typical for purposeful problem solving based on one's past performance history.

Similarly, findings supporting the model of if-then planning show that binding goal commitments are only a prerequisite for goal attainment. To facilitate goal attainment, people may form if-then plans that link instrumental responses to anticipated critical situations. By an act of will (i.e., making an if-then plan), action control is strategically delegated to these specified situations and thus acquires features of automaticity that are commonly observed only with habitual action control. In numerous studies, such if-then plans have been found to effectively increase rate of goal attainment.

MENTAL CONTRASTING AND IMPLEMENTATION INTENTIONS ACROSS CULTURES

As mental contrasting solves the problem of discriminating between feasible and unfeasible goals, we speculate that cultures that demand such "discriminative facility" (Mischel, 1973, p. 258) foster the readiness to use mental contrasting over indulging and dwelling. Similarly, because if-then planning solves the problem of strategically automating goal-directed actions, we speculate that cultures that demand such strategic automation should foster the readiness to generate implementation intentions. In sum, cultures should differ in the extent they foster self-regulation of goal setting (mental contrasting) and goal implementation (if-then planning).

These ideas go beyond the traditional claim that cultural values affect the key determinants of goal pursuit, desirability and feasibility, as they highlight that cultural values may also affect the way in which people commit to goals and implement them. Cultural variables that qualify may be manifold, though variables that relate to "the space of free movement" (Lewin, 1936, p. 268) should again be of particular importance here. According to Lewin, and as noted before,

too many restrictions in the form of social prohibitions will limit the space of free movement. In light of such social prohibitions, goals should not be formed and self-regulatory strategies of goal pursuit should not be needed (Oettingen, 1997). In the following, we want to consider a cultural variable that affects the space of free movement: strong versus weak norm-orientation (tightness versus looseness; Triandis, 1989; Chan et al., 1996).

Norm-Orientation

In traditional cultures, myths and other cultural symbols favor norm-oriented rituals which then serve as the basis for action (Boesch, 1982). Norm-orientation functions as the basis for action because of two reasons: norm-oriented rituals provide the necessary assurance for action and they lay down the boundaries for action (i.e., they inform the person when and where to interact with whom in what way). However, norm-oriented rituals are fading in modern societies. The myths and symbols of modern societies, even if they sound scientific (e.g., eat healthy, be friendly, save energy), are by and large abstract ideologies without creating a basis for forming strong goal commitments and engaging in subsequent action (Ryder, 1965; Boesch, 1982; Sennett, 2005).

Therefore, in *non-normative (loose)* cultures the individual is forced to seek alternative guidance that substitutes for the lost support by rituals and prohibitions. As perceived feasibility (efficacy expectations, outcome expectations, general expectations of success) reflects an individual's personal experience and performance history, it can provide the necessary assurance to act and show the boundaries of acting. Assuming that perceived feasibility is a major determinant of a person's goal commitment in non-normative societies, mental contrasting as a mode of self-regulatory thought should be in high demand. As mental contrasting allows people to solve the problem of translating perceived feasibility into respective goal commitments with subsequent goal striving, it should help people to invest in promising projects and stay away from futile ones.

Moreover, in non-normative cultures where norms fail to provide guidance, implementation intentions should be a welcome tool for enacting one's set goals. People may benefit much from using implementation intentions when preparing for upcoming difficulties and temptations during goal striving, as norms do not guide their way. Also, because mental contrasting should be prevalent and mental contrasting leads to scrutinizing obstacles to the enactment of the desired future, people should find it easy to make if-then plans; they can use these obstacles to specify the if-component of their implementation intentions (Oettingen et al., 2001). These speculations are in line with the finding that low conscientious college students benefited from forming implementation intentions, while high conscientious students showed successful goal implementation no matter whether they formed implementation intentions or not (Webb et al., in press).

In contrast, in *normative (tight)* cultures turning to perceived feasibility is less necessary, and mental contrasting as the respective problem-solving strategy should be less in demand. If anything, indulging in the desired future should flourish. A high prevalence of indulging should have a stabilizing function for

the individual's well-being and the cultural environment, because indulging helps to live with the experience of normative constraints in the present by providing hope for a better future. Indeed, in light of low feasibility, indulging in a positive future has been shown to help people "to stay in the field" (Lewin, 1936; Oettingen et al., 2001). Disregard of perceived feasibility and respective endurance is also facilitated by dwelling on the negative reality. In sum, cultures that adhere to myths and symbols which favor norm-oriented rituals should encourage indulging in positive futures and allow extensive dwelling on the current dreary reality. They should discourage mental contrasting of a positive future with negative reality that induces feasibility-guided goal pursuit.

Because highly normative cultures do not provide much space of free movement, there should be relatively little need to form implementation intentions either. Action in normative cultures is highly ritualized and thus automated by default. A strategic automaticity produced by if-then planning is superfluous. For example, people in normative cultures have been taught to tackle barriers in a pre-specified way (e.g., how to be polite to an unfriendly person). This pre-specification is the purpose of if-then planning and if this purpose is fulfilled by the guidance of norms, implementation intentions are not needed to begin with. Finally, in normative cultures, as people preferably indulge and dwell rather than mentally contrast, they lack the cognitive preparation (i.e., thinking of obstacles) that facilitates the explication of the if-component of implementation intentions.

Summary

Socio-cultural contexts can be differentiated by whether they grant what Kurt Lewin has called "the space of free movement." We have operationalized this variable by pointing to the cultural value of norm-orientation (i.e., tightness versus looseness; Triandis, 1989) and reasoned that loose cultures should foster the use of mental contrasting and forming implementation intentions, while in tight cultures these modes of thought are not needed to effectively control one's actions. Moreover, we argued that indulging and dwelling should be prevalent in tight cultures, as these modes of thought facilitate endurance and positive affect in situations that do not allow for "free movement" (i.e., situations where a person's actions are determined by societal prohibitions or situations which are not escapable in the sense that they can neither be resolved nor escaped). Certainly, each individual member of a loose or tight culture should at times entertain a typical self-regulatory thought. Also, there should be individual differences in preferred self-regulatory thought within a given culture. However, the socio-cultural contexts outlined above should selectively favor the prevalence of specific types of self-regulatory thought in their members.

CONCLUSION

In the first part of this chapter, we discussed how culture may affect people's goal pursuits via determining the perceived desirability and feasibility of potential

goals. With respect to perceived feasibility, we reported a line of research showing that political system and cultural variables conjointly inform people's self-efficacy beliefs. In the second part of the chapter, we raised the question of how cultural values might affect people's preferential use of certain self-regulation strategies when committing to and acting on goals. We pointed to the cultural dimensions of weak versus strong norm-orientation (looseness versus tightness, Triandis, 1989), and reasoned that strong norm orientation reduces the space of free movement. Accordingly, there should be relatively little demand for mental contrasting or implementation intentions as people know a priori how to act (i.e., with whom, when, where, and how). To the contrary, in cultures of weak norm orientation people have to set goals and find ways of implementing them. Therefore, it is vital to develop discriminative ability in goal setting (by mental contrasting) and strategic automaticity in goal implementation (by forming implementation intentions). Future research may turn to testing the hypotheses we have developed, or start exploring their implications. For instance, one wonders whether mental contrasting and forming implementation intentions are to be preferred when people in a given culture are opting toward change and the political and economic situation allows for such a change, whereas indulging in a positive future is the proper self-regulatory strategy when people in a given culture have to endure a dismal situation until the political and economic developments allow for change toward the better.

REFERENCES

- Abramson, L. Y., Seligman, M. E. P., & Teasdale, J. D. (1978). Learned helplessness in humans: Critique and reformulation. *Journal of Abnormal Psychology, 87*, 49–74.
- Achtziger, A., Fehr, T., Oettingen, G., Gollwitzer, P. M., & Rockstroh, B. (in press). Strategies of intention formation are reflected in continuous MEG activity. *Social Neuroscience*.
- Atkinson, J. W. (1957). Motivational determinants of risk-taking behavior. *Psychological Review, 64*, 359–372.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- Benedict, R. (1934). *Patterns of culture*. Boston: Houghton Mifflin.
- Boesch, E. E. (1982). Ritual und Psychotherapie. *Zeitschrift für klinische Psychologie und Psychotherapie, 30*, 214–234.
- Bond, M. H. (1986). *The psychology of the Chinese people*. New York: Oxford University Press.
- Brandstätter, V., Lengfelder, A., & Gollwitzer, P. M. (2001). Implementation intentions and efficient action initiation. *Journal of Personality and Social Psychology, 81*, 946–960.
- Brunstein, J. C., Schultheiss, O. C., & Grassman, R. (1998). Personal goals and emotional well-being. The moderating role of motive dispositions. *Journal of Personality and Social Psychology, 75*, 494–508.
- Burgess, P. W., Simons, J. S., Dumontheil, I., & Gilbert, S. J. (2007). The gateway hypothesis of rostral prefrontal cortex (area 10) function. In J. Duncan, L. Phillips, & P. McLeod (Eds.), *Measuring the mind: Speed, control, and age* (pp. 217–248). Oxford: Oxford University Press.
- Chan, D. K. S., Gelfand, M. J., Triandis, H. C., & Tzeng, O. (1996). Tightness-looseness revisited: Some preliminary analyses in Japan and the United States. *International Journal of Psychology, 31*, 1–12.

- Frese, M., Kring, W., Soose, A., & Zempel, J. (1996). Personal initiative at work: Differences between East and West Germany. *Academy of Management Journal*, 39, 37–63.
- Gilbert, S. J., Gollwitzer, P. M., Cohen, A.-L., Oettingen, G., & Burgess, P. W. (2008). *Separable brain systems supporting realization of future goals versus if-then plans*. Manuscript submitted for publication.
- Gillispie, J. M., & Allport, G. W. (1955). *Youth's outlook on the future (a cross-national study)*. New York: Doubleday & Company.
- Gollwitzer, P. M. (1990). Action phases and mind-sets. In E. T. Higgins & R. M. Sorrentino (Eds.), *The handbook of motivation and cognition: Foundations of social behavior* (Vol. 2, pp. 53–92). New York: Guilford Press.
- Gollwitzer, P. M. (1999). Implementation intentions: Strong effects of simple plans. *American Psychologist*, 54, 493–503.
- Gollwitzer, P. M., & Brandstätter, V. (1997). Implementation intentions and effective goal pursuit. *Journal of Personality and Social Psychology*, 73, 186–199.
- Gollwitzer, P. M., & Sheeran, P. (2006). Implementation intentions and goal achievement: A meta-analysis of effects and processes. *Advances in Experimental Social Psychology*, 38, 69–119.
- Hannover, B. (1995). Self-serving biases and self-satisfaction in East versus West German students. *Journal of Cross-Cultural Psychology*, 26, 176–188.
- Heckhausen, H. (1977). Achievement motivation and its constructs: A cognitive model. *Motivation and Emotion*, 1, 283–329.
- Heckhausen, H., & Gollwitzer, P. M. (1987). Thought contents and cognitive functioning in motivational versus volitional states of mind. *Motivation and Emotion*, 11, 101–120.
- Heckman, J. J. (2006). Skill formation and the economics of investing in disadvantaged children. *Science*, 312, 1900–1902.
- Heine, S. J., & Lehman, D. R. (1995). Cultural variation in unrealistic optimism: Does the west feel more invulnerable than the east? *Journal of Personality and Social Psychology*, 68, 595–607.
- Heine, S. J., Lehman, D. R., Markus, H. R., & Kitayama, S. (1999). Is there a universal need for positive self-regard? *Psychological Review*, 106, 766–794.
- Hofstede, G. H. (2001). *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Janis, I. L. (1968). Attitude change via role playing. In R. Abelson, E. Aronson, W. McGuire, T. Newcomb, M. Rosenberg, & P. Tennebaum (Eds.), *Theories of cognitive consistency: A sourcebook* (pp. 810–818). Chicago, IL: Rand-McNally.
- Kim, H., & Markus, H. R. (1999). Deviance or uniqueness, harmony or conformity? A cultural analysis. *Journal of Personality and Social Psychology*, 85, 373–382.
- Kitayama, S., Ishii, K., Imada, T., Takemura, K., & Ramaswamy, J. (2006). Voluntary settlement and the spirit of independence: Evidence from Japan's "Northern frontier". *Journal of Personality and Social Psychology*, 91, 369–384.
- Kitayama, S., Park, H., Sevincer, A. T., Karasawa, M., & Uskul, A. (2008). *A cultural task analysis of implicit independence: Comparing North America, West Europe, and East Asia*. Manuscript submitted for publication.
- Lewin, K. (1936). Some social psychological differences between the United States and Germany. *Character and Personality*, 4, 265–293.
- Little, T. D., Oettingen, G., Stetsenko, A., & Baltes, P. B. (1995). Children's action-control beliefs about school performance: How do American children compare with German and Russian children? *Journal of Personality and Social Psychology*, 69, 686–700.
- Locke, E. A., & Latham, G. P. (1990). *A theory of goal setting and task performance*. Englewood Cliffs, NJ: Prentice Hall.
- Mac Iver, D. (1987). Classroom factors and student characteristics predicting students' use of achievement standards during self-assessment. *Child Development*, 58, 1258–1271.
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98, 224–253.

- Matsumoto, D., & Yoo, S. H. (2006). Toward a new generation of cross-cultural research. *Perspectives on Psychological Science, 1*, 234–250.
- McClelland, D. C. (1965). *The achieving society*. Princeton, NJ: Van Nostrand.
- Mischel, W. (1973). Toward a cognitive social learning reconceptualization of personality. *Psychological Review, 80*, 252–283.
- Newell, A., & Simon, H. A. (1972). *Human problem solving*. Englewood Cliffs, NJ: Prentice-Hall.
- Nurmi, J. E. (1991). How do adolescents see their future? A review of the development of future orientation and planning. *Developmental Review, 11*, 1–59.
- Oettingen, G. (1995a). Explanatory style in the context of culture. In G. M. Buchanan & M. E. P. Seligman (Eds.), *Explanatory style* (pp. 209–224). Hillsdale, NJ: Erlbaum.
- Oettingen, G. (1995b). Cross-cultural perspectives on self-efficacy. In A. Bandura (Ed.), *Self-efficacy in changing societies* (pp. 149–176). New York: Cambridge University Press.
- Oettingen, G. (1997). Culture and future thought. *Culture and Psychology, 3*, 353–381.
- Oettingen, G. (2000). Expectancy effects on behavior depend on self-regulatory thought. *Social Cognition, 18*, 101–129.
- Oettingen, G., & Gollwitzer, P. M. (2001). Goal setting and goal striving. In A. Tesser & N. Schwarz (Eds.), *The Blackwell Handbook of Social Psychology*. Oxford: Blackwell.
- Oettingen, G., Hönig, G., & Gollwitzer, P. M. (2000). Effective self-regulation of goal attainment. *International Journal of Educational Research, 33*, 705–732.
- Oettingen, G., & Little, T. D. (1993). Intelligenz und Selbstwirksamkeitsurteile bei Ost- und Westberliner Schulkindern [Intelligence and self-efficacy beliefs in East and West Berlin school children]. *Zeitschrift für Sozialpsychologie [German Journal of Social Psychology], 24*, 186–197.
- Oettingen, G., Little, T. D., Lindenberger, U., & Baltes, P. B. (1994). Causality, agency, and control beliefs in East versus West Berlin children: A natural experiment on the role of context. *Journal of Personality and Social Psychology, 66*, 579–595.
- Oettingen, G., & Maier, H. (1999). Where political system meets culture: Effects on efficacy appraisal. In Y. T. Lee, C. R. McCauley, & J. G. Draguns (Eds.), *Personality and person perception across cultures*. Mahwah, NJ: Erlbaum.
- Oettingen, G., & Mayer, D. (2002). The motivating function of thinking about the future: Expectations versus fantasies. *Journal of Personality and Social Psychology, 83*, 1198–1212.
- Oettingen, G., Mayer, D., Thorpe, J. S., Janetzke, H., & Lorenz, S. (2005). Turning fantasies about positive and negative futures into self-improvement goals. *Motivation and Emotion, 29*, 237–267.
- Oettingen, G., Pak, H., & Schetter, K. (2001). Self-regulation of goal-setting: Turning free fantasies about the future into binding goals. *Journal of Personality and Social Psychology, 80*, 736–753.
- Oettingen, G., & Seligman, M. E. P. (1990). Pessimism and behavioural signs of depression in East versus West Berlin. *European Journal of Social Psychology, 20*, 207–220.
- Oettingen, G., & Thorpe, J. S. (2006). Fantasy realization and the bridging of time. In L. A. Sanna & E. C. Chang (Eds.), *Judgments over time: The interplay of thoughts, feelings, and behaviours* (pp. 120–142). Oxford: Oxford University Press.
- Oishi, S., & Diener, E. (2001). Goals, culture, and subjective well-being. *Personality and Social Psychology Bulletin, 27*, 1674–1682.
- Oyserman, D., Coon, H. M., & Kemmelmeier, M. (2002). Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta-analyses. *Psychological Bulletin, 128*, 3–72.
- Parks-Stamm, E. J., Gollwitzer, P. M., & Oettingen, G. (2007). Do implementation intentions lead to rigid goal pursuit? Cue detection versus response selection. *Social Cognition, 25*, 248–266.
- Rosenholtz, S. J., & Rosenholtz, S. H. (1981). Classroom organization and the perception of ability. *Sociology of Education, 54*, 132–140.
- Ryder, N. B. (1965). The cohort as a concept in the study of social change. *American Sociological Review, 30*, 841–861.
- Schunk, D. H. (1991). Self-efficacy and academic motivation. *Educational Psychologist, 26*, 207–231.

- Seehausen, R., Bayer, U., & Gollwitzer, P. M. (1994, September). *Experimentelle Arbeiten zur vorsätzlichen Handlungsregulation* [Experimental studies on the intentional control of behavior]. Paper presented at the 39th convention of the German Psychological Society, Hamburg, Germany.
- Sennett, R. (2005). *The culture of the new capitalism*. London: Yale University Press.
- Sheeran, P., Webb, T. L., & Gollwitzer, P. M. (2005). The interplay between goal intentions and implementation intentions. *Personality and Social Psychology Bulletin*, 31, 87–98.
- Shuper, P., Sorrentino, R. M., Otsubo, Y., Hodson, G., & Walker, A. M. (2004). A theory of uncertainty orientation: Implications for the study of individual differences within and across cultures. *Journal of Cross-Cultural Psychology*, 35, 460–481.
- Simpson, C. (1981). Classroom structure and the organization of ability. *Sociology of Education*, 54, 120–132.
- Skinner, E. A., Chapman, M., & Baltes, P. B. (1988). Control, means-ends, and agency beliefs: A new conceptualization and its measurement during childhood. *Journal of Personality and Social Psychology*, 54, 117–133.
- Smith, P. B., Dugan, S., & Trompenaars, F. (1996). National culture and the values of organizational employees: A dimensional analysis across 43 nations. *Journal of Cross-Cultural Psychology*, 27, 231–264.
- Taylor, S. E. (1989). *Positive illusions: Creative self-deception and the healthy mind*. New York: Basic Books.
- Triandis, H. C. (1989). The self and social behavior in differing cultural contexts. *Psychological Review*, 96, 506–520.
- Van Baaren, R. B., Maddux, W. W., Chartrand, T. L., De Bouter, C., & Van Knippenberg, A. (2003). It takes two to mimic: Behavioral consequences of self-construals. *Journal of Personality and Social Psychology*, 84, 1093–1102.
- Vroom, V. H. (1964). *Work and motivation*. New York: Wiley.
- Webb, T. L., & Sheeran, P. (2003). Can implementation intentions help to overcome ego-depletion? *Journal of Experimental Social Psychology*, 39, 279–286.
- Webb, T. L., & Sheeran, P. (2007). How do implementation intentions promote goal attainment? A test of component processes. *Journal of Experimental Social Psychology*, 43, 295–302.
- Webb, T. L., Christian, J., & Armitage, C. J. (2007). Helping students turn up for class: Does personality moderate the effectiveness of an implementation intention intervention? *Learning and Individual Differences*, 17, 316–327.
- Zimmerman, B. J., & Kitsantas, A. (2005). Homework practices and academic achievement: The mediating role of self-efficacy and perceived responsibility beliefs. *Contemporary Educational Psychology*, 30, 397–417.

