

Abstract

The achievement of an identity is commonly construed as a choice between options, for instance, between becoming a physician or a chemist, a housewife or a professional. This approach, however, ignores the fact that identity choices, even when based on cumbersome deliberation, need to be followed up by implementational efforts. The present chapter focuses on this willful construction of a chosen identity (i.e., the implementation of identity goals) and attempts to delineate those features that distinguish it from other forms of goal-striving. More specifically, it is suggested that the pursuit of identity goals is enduring over time, as such goals cannot actually be completed and are not easily halted by failure. In fact, failure experiences invigorate identity goal pursuits, as suggested by various experiments demonstrating that identity-related failures affect subsequent identity-relevant performances positively. Moreover, it has been shown that identity-related social recognition hampers goal-directed efforts instead of facilitating them. Apparently, identity goals entail the mere claim to be, for example, a physician in the eyes of others (i.e., are represented on the level of social reality). The chapter also addresses issues of whether the willful pursuit of identities is moderated by people's framing of the identity goal in question (i.e., as a mastery goal as opposed to a learning goal, with a positive-outcome as opposed to a negative-outcome focus), and it discusses how the processes involved with choosing an identity differ from processes associated with the implementation of the chosen identity. Finally, the present approach is related to classic notions of life-span development (i.e., the model of selective optimization with compensation, the distinction between primary and secondary forms of control), and it is suggested that people of old age and very old age are likely to remain able to maintain their identity claims, an ability that is facilitated by their tendency to reduce their social contacts to a few intimates.

Introduction

The psychology of the self (Suls & Greenwald, 1983; Suls, 1993) and the sociology of identity (Yardley & Honess, 1987; Stryker & Statham, 1985) focus on the following question: How does a person conceive of his or her self? In this sense, the term *self* (or *identity*) refers to a cognitive structure that incorporates all the ways in which a person characteristically answers the question "Who am I?" Following James's (1890/1950) lead, researchers consider the answers given to this question as falling into a number of different categories (Gordon, 1968; Rosenberg, 1979). One group of answers relates to physical attributes (e.g., "I am tall"); another relates to the broader categories of social identities, which include the various informal and formal, chosen or assigned social roles an individual occupies (e.g., "I am a youngster," "I am a daughter," "I am a student," "I am a butcher,"). Some answers may refer to perceived traits and dispositions (e.g., "I am tolerant"), to skills and aptitudes (e.g., "I am a math whiz-kid"), or to values and interests (e.g., "I love to travel").

The answers that researchers studying the self or identity give to the question of how a person conceives of her or his self depend on the theoretical background and the self-aspects (i.e., physical, social, or personal aspects) that are focused on. For instance, Bem's self-perception theory (1972) claims that people make inferences about the self-aspects they possess by observing their own behaviors, feelings, and thoughts. More sociologically inclined approaches postulate that people infer the contents of their identity by observing the behavior of other people toward them (based on Cooley, 1902) or by analyzing the role that people play in the social community to which they belong (based on Mead, 1934). Socioecological approaches (e.g., Hormuth, 1986) point out that people also use the material objects that surround them and the opportunity structures in which they feel embedded to make inferences about the self.

Social-psychological approaches to the self assert that a person searching for self-knowledge actively creates his or her social environments. Such an approach is exemplified by Swann (1983), who hypothesizes in his self-verification theory that people verify self-related beliefs by choosing interaction partners who are known to support their preferred self-conceptions. Social-interactionist approaches (e.g., Stryker's 1985 identity salience theory; see Stryker & Statham, 1985) assign a similar active role to the individual in the context of acquiring self-knowledge.

The various approaches listed so far assert that self or identity is construed as something the individual needs to cognize. It is not surprising,

then, that researchers in this tradition prefer to speak of the self or identity in terms of the self-concept. The emphasis is on how the individual conceives the self. This is also true for the intriguing extension of this work, which deals with people's conceptions of what they hope or fear to become (for the concept of possible selves, see Markus & Nurius, 1986). Controversies in self-concept research surround issues of whether the self is construed as a coherent entity or is composed of many partial selves (Greenwald, 1982), whether the self-concept is stable or malleable (Gergen, 1982), and whether the self-concept is accurate or illusory (Brown, 1991).

Another important branch of research focuses on how people evaluate the self (Greenwald, 1980; Stahlberg, Osnabrügge, & Frey, 1985). This affective response is discussed in its most global form as a person's self-esteem. It is commonly assumed that people have a pervasive need for high self-esteem, so discussion focuses on where this need comes from and how it is served. Greenberg, Pyszczynski, and Solomon (1986) point to the terror associated with the fear of death as the critical source of the need for self-esteem; Baumeister and Tice (1990) refer to the terror of social exclusion. Various ideas have also been offered about how positive self-evaluations come about. Some researchers see a link between structural qualities of the self-concept and positive self-evaluations (clarity of self-concept, Campbell, 1990; complexity of self-concept, Linville, 1987). Others (Higgins, 1987) point out that a person's affective responses toward the self are associated with the discrepancies that people experience between so-called self-guides (i.e., the ideal or ought self) and the actual self. Finally, research on the psychology of the self has also analyzed how relating to others affects a person's self-evaluations. Tesser (1988), in his self-evaluation maintenance theory, focuses on social comparison processes and basking in the reflected glory of others. Baumeister (1982), on the other hand, points to strategic self-presentations as a means to boosting one's self-evaluation.

Research on positive self-evaluation processes and self-esteem construes the self as something that is (to be) evaluated by the individual. This adds an affective and motivational dimension to the self-concept research that traditionally looked at the self as something to be cognized. What research on positive self-evaluations does not yet capture, however, is how the desired self is achieved behaviorally. The self or identity (or aspects of it) may be construed as goals the individual attempts to attain. This goal perspective on the self has been exemplified in Wicklund and Gollwitzer's (1982) theory of symbolic self-completion, which focuses on how self-defining goals are implemented by the individual. Heckhausen (1989) and Gollwitzer (1990; Heckhausen & Gollwitzer, 1987) have distinguished between

Introduction

The psychology of the self (Suls & Greenwald, 1983; Suls, 1993) and the sociology of identity (Yardley & Honess, 1987; Stryker & Statham, 1985) focus on the following question: How does a person conceive of his or her self? In this sense, the term *self* (or *identity*) refers to a cognitive structure that incorporates all the ways in which a person characteristically answers the question "Who am I?" Following James's (1890/1950) lead, researchers consider the answers given to this question as falling into a number of different categories (Gordon, 1968; Rosenberg, 1979). One group of answers relates to physical attributes (e.g., "I am tall"); another relates to the broader categories of social identities, which include the various informal and formal, chosen or assigned social roles an individual occupies (e.g., "I am a youngster," "I am a daughter," "I am a student," "I am a butcher."). Some answers may refer to perceived traits and dispositions (e.g., "I am tolerant"), to skills and aptitudes (e.g., "I am a math whiz-kid"), or to values and interests (e.g., "I love to travel").

The answers that researchers studying the self or identity give to the question of how a person conceives of her or his self depend on the theoretical background and the self-aspects (i.e., physical, social, or personal aspects) that are focused on. For instance, Bem's self-perception theory (1972) claims that people make inferences about the self-aspects they possess by observing their own behaviors, feelings, and thoughts. More sociologically inclined approaches postulate that people infer the contents of their identity by observing the behavior of other people toward them (based on Cooley, 1902) or by analyzing the role that people play in the social community to which they belong (based on Mead, 1934). Socioecological approaches (e.g., Hormuth, 1986) point out that people also use the material objects that surround them and the opportunity structures in which they feel embedded to make inferences about the self.

Social-psychological approaches to the self assert that a person searching for self-knowledge actively creates his or her social environments. Such an approach is exemplified by Swann (1983), who hypothesizes in his self-verification theory that people verify self-related beliefs by choosing interaction partners who are known to support their preferred self-conceptions. Social-interactionist approaches (e.g., Stryker's 1985 identity salience theory; see Stryker & Statham, 1985) assign a similar active role to the individual in the context of acquiring self-knowledge.

The various approaches listed so far assert that self or identity is construed as something the individual needs to cognize. It is not surprising,

then, that researchers in this tradition prefer to speak of the self or identity in terms of the self-concept. The emphasis is on how the individual conceives the self. This is also true for the intriguing extension of this work, which deals with people's conceptions of what they hope or fear to become (for the concept of possible selves, see Markus & Nurius, 1986). Contraries in self-concept research surround issues of whether the self is construed as a coherent entity or is composed of many partial selves (Greenwald, 1982), whether the self-concept is stable or malleable (Gergen, 1982), and whether the self-concept is accurate or illusionary (Brown, 1991).

Another important branch of research focuses on how people evaluate the self (Greenwald, 1980; Stahlberg, Osnabrigge, & Frey, 1985). This affective response is discussed in its most global form as a person's self-esteem. It is commonly assumed that people have a pervasive need for high self-esteem, so discussion focuses on where this need comes from and how it is served. Greenberg, Pyszczynski, and Solomon (1986) point to the terror associated with the fear of death as the critical source of the need for self-esteem; Baumeister and Tice (1990) refer to the terror of social exclusion. Various ideas have also been offered about how positive self-evaluations come about. Some researchers see a link between structural qualities of the self-concept and positive self-evaluations (clarity of self-concept, Campbell, 1990; complexity of self-concept, Linville, 1987). Others (Higgins, 1987) point out that a person's affective responses toward the self are associated with the discrepancies that people experience between so-called self-guides (i.e., the ideal or ought self) and the actual self. Finally, research on the psychology of the self has also analyzed how relating to others affects a person's self-evaluations. Tesser (1988), in his self-evaluation maintenance theory, focuses on social comparison processes and basking in the reflected glory of others. Baumeister (1982), on the other hand, points to strategic self-presentations as a means to boosting one's self-evaluation.

Research on positive self-evaluation processes and self-esteem construes the self as something that is (to be) evaluated by the individual. This adds an affective and motivational dimension to the self-concept research that traditionally looked at the self as something to be cognized. What research on positive self-evaluations does not yet capture, however, is how the desired self is achieved behaviorally. The self or identity (or aspects of it) may be construed as goals the individual attempts to attain. This goal perspective on the self has been exemplified in Wicklund and Gollwitzer's (1982) theory of symbolic self-completion, which focuses on how self-defining goals are implemented by the individual. Heckhausen (1989) and Gollwitzer (1990; Heckhausen & Gollwitzer, 1987) have distinguished between

motivational and volitional processes of wish fulfillment. Whereas motivational processes guide a person's choice between goals, volitional processes are assumed to determine a person's implementation of the chosen goals. The former relate to issues of the feasibility and desirability of potential goals (i.e., wishes and desires), whereas the latter relate to a person's commitment to the chosen goal, holding on to the goal in the face of difficulties, and successful goal pursuit. From the perspective of a distinction between motivation and volition, research on the self has traditionally been concerned with motivational issues of the feasibility and desirability of the various aspects of the self (i.e., self-concept research and self-evaluation research, respectively). Self-completion theory, on the other hand, is concerned with the volitional issue of implementing identity-related (self-defining) goals.

Self-Completion Theory

Historical Roots

Self-completion theory (Wicklund & Gollwitzer, 1982) is based on Lewin's (1926) ideas on goal-directed action. According to Lewin, quasi-needs originate when people set themselves goals. A quasi-need is associated with a tension state that persists until the goal is attained. The tension state is linked to the person's commitment to reach the goal. Accordingly, this tension is said to persist when a person's goal-directed activities are disrupted and thus do not lead to goal attainment (as demonstrated by Lewin's colleagues Lissner, 1933; Mahler, 1933; Ovsiankina, 1928; Zeigarnik, 1927). However – and this is particularly important for self-completion processes – Lissner and Mahler demonstrated early on that the persevering tension state can be reduced by performing alternative goal-directed activities when disruption of an original goal-directed action has occurred. This implies that tension reduction stems not only from completion of an ongoing goal-directed action but also from successfully performing substitute actions.

In the experimental studies analyzing this principle, Lewin's colleagues employed simple tasks such as building a tower out of wooden blocks, translating a French piece of prose into German, solving mathematical problems with pencil and paper, and creating small sculptures from modeling clay. Shortly after beginning the task, subjects were interrupted and asked to solve a substitute task. They were then allowed to return to the interrupted original task. Of interest was whether subjects would take advantage of this opportunity to *complete the original task*. Mahler (1933) postulated that

whenever subjects experience a correspondence between the quality of the goal served by solving the *substitute* task and the quality of the goal served by the *original* task, they are no longer inclined to return to the original task because substitute completion had occurred. Accordingly, in the event that solving a substitute task reduces the frequency of resumption of the original task, it can be inferred that the goal of the original task entails qualities that are served by the substitute task performed. Mahler reasoned that the substitution paradigm not only tests Lewin's quasi-need theory but also unveils the individual goal conceptions or inner goals people have when approaching a task. One simply has to analyze which activities can substitute for the original goal-striving.

Mahler observed that for people who were asked to build a house of wooden blocks but were interrupted, drawing a picture of that house qualified as a powerful substitute. More interestingly, when people were asked to perform more intellectual tasks (e.g., solving a mathematical problem), other quite different intellectual tasks (e.g., solving a puzzle) served as substitutes. Apparently, although the experimenter instructed subjects to perform a particular mathematical problem (i.e., the original task), subjects did not subscribe to the external goal assigned by the experimenter but tried to meet the self-set goal of showing creativity, intelligence, and ambition. Henle (1944) and Hoppe (1930) demonstrated that the subjects' inner goals may already touch such higher spheres of the ego when rather simple and concrete tasks are at stake (e.g., creating a sculpture out of modeling clay or solving simple mathematical problems).

Mahler also discovered that inner goals that involve such self-related issues as creativity and intelligence are conceived of by the individual *on the plane of social reality*. She argued that whenever solving a certain task was interpreted by the individual as a test of intelligence, creativity, or of any other self-related attribute, it was necessary that others take notice of the completion of the substitute task. No sense of having reached a self-related goal would occur as long as relevant task solutions did not become a social fact by being noticed by others. To demonstrate this, for the original task Mahler gave her subjects mathematical problems or asked them to construct creative sentences from lists of words. The substitute tasks required that subjects solve some other intellectual problems either through silent deliberation or through speaking aloud. Speaking aloud proved to be more effective with respect to suppressing the resumption of the original task. Apparently, subjects not only sought to find solutions to the mathematical or creative problems posed as the original task, but also wanted others (in this case, the experimenter) to recognize that they were smart or creative. Only

solving the substitute tasks aloud provided the subjects with a sense of having attained the self-related goals of being smart or creative to which they had aspired while working on the original tasks.

The Concept of Self-defining Goals

The theory of self-completion describes the dynamics of striving for self-defining goals. The distinction between self-defining goals and non-self-defining goals (Gollwitzer & Wicklund, 1985b) is illustrated in the following example. Two students undertake their first major task in the laboratory of an experimental psychology class. The assigned objective is clear and distinct: Train a pigeon to execute a peculiar behavior with high reliability. Suppose that one student (a work-study student) is solely interested in training the pigeon to behave in the way demanded; the other student's interest is only peripherally on the external goal (the advisor's) and more centrally on the goal of becoming an experimental psychologist.

Both students fail to achieve the task set by the advisor. Given that the first student's goal orientation in the situation is defined by the non-self-defining goal of simply meeting the set task, one might expect that student to feel frustrated and perhaps to try alternative means to train the bird to perform the peculiar behavior. The reaction of the second student who aspires to become an experimental psychologist may well be much different. Assuming that an accomplished feat of animal training is nothing more than one possible indicator of being a psychologist, the student can readily resort to alternative routes of completing his self-definition, such as attempting to put his name on publications, becoming associated with recognized psychologists, acquiring a collection of psychology books and journals, or taking a temporary job as a psychology instructor.

Self-completion theory applies the term *self-defining goals* to refer to people's ideal conceptions of themselves as possessing a readiness or potential to enact certain content-specific classes of behavior. If the self-defining goal is, for instance, to be a jogger, then the related activities involve running, wearing the appropriate clothes, associating with runners, and so on. With the concept of goal, the theory points to the individual's commitment to reach the ideal condition that embodies all the qualities pertaining to the aspired self-definition.

Indicators of Completeness and Social Reality

To acquire self-defining goals means accumulating relevant indicators or symbols. Self-completion theory assumes that each particular self-defining

goal is composed of a whole set of various symbols. Accordingly, indicating the possession of the aspired self-definition (the theory speaks of self-symbolizing) may take different forms. It is possible, for instance, to self-symbolize through the exercise of identity-related social influence (e.g., an academic psychologist may engage in teaching psychology), by displaying material symbols (e.g., a pious person may wear a golden cross), through the fulfillment of the daily duties and performances associated with a particular identity (e.g., a baker bakes bread), by simply making a verbal claim to possession of a particular identity (e.g., "I am a psychologist"), or through the acquisition of the skills and tools associated with a specific identity (e.g., a musician acquires an education in music theory and a fine-quality instrument).

These various forms of self-symbolizing obviously differ in terms of their accessibility. For instance, showing off relevant symbols one already possesses as well as making self-descriptions that state a claim to possession of the intended identity are readily accessible and easily achievable approaches. This is less true for the actual acquisition of relevant symbols, such as attaining advanced education. From the perspective of self-completion theory, however, accessibility of self-symbolizing is not a crucial variable. Not only the forms of self-symbolizing that are easily attainable, but also those that are difficult to perform, potentially indicate to others one's claim to possess the intended self-definition.

What matters more is whether the chosen form of self-symbolizing effectively indicates one's claim to others. Self-completion theory asserts that the possession of relevant symbols in and of itself is not sufficient to create a sense of identity-related completeness. These indicators must serve their indicative function and therefore must become a social fact. This occurs when the social community recognizes the indicators as a claim to the possession of particular self-definitions. It is this recognition by others that strengthens a person's sense of identity-related completeness.

Research Stimulated by Self-Completion Theory

Self-completion theory has stimulated many empirical studies on people's pursuits of all kinds of self-defining goals: being a good mother, religious person, feminist, athlete, business manager, or a physician. The studies can be grouped with respect to the central hypotheses tested.

The Compensation Hypothesis. Self-completion theory postulates that whenever people who strive for a self-defining goal experience the lack of a relevant symbol, a sense of incompleteness arises. This incompleteness

may come about because comparing oneself to others makes salient that one is falling short of certain indicators (e.g., when colleagues repeatedly recount their recent successes). However, incompleteness also originates when people receive negative feedback (e.g., through teachers) about identity-relevant performances or when their attempts to acquire relevant symbols fail. Self-completion theory assumes that experiences of incompleteness are not accepted passively but that people attempt to strive for the desired identity goal via alternative routes – similar to the manner in which Mahler's subjects embraced the substitute task when the original task had been interrupted. As identity goals commonly imply a whole array of symbols, the individual does not have to focus her or his compensatory efforts on the experienced shortcoming or incompleteness. Compensatory efforts can be expressed in any of the many alternative routes of self-symbolizing.

This compensation hypothesis has been supported in a series of experiments that used the following paradigm. Subjects were selected on the basis of being committed to one or another self-defining goal (e.g., musician, physician, mother, religious person). Half the subjects (incomplete subjects) were made to feel incomplete by pointing out to them that they lacked a relevant indicator. The other half of the subjects (complete subjects) were made to feel that they possessed this indicator. Finally, in a different situational context (i.e., a different experimenter in a presumably unrelated second experiment) subjects had a chance to acquire an alternative symbol or at least point to its possession. The extent to which subjects made use of this chance to self-symbolize was measured.

A typical example of such an experiment is a study with young business managers who returned to the business school of the University of Texas to attend summer school courses (Gollwitzer, 1983). The study was conducted by two experimenters. The first experimenter introduced himself as a personality psychologist and asked subjects to fill out a semantic differential type of questionnaire that presented several pairs of adjectives (e.g., weak-strong, warm-cold, active-passive). Subjects were informed that they were to fill out the questionnaire so that the personality psychologist could determine whether young business managers possessed the ideal personality profile observed in successful businesspeople. Once subjects had completed the questionnaire, the second experimenter introduced himself as an industrial psychologist and explained that he would conduct a study in which the subjects would take part in a staged executive committee meeting. Subjects could choose from among six roles to play, ranging from chair of the board to secretary and keeper of the minutes. Shortly before subjects were asked to make their choices, the first experimenter (the personality psychologist)

disrupted the proceedings of the study of the industrial psychologist and handed his feedback to the subjects. Half the subjects were told that their personality profile differed greatly from the ideal profile of a successful businessperson; the other half were told that their personality profile closely matched the ideal profile.

This feedback was intended to create feelings of either incompleteness or completeness. As expected, subjects with negative personality feedback chose the chair position significantly more often than did the subjects with positive personality feedback. Self-completion theory interprets this finding by holding that the lack of one symbol of an intended identity (i.e., lacking the proper personality attributes) is substituted with self-symbolizing efforts focusing on an alternative symbol (i.e., laying claim to a relevant position of high status).

Compensatory self-symbolizing has been demonstrated in numerous other studies, in which other types of self-symbolizing were offered. Incomplete subjects showed a greater readiness to teach others in the domain relevant for their identity (Wicklund & Gollwitzer, 1981). They also invented more positive self-descriptions and refused to admit to failures (Gollwitzer, Wicklund, & Hilton, 1982). Further, they distanced themselves from unsuccessful people (Wagner, Wicklund, & Shaigan, 1990), displayed material symbols (e.g., articles symbolic of religious beliefs such as a cross or a star of David; Wicklund & Gollwitzer, 1982, chap. 9), or used prestigious tools (Braun & Wicklund, 1989). All of self-symbolizing, of course, was observed in the field of interest pertaining to subjects' identity goals.

For the induction of the experience of incompleteness, the negative personality feedback procedure was not the only paradigm used. In some studies, subjects were asked to write about their worst teacher in their field of interest (see Wicklund & Gollwitzer, 1981), or subjects were induced to come up with positive self-descriptions, which were then disrupted (see Gollwitzer, Wicklund, & Hilton, 1982). Finally, subjects were asked to list accomplishments relevant to their identity that, by all means, they could not yet have achieved (e.g., psychology undergraduates were asked to list their major publications; Wagner et al. 1990). In all these compensation studies, subjects were convinced that the so-called first experiment in which the incompleteness experience occurred was not related to the second study. In addition, the second experimenter was not aware of subjects' feelings of incompleteness.

The Social Reality Hypothesis. Based on Mahler's (1933) observation that self-defining goals are located on the level of social reality, self-completion theory postulates that self-symbolizing that becomes a social

fact is likely to be particularly effective in reducing a sense of incompleteness. This hypothesis has been confirmed by two types of experimental studies (Gollwitzer, 1986a, studies 1 to 4). In the first experimental paradigm (see studies 1 and 2), subjects are first given the opportunity to engage in a self-symbolizing activity. In order to vary whether these efforts become a social fact, subjects are placed in a situation where self-symbolizing either is noticed by others or remains unnoticed. Given that identity goals are located on the level of social reality, striving for an identity in front of an audience is expected to provide a stronger sense of possessing the intended identity than striving in the absence of an audience. To determine whether this is the case, subjects are brought to a new situational context where they are provided a further opportunity to strive for the intended identity. If self-symbolizing noticed by others provides a stronger sense of completeness than does self-symbolizing that remains unnoticed, comparatively less self-symbolizing is likely to be observed in subjects whose original self-symbolizing is noticed by others.

Following this logic, Gollwitzer (1986a, study 1) asked female college students with the identity goal of raising a family to write down personal skills relevant to succeeding as a mother. Subjects were told either that these self-descriptions would be carefully studied by a partner subject or that their descriptions would not become known to others. Thereafter, all subjects were given the opportunity to engage in further self-symbolizing by completing a personality profile questionnaire. This questionnaire carried a sample profile that was said to represent the ideal personality of a mother. The subjects who were told that their initial self-symbolizing would not be made known to the partner subject felt compelled to engage in further self-symbolizing by drawing their own profile close to the ideal mother profile provided. Subjects who were told that their initial self-descriptions would be noticed by a partner subject, however, ascribed attributes to themselves that were at variance with the ideal mother profile.

In a second study following the same logic (Gollwitzer, 1986a, study 2), subjects were medical students committed to becoming physicians. All subjects were induced to work on a stack of simple medical problems in a paper and pencil format. After the third problem had been completed, subjects' work was turned into a social fact (i.e., a confederate either took notice of task performance or ignored it). It was then observed how long subjects persisted working on the rest of the stack. Subjects whose prior performance was taken notice of by another person persisted comparatively less. This finding demonstrates that identity performances noticed by others make further identity-striving less necessary, thus supporting the self-completion theory notion of social reality. Apparently, a stronger sense of

completeness arises when indications of the possession of an intended identity are socially realized.

The hypothesis that self-symbolizing that becomes a social fact is particularly effective has also been tested via a different approach. This approach is based on the idea that individuals who are oriented toward achieving a particular identity but feel incomplete are likely to be especially concerned with finding an audience for their identity-related strivings. Accordingly, one has to manipulate people's readiness to engage in identity-related goal-striving (by making some subjects incomplete and others complete), and then observe subjects' self-initiative in making self-symbolizing noticed by others. Two experiments reported by Gollwitzer (1986a, studies 3 and 4) followed this logic. In study 3, medical students with the expressed intention of becoming physicians were made either complete or incomplete by being given positive or negative personality feedback with respect to their prospects as physicians. In a subsequent, presumably independent, experiment subjects were provided with the opportunity to engage in self-symbolizing through finding solutions to a series of simple medical problems (i.e., a stack of fifteen problems stated on index cards was placed in front of subjects, who were to write their solutions on these cards). The subjects were told that they could submit completed sections of the assignment to the experimenter whenever desired (i.e., before having completed the entire stack of fifteen tasks). More than 50 percent of the incomplete subjects attempted to bring their completed tasks to the experimenter's notice before finishing the entire stack of tasks; for the complete subjects this percentage was drastically lower (i.e., only 8 percent).

Self-initiative to make one's self-symbolizing efforts known to others was also observed among female undergraduates who pursued the identity goal of dancer. Subjects who wrote a lengthy essay on their worst dancing instructor (incomplete subjects) wanted to be scheduled for a public dancing session about two weeks earlier than subjects who had to write about their best dancing instructor (complete subjects). Apparently, subjects whose readiness to engage in self-symbolizing had been stimulated (i.e., incomplete subjects) selected comparatively earlier dates for the public performance of a dance routine. Assuming that performing this dance routine qualifies as an indicator of the identity of dancer, these results suggest that people are more anxious for self-symbolizing efforts to be noticed by others when they are in a state of incompleteness.

The Social Insensitivity Hypothesis. Knowing that self-symbolizing individuals turn to others in an effort to strengthen their sense of possessing an intended identity, the next question is "How do self-symbolizing individuals

we analyzed subjects' self-descriptions in terms of their positivity, incomplete subjects produced more self-aggrandizing descriptions than did complete subjects, regardless of the target person's preference for meeting individuals with modest as opposed to proud self-descriptions. Moreover, self-symbolizing individuals ignored even their own interpersonal interests. Whereas complete subjects followed the target person's self-presentational cue to the degree to which they felt attracted to her, incomplete subjects' self-descriptions were totally unaffected by their feelings of attraction.

In summary, self-symbolizing individuals do not seem to care much about their audiences' interests. They focus on making their self-definitional strengths known to others. This is true whether the audience is present in person or not and whether the audience explicitly expresses its interests or not.

Self-Completion Processes: Controversial Issues and Open Questions

Mutual Exchangeability of Symbols

Consistent with the theoretical position guiding self-completion research, Wurf and Markus (1991) have claimed that in the domain of identity strivings, "failure of particular routes to achievement will often lead to enhanced rather than decreased striving, . . . and the person will flexibly and creatively try multiple pathways to achievement" (p. 58). However, Wurf and Markus also argued that symbolic validation of the self (e.g., claiming the possession of a self-definition via positive self-descriptions) might be less satisfying than actual achievements (e.g., mastering performances implied by the self-definition). In contrast, from the standpoint of self-completion theory, positive self-descriptions are likely to be as effective in generating a sense of self-definitional completeness as self-defining task performances when the given self-description is recognized by others, thereby becoming a social reality (Gollwitzer, 1986b).

We have addressed this issue directly in two recent experiments (Brunstein & Gollwitzer, 1996), both of which employed an experimental paradigm commonly used in research on learned helplessness. Subjects were asked to work on a first task (so-called training task), and they were given failure feedback or no performance feedback. Subsequently subjects worked on a second task (so-called test task), and their level of performance was assessed. In our first experiment, medical students who intended to become physicians were instructed to solve simple interpersonal problems presented

relate to their audiences?" Self-completion theory suggests that this type of relating to others is best described as a pseudosocial interaction. Self-symbolizing individuals do not conceive of their audiences as partners for mutual exchange. Rather, these individuals regard the audience as serving the sole function of taking notice of their claim to possess the aspired identity. Attributes of the audience that go beyond this purpose (e.g., the audience's own feelings and interests) are largely neglected.

This hypothesis of social insensitivity was tested in experiments with the following paradigm. As in classic self-presentation studies (Baumeister, 1982), subjects were first told about the personal wishes and desires of the audience. These wishes and desires were posed in a way that either contradicted subjects' self-symbolizing efforts or were in line with them. Finally, it was observed how incomplete and complete subjects followed the audience's wishes and desires.

Gollwitzer and Wicklund (1985a) conducted two experiments that demonstrate that individuals who strive to self-symbolize neglect the thoughts and feelings of the audiences to which their efforts are directed. In the first study, female undergraduates with the identity goal of being a career woman were made either complete or incomplete by feedback that their personality attributes either did or did not predestine them to professional success. In a presumably different second experiment, complete and incomplete subjects were then grouped into pairs and told to cooperate with each other. They were instructed to create positive self-descriptions related either to the intended identity or to an identity that they did not care to possess. When the self-descriptions to be created were related to the identity of a career woman, incomplete subjects dominated the interaction by producing more positive self-descriptive statements than did their complete partner subjects. Even though incomplete subjects knew that the partner subject was also trying to create many positive self-descriptions, the orientation toward self-symbolizing provoked by the negative personality feedback suppressed such interpersonal concerns.

In the second study, male undergraduates committed to various sports (e.g., swimming, tennis, track) were first made to feel either incomplete or complete and then asked to participate in a supposed second study on first impressions. The target person to be encountered was described as an attractive female undergraduate who had expressed a preference for getting to know either modest or proud people. Before subjects were asked to introduce themselves to the target person via a written self-description of their strengths and weaknesses in their self-definitional area (i.e., swimming, tennis, track), they rated their feelings of attraction to the target person. When

Identity-relevant Training Task

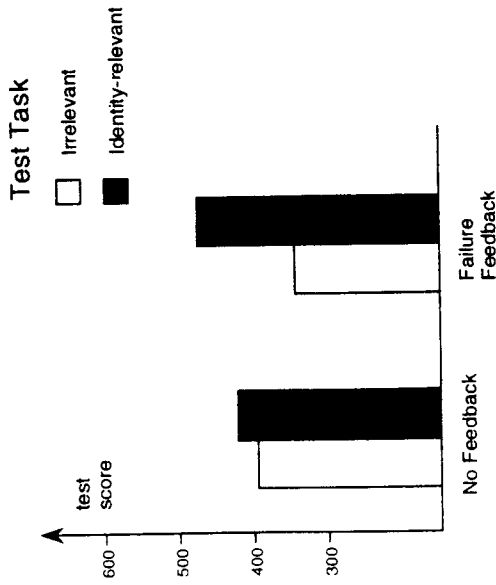


Figure 15.1. Medical students' performance on a mental concentration test (test task) described as either irrelevant or relevant to the identity of physician. Prior to test performance, subjects had received either no performance feedback or failure feedback on a task (training task) either irrelevant or relevant to being a physician (*Source*: Adapted with permission from Brunstein & Gollwitzer, 1996, study 1).

on index cards. The problems were related either to interpersonal conflicts that physicians commonly experience in their profession or to interpersonal problems that anyone might experience in everyday life. Subsequently, subjects were asked to perform a mental concentration test (d2 test; Brickenkamp, 1981) that was described as measuring a skill either relevant or irrelevant to being a physician. Performance on this test task peaked when subjects had been given failure feedback on solving the physician-related interpersonal problems and when the test task was said to measure a physician-related skill. Test performance dropped when subjects with failure feedback on the physician-related interpersonal problems worked on the concentration test described as measuring skills unrelated to being a physician (see Figure 15.1). For the rest of the conditions, test results on the d2 test were in between these two groups and did not differ from each other. These results nicely demonstrate that identity-relevant performances are

Irrelevant Training Task

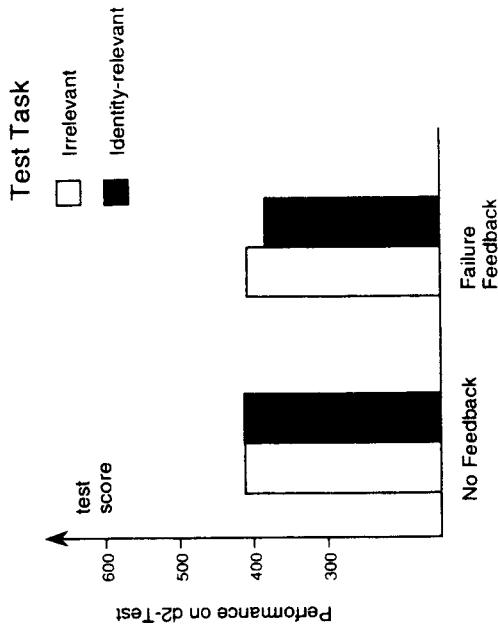


Figure 15.1. (cont.)

powerful indicators that an individual possesses the respective identity. When such indicators are absent, individuals feel highly incomplete, which causes them to strive intensively for alternative indicators. When these indicators are not available, individuals become so absorbed with their incompleteness that non-identity-related performances are hampered.

Having demonstrated this, in a second study we investigated whether an incompleteness experience stemming from a weak identity-related performance can also be effectively reduced through self-symbolizing based on positive self-descriptions. In that case, further self-symbolizing in the form of a strong alternative identity-related performance is no longer likely to be necessary. Brunstein and Gollwitzer (1996, study 2) asked students of the computer sciences to perform a concept formation test (Brunstein & Olbrich, 1985) that was said to assess a number of mental skills (e.g., logical reasoning) commonly found in successful computer scientists. Subjects received failure or no feedback on their performance in this training task before they were asked to perform the test task. The d2 test was again used, this time described as measuring a skill either that is irrelevant to a computer scientist (i.e., vigilance in road traffic situations) or relevant (i.e., precision in performing mental tasks). Failure-feedback subjects performed

Identity-relevant Training Task

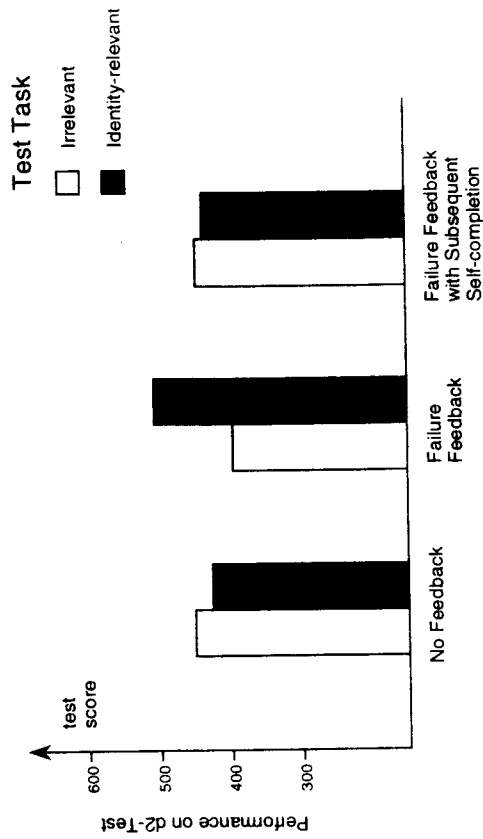


Figure 15.2. Computer science students' performance on a mental concentration test (test task) described as either irrelevant or relevant to the identity of computer scientist. Prior to test performance, subjects had received either no performance feedback or failure feedback on a training task described as relevant to the identity of computer scientist (*Source:* Adapted with permission from Brunstein & Gollwitzer, 1996, study 2).

better on the d2 test than did no-feedback subjects when the test was described as identity-relevant; a comparatively worse performance was observed when the d2 test was described as irrelevant (see Figure 15.2). This finding is consistent with the observations made in study 1.

After having received feedback on the concept formation test (training task), half of the negative feedback subjects were allowed to describe their personality on a semantic differential type of questionnaire. Before these subjects started to work on the d2 test (test task), they received feedback from a second experimenter who told them that they possessed personality attributes observed in successful computer scientists. This intervention completely wiped out the performance effects of the failure feedback (see Figure 15.2). Whereas no-intervention subjects reduced the experienced incompleteness by stepping up their performance on the d2 test, incomplete subjects who demonstrated the possession of identity personality attributes

to the second experimenter no longer needed to do so. Their feelings of incompleteness were already reduced, so that self-symbolizing in the form of identity-related performances was no longer necessary. This finding implies that performance-related indicators of an identity are mutually exchangeable with indicators that are easily accessible, such as publicly recognized positive self-descriptions. This interpretation is further supported by the observation that the interference effect of incompleteness on the d2 test (i.e., a weakened performance when the test was described as irrelevant) was also alleviated when incomplete subjects learned that they possessed personality attributes conducive to being a successful computer scientist (see Figure 15.2).

From Incompleteness to Completeness: A Process Account

What do people feel when they experience self-definitional incompleteness? How is this state of incompleteness translated into compensatory efforts that reestablish completeness? In recent studies by Brunstein and Gollwitzer (1996), subjects were asked about their feelings immediately after experiencing failure on the training task and prior to performing the test task. Failure on an identity-relevant training task made subjects feel more worried, pessimistic, dissatisfied, and blocked than failure on an identity-irrelevant training task. However, this frustration and ruminative self-concern over a poor identity-relevant performance transforms into feeling energetic and vigorous when subjects are given a second chance (i.e., a second identity-relevant task is presented as the test task). Whereas incomplete subjects to whom the second task (test task) was described as identity-irrelevant continued to worry and to feel frustrated, this was not true when the second task was described as identity-relevant.

It appears then that incompleteness experiences are highly frustrating and a severe burden to an individual's striving for identity goals. These feelings of being burdened, however, are immediately converted into feeling energized when an opportunity for compensation arises. Obviously, self-symbolizing is an action-oriented state in which no thought is directed at the experienced self-definitional shortcoming. Attention rests solely on successful compensation.

This switch from self-reflection about failure to involvement with self-symbolizing activities is nicely demonstrated in a study by Gollwitzer, Stevenson, and Wicklund (reported in Wicklund & Gollwitzer, 1983). Subjects striving for identity goals were made to feel incomplete and then were offered an opportunity to self-symbolize — either in front of a mirror or not.

The incompleteness experience led to less self-symbolizing when these efforts had to be executed in front of a mirror. Based on the assumption that mirrors induce self-awareness and self-reflection, these data suggest that self-reflective thoughts hamper self-symbolizing, which appears to be an impulsive activity.

The impulsiveness of self-symbolizers was analyzed in a study by Flügge and Gollwitzer (1986). Incomplete and complete subjects were given an opportunity to compensate immediately or at a later point in time. The catch was that the immediately accessible audience was highly critical of subjects' identity-related potentials, whereas the delayed audience was more accepting. Incomplete subjects preferred to self-symbolize in front of the immediately accessible audience, whereas complete subjects preferred to wait.

Are All Identity Goals Alike?

Are there features of identity goals that force self-completion theory to make qualifications? In other words, are self-completion processes more of an issue for some identity goals than for others? According to Dweck (1996, and Chapter 10, this volume), goals can be differentiated as learning goals and performance goals. If a person has an implicit theory that the amount of ability is fixed and cannot easily be changed (i.e., an entity theorist), he or she will prefer to set him- or herself performance goals. Such goals focus on finding out how capable one is. In contrast, an incremental theorist believes that the amount of ability can be improved by learning. Incremental theorists set themselves learning goals that allow them to find out where and why they are making mistakes. These distinct types of goals have important behavioral consequences particularly in the context of coping with failure. For individuals with performance goals, negative outcomes signal a lack of ability and result in helpless reactions (e.g., low persistence). People with learning goals, on the other hand, view setbacks as cues to focus on new behavioral strategies. When people set themselves identity or self-definitional goals, some are likely to conceive of these goals in terms of performance goals, and others are likely to conceive of them as learning goals. What does that imply for people's self-symbolizing efforts when they experience incompleteness? One may speculate that entity theorists prefer different types of self-symbolizing than do learning theorists. An entity theorist with the identity goal of musician, for example, may point to symbols he has acquired in the past (e.g., past recitals, high-quality instruments), whereas a learning theorist may engage in forms of self-symbolizing that are focused on acquiring new skills (e.g., extending her repertoire). Also,

whereas entity theorists may be more sensitive to incompleteness experiences that relate to their aptitude (e.g., not being able to play by ear), learning theorists are particularly sensitive to incompleteness experiences that relate to their efforts (e.g., not having practiced enough).

Similarly, whether people construe their self-defining goals in terms of a negative or positive outcome focus is also likely to affect self-symbolizing (Higgins, 1996; Higgins & Loeb, Chapter 3, this volume). People with negative-outcome-focus goals are said to be responsive to security needs and have a predilection for avoidance strategies. People with positive-outcome-focus goals are said to be responsive to nurturance needs and show a predilection for approach strategies. People who are driven by their duties are likely to form negative-outcome-focus goals. This should also hold true when they set themselves identity goals. Given the identity goal of musician, such a duty-driven individual would be likely to symbolize himself as unlike a nonmusician. A person driven by her ideals, on the other hand, would be likely to form positive-outcome-focus identity goals. Such a person would focus on symbolizing herself as a musician.

Negative-outcome framing puts the person in a particular bind. In this case, many routes to self-symbolizing are available that have nothing to do with acquiring indicators of an intended identity (e.g., showing that one does not have the symbols of any profession other than musician). Accordingly, the person fails to collect indicators of being a musician. As a result, the person's possession of relevant indicators remains limited and, consequently, incompleteness experiences become even more likely. In addition, for the person with a negative-outcome-focus identity goal, any evidence that she or he possesses indicators of identities that are inconsistent with the intended identity may elicit feelings of incompleteness with respect to her or his identity goal. In summary, then, people with negative-outcome-focus identity goals are prone to experience a sense of incompleteness rather frequently, to which they respond in a way that perpetuates the experience of incompleteness. In contrast, the person with positive-outcome-focus identity goals responds to incompleteness differently: Self-symbolizing is aimed at acquiring indicators of the intended identity goal, thus stimulating the active construction of the intended identity.

Self-definitional goals may also differ in terms of how strongly they serve a person's need for self-esteem (e.g., being a good mother may serve a particular person's self-esteem needs more than being a good skier). In a model of self-affirmation processes, Steele (Liu & Steele, 1986; Steele, 1988) argued that people's responses to events that threaten self-esteem are not confined to the domain in which the self-threat occurred. Rather, according to

Steele, people strive toward a global sense of self-integrity or self-esteem. This superordinate goal or motive enables individuals to engage in a variety of highly flexible compensation processes while they try to cope with self-threatening information. Furthermore, incompleteness experiences with respect to identity goals that are strongly linked to the superordinate goal of self-esteem protection and maintenance may be reduced not only by achieving indicators relevant to the threatened self-definition, but also by self-esteem pampering maneuvers (e.g., putting oneself in a good mood by partying).

Even when a self-definition is strongly linked to self-esteem, however, the range of substitutability may be limited to (using Lewin's terms) the goal region of the self-definition only and may not encompass the goal region of protecting and maintaining self-esteem. Whether one or the other is the case is likely to be moderated by a person's feelings of commitment to the definitional goal in question. If the individual is highly committed to the self-definitional goal, effective substitution must involve self-symbolizing in the form of acquiring or pointing to indicators of the aspired self-definition. If the individual feels less committed to the self-definitional goal, however, one may only observe compensatory efforts directed at affirming one's self-esteem.

That commitment is a powerful moderator of self-symbolizing has been demonstrated in the many self-completion studies reported in Wicklund and Gollwitzer (1982). In most of the studies, subjects who were only weakly committed to the analyzed self-definitions responded to incompleteness manipulations with retreat. Whereas incomplete committed individuals showed more self-symbolizing than did their complete counterparts, incomplete noncommitted individuals tended to show less self-symbolizing. Apparently, the latter subjects took the lack of self-definitional indicators to mean that they were not suited for the identity in question and therefore felt less compelled to engage in identity-relevant activities than those noncommitted individuals who received positive feedback.

How commitment can be assessed most effectively remains an open question. Research on self-completion theory, however, suggests various ways to measure commitment to an identity goal. When people have just begun to pursue a new identity goal (e.g., undergraduates who intend to become professional musicians, athletes, mathematicians), it seems wise to monitor their daily routines. People who have not recently (e.g., within the last two weeks) pursued activities related to the respective identity are not likely to feel strongly committed to the identity in question. More direct measurement approaches are also possible. The researcher might ask sub-

jects if they continue to entertain ideas on how to promote their self-definition. Subjects could be asked how frustrated and disappointed they would be if, for one reason or another, they had to give up striving for their self-definitions. All these different ways of assessing commitment have been successfully used in self-completion research. Clearly, however, this list is not exhaustive.

The Choice of Identity Goals

In a historical analysis of human identity, Baumeister (1986) maintains that society no longer assigns identity to its members but instead forces individuals to create their own identities. In Baumeister's view, identity achievement has become a struggle for self that necessitates the making of choices and the execution of effort. For instance, becoming an athlete, a physician, or a religious person requires the making of a decision and the willful implementation of that decision.

The willful pursuit of identity as described by self-completion theory focuses only on the second of these two tasks, even though it is recognized that the making of identity choices is a prerequisite for the effortful pursuit of this task. A complete account of the willful pursuit of identity definitely must also address how people arrive at such identity choices (i.e., commit themselves to certain identities). Developmental psychologists, following the lead of Erikson's (1956) ideas on identity development, have addressed this issue. It is assumed (Marcia, 1966, 1967, 1980) that identity formation originates with the experience of an identity crisis, which is conceived of as a state of vigorous deliberation. The individual is torn between possible options and therefore continues weighing alternatives until definite identity commitments are formed. Marcia's theory of ego-identity development proposes various stages that range from identity confusion to identity achievement; it also allows for leaving options open (moratorium status) and for taking an easy way out (foreclosure status; e.g., a student simply follows the lead or explicit suggestions of others).

With respect to self-completion theory, most interesting about this work are the psychological differences between individuals searching for an identity and self-symbolizing individuals (Gollwitzer, 1986a). Individuals who are searching for an identity (i.e., experiencing an identity crisis) display an open-mindedness with respect to processing information. Keniston (1965) reports intensive contemplation on the meaning and implications of one's actions, and Newman and Newman (1973) observed a critical examination of one's personal values. Slugowski, Marcia, and Koopman (1984)

report a heightened integrative cognitive complexity in subjects who are in the midst of an identity crisis. These subjects are very receptive to various kinds of incoming information – except that which comes from authority figures (Podd, Marcia, & Rubin, 1970; Toder & Marcia, 1973).

This cognitive orientation of open-mindedness is diametrically opposed to the self-symbolizing individuals' closed-minded action orientation (see Brunstein & Gollwitzer, 1996). Self-symbolizing individuals seem to be immunized against questioning their identity choices. Identity failures lead to incompleteness experiences associated with ruminative thoughts; however, when an opportunity to self-symbolize arises, these thoughts are immediately put aside and a sole focus on the execution of self-symbolizing actions occurs. In this sense, the cognitive orientation of self-symbolizing individuals is comparable to an implemental mindset (Gollwitzer, 1990), which is observed in individuals who plan the execution of goal-directed actions: Information on the execution of goal-directed action is processed more readily and effectively than information on the expected value of these actions. In contrast, the cognitive orientation of individuals undergoing an identity crisis is comparable to the deliberative mindset that is observed in individuals who are asked to make choices between goals: Information on the feasibility and desirability of the goals is preferably processed, whereas information on how to implement these goals is secondary (Gollwitzer, Heckhausen, & Steller, 1990; Taylor & Gollwitzer, 1995, study 3).

Life-Span Psychology

The Endurance of Self-Definitional Goal Pursuit

The mental representation of an identity goal is probably best described as a claim to possess the respective identity, which is indicated by the possession of relevant symbols. These indicators range from possessing relevant tools to owning status symbols, and from being able to execute relevant actions to pointing to past performances. Realizing an identity goal thus implies a continued accumulation of relevant indicators. Goal pursuit is not finished simply because a powerful indicator has been acquired. As soon as the lack of other alternative indicators becomes salient, an incompleteness occurs and self-symbolizing becomes necessary. This is true even when a person holds extremely powerful symbols, such as many years of experience in a given field. As demonstrated in many self-completion experiments, even people with many years of experience can easily be made to feel incomplete by classic incompleteness manipulations (see Wicklund & Gollwitzer, 1982).

Many factors prevent people from achieving their identity goals permanently. When a person progresses with respect to the pursuit of an identity goal, he or she does not relent in the pursuit of that goal. When a person gains increased competence in a given field, new horizons with a host of new, more sophisticated indicators come into sight. In addition, most career identities include different arrays of symbols associated with different sections of the life course. With professional identity goals, for instance, different social and physical surroundings unfold while the person climbs upward. For example, the identity of a physician is defined differently during the phases of university training, hospital rotation, and, running a private practice. Each step of this career implies, more or less, a new start with respect to indicating the physician identity.

Most interestingly, the social community – formally or informally – defines the indicators for a certain identity and thus guides individuals in their goal pursuit. It also revises such definitions from time to time. For example, twenty years ago a person could easily indicate the identity of experimental psychologist without having to refer to a laboratory filled with computers. Today, this hardly seems possible. In this way, the social community induces a constant striving for new indicators to reach identity goals.

Finally, even the performance deficits that are associated with old or very old age (P. B. Baltes & M. M. Baltes, 1990) are not likely to end a person's identity-striving. For example, Brunstein and Gollwitzer (1996) point out that self-symbolizing that is easily accessible (e.g., positive self-descriptions) is as valuable as self-symbolizing that is based on effortful and skillful performances. This implies that old and very old people who can no longer acquire performance-related indicators may remain in the field and are not forced to give up their claim to possess an intended identity. They can focus on self-symbolizing that does not demand much effort and skill (e.g., by pointing to performances achieved in the past via positive self-descriptions).

But people do give up on identity goals. How can this phenomenon be explained? Raynor and Entin (1982) have suggested the concept of the contingent action path, which is defined as "a series of steps to a goal in which success in a more immediate step is necessary to earn the opportunity to move on to the next step of the path" (pp. 19–20). Raynor (1982, pp. 287–288) points out that self-relevant failure in a contingent path not only means a negative identity achievement but also rules out a host of future opportunities to strive for the respective identity goal (e.g., when a law or medical student fails to earn his or her diploma and therefore cannot move along the path of striving for the respective professional career). Thus, failure in

contingent paths not only makes feel people incomplete, it also reduces their options to acquire further indicators of the respective identity. Under such circumstances, failure might prompt a reappraisal of identity goals and instigate disengagement.

Similarly, a person may experience reduced possibilities to self-symbolize when his or her social surroundings do not support his or her self-symbolizing as a claim to possessing the respective identity. For example, when a young lawyer who comes from a family of artists arrives home for a family event in his three-piece-suit, the relatives may fail to recognize its symbolic character and focus instead on the aesthetic quality of the fabric. In this case, self-symbolizing will not become a social fact and, consequently, will not be very effective. However, the symbolic world of most self-definitions (e.g., lawyer, physician) is culturally shared knowledge, so that self-symbolizers can be certain that their self-symbolizing does register on others. Accordingly, failures to attain social reality are more likely to occur when self-definitions are shared within certain narrowly defined subcultures (e.g., techno music fans).

The most powerful force for disengagement processes seems to be the conflict between identity goals, such as the conflict that women experience when they are torn between the roles of mother and professional (Barnett & Baruch, 1985; McBride, 1990). Identity goals conflict when they compete for one and the same opportunity to acquire relevant symbols. For example, a free Saturday afternoon is highly conducive not only to finishing work on a scientific manuscript but also to playing with one's children. If a female professional continues to choose to play with her children instead of working on her scientific manuscript, she is likely to begin to disengage from her identity goal of professional. In the long run, this female professional is also likely to fail to use other relevant opportunities to promote her self-definition of being a professional.

It appears, then, that experienced and expected shortcomings and the associated feelings of incompleteness are not responsible for people's disengagement from identity goals. Instead, a lack of access to or a refusal to make use of opportunities to acquire relevant symbols is responsible. Committed individuals are oriented toward symbolizing the possession of the intended identity; therefore, in the face of failure, they are not much concerned with outcome expectations and feasibilities. Rather, they focus on effectively acquiring and pointing to alternative indicators of completeness. In the many cases of individuals who need to be discouraged in their pursuit of self-definitions (e.g., a businessperson who continues to self-symbolize in the face of diminishing returns or a child with no musical talent who is

bent on becoming a soloist), it is necessary to point them away from self-symbolizing. One such strategy has recently been suggested by Oettingen (1996). People do begin to consider negative-outcome expectations and weak self-efficacy when they are made to contrast their idealistic views of the future with reflections on aspects of the present reality that stand in the way of reaching this positive future.

Many Forms of Compensation

Life-span psychology uses various models that describe how people compensate for the physical and mental deficits associated with old and very old age (Bäckman & Dixon, 1992). The starting point of these models is a skill-demand mismatch. The most prominent model is the "selective optimization with compensation" notion proposed by Baltes and Baltes (1990; Marsiske, Lang, Baltes, & Baltes, 1995). The model posits that compensation for age-related declines in the mechanics of intelligence is a prototypical feature of the adult aging process. Within this perspective, life-span development is portrayed as a dynamic interaction between gains and losses. When the skill-demand mismatch exceeds a certain threshold, the aging person may begin to select and thereby narrow the range of domains or goals for continued development. Second, the person may try to optimize his or her performances within this narrow domain. Optimization is directed at efficacious and desirable functioning and thus implies training, practice, and motivational enhancement. Finally, as a last resort, compensation strategies aim to minimize age-related losses and limits by relying on alternative internal or external resources.

To summarize, people utilize various strategies to respond to age-related skill-demand mismatches, with compensation being a last resort. For instance, when a scientist suffers age-related losses of memory, she may first try to ameliorate the skill-demand mismatch by limiting her research to certain themes that are very familiar. Second, she may try to acquire and maximize mnemonic skills that are particularly conducive to the chosen field of interest. Finally, she may even actively compensate for the age-related memory deficits by employing all kinds of substitutes, such as a sophisticated index system or a skilled research assistant.

The important implications of this model to self-completion processes extend to the notion of gains and losses. Self-completion theory has so far not addressed the losses of compensation. These losses become immediately apparent when considering, for example, the person who focuses primarily on self-symbolizing that is easily accessible (e.g., positive self-

descriptions). This person fails to develop his or her identity-related performance potential. On the other hand, self-completion theory has implications for understanding the compensation notion that is prevalent in life-span psychology. According to the tradition of Lewin and his collaborators, self-completion theory stresses the necessity of distinguishing between the inner goal of the individual and the external or outer goal considered by researchers (or experimenters). This distinction is important. If one considers the inner goal of a self-symbolizing individual, it does not matter whether this person employs self-descriptions or self-definitional performances. In both cases the individual advances equally well with respect to the inner goal of indicating the possession of an identity to others. From the perspective of a life-span psychologist who considers the outer goal of attaining an identity, however, the self-symbolizer who employs only self-descriptions and no actual achievements does not advance at all.

More important, self-completion theory allows one to recognize that there is more than one type of compensation relevant to a person's life-span development. Whereas Baltes and Baltes (1990; see also Bäckman & Dixon, 1992) consider compensational efforts elicited by skill-demand mismatches (which we would call *functional compensation*), self-completion theory focuses on compensating self-definitional incompletenesses by pointing out alternative indicators of the intended identity. However, still other forms of compensation are important to life-span development. One of them is self-esteem compensation (Adler, 1912; Steele, 1988; Tesser, Martin, & Cornell, 1996), in which lowered self-esteem produced by a personal shortcoming is said to lead to compensation achieved by pointing to a personal strength in any area that relates to a person's self-worth. Another form is life-plan compensation, as described by Jung (1939). Jung assumes that a life plan that is too narrowly constructed (e.g., being only a scientist with only scientist friends) creates feelings of incompleteness that lead to compensation focused on enriching one's life by adding goals that use dormant capacities.

Primary and Secondary Control

Recently, Heckhausen and Schulz (1995, and Chapter 2, this volume) have applied Rothbaum, Weisz, and Snyder's (1982) distinction between primary and secondary control to life-span psychology. *Primary control* refers to attempts to influence the external environment in order to make it fit the needs and desires of the individual. *Secondary control* refers to attempts to accommodate existing realities and is targeted at a person's internal states and processes, such as expectations, wishes, goals, attitudes, and attributions.

Secondary control aims to help the person cope with failure by channeling motivational resources toward selected action goals throughout the person's life course. Heckhausen and Schulz (1995, and Chapter 2, this volume) hold that secondary control serves to minimize losses in, maintain, and expand existing levels of primary control. In this sense, primary control has functional primacy over secondary control.

A primary versus secondary control perspective on self-completion theory must differentiate two forms of self-symbolizing. Self-symbolizing related to pointing at already acquired symbols in the form of positive self-descriptions would qualify as secondary self-symbolizing because there is no influencing of existing realities. Self-symbolizing in the form of identity-related performances would qualify as primary self-symbolizing, as it is targeted at changing existing realities.

Does primary self-symbolizing have functional primacy over secondary self-symbolizing? The results of Brunstein and Gollwitzer's (1996) study contradict the view that secondary self-symbolizing puts a person in a better position to engage in primary self-symbolizing. We observed that subjects who were induced to engage in secondary self-symbolizing (in terms of positive self-descriptions) showed less subsequent primary self-symbolizing (in terms of solving identity-related problems), not more. How does one solve this puzzle? Above, we distinguished between two goal perspectives: the inner goal of the individual and the outer goal assumed by the life-span psychologist. For the individual, it does not matter how possession of an identity is indicated; once it is symbolized via primary or secondary means, further self-symbolizing (primary or secondary) becomes less necessary. In other words, in the individual's striving for an identity, all forms of self-symbolizing are primary because they indicate to others the possession of the identity in question.

For the life-span psychologist focusing on the development of people's potentials, however, secondary self-symbolizing may be seen as functional for later primary self-symbolizing. After all, as described above, striving for an identity – in particular for a professional identity – implies that there is a long way to go. If primary forms of self-symbolizing are not available because certain skills have not yet been acquired, secondary self-symbolizing allows the individual to stay in the field until such skills or resources have developed.

Social Contact Across the Life Span

In her theory of socioemotional selectivity, Carstensen (1992, and Chapter 13, this volume) suggests that people's reasons for social contact change

across the life span. Social contact in the service of learning more about the self (in the sense of "Who am I?") or the world and other people is infrequent in early age, peaks in adolescence and middle age, and then declines again with old age. Social contact for the purpose of emotional experiences and regulation is strong in infancy, weakened in adolescence and middle age, and strong again in old age. These different reasons for contact with others have implications with respect to what kind of people one relates to. As it turns out, emotional regulation is more easily achieved if one is surrounded by a few intimates. Accordingly, Carstensen postulates and observes that older people prefer to engage in social contacts with a few intimates and stay away from getting to know new people, as the former are more emotionally satisfying than the latter.

Self-completion theory also speaks to the social contacts of the self-symbolizer. It could be demonstrated that self-symbolizers' relating to others serves the sole purpose of socially registering the possession of the intended identity. This has implications with respect to what types of social encounters are most conducive to successful self-symbolizing. What kinds of people or audiences are willing to tolerate such pseudosocial encounters? Social psychologists have observed that people generally refrain from conveying to others negative feedback (Blumberg, 1972; Tesser & Rosen, 1975). As Goffman (1959) stated, only the socially disgruntled will question the realness of what is presented. It can be assumed, therefore, that strangers will give a person's self-symbolizing efforts the benefit of the doubt. However, strangers tend to challenge an individual's sense of self-definitional completeness out of ignorance or carelessness and are thus a constant source of incompleteness experiences.

This is not likely to be true for a person's intimates. They know the self-definitions to which the person aspires and thus will refrain from behaviors that raise questions about his or her possessing a particular self-definition. In addition, they know about the person's life history and thus about the self-definitional indicators the individual has acquired in the past. This allows the older self-symbolizer to refer readily to these achievements in positive self-descriptions if incompleteness experiences should arise – which is very fortunate given that age-related declines in skills and resources hamper identity-related performances.

It appears, then, that intimates provide a narrow and stable social reality that makes it easy to self-symbolize effectively. For individuals who have a relatively low sense of completeness with respect to their aspired identity and thus opt for effective self-symbolizing, the tendency focus on a narrow and stable social reality is likely to be particularly pronounced. Indeed,

when Havighurst (1980) asked scientists who were approximately at retirement age about the main sources of their professional recognition, subjects who had a weak publication record referred significantly more often to approval by the family, the local community, and local colleagues than did subjects with a strong publication record. In summary, older people may focus their social contacts on a few intimates not only for the enjoyment and more effective regulation of their emotions (Carstensen, 1992, and Chapter 13, this volume) but also because it allows older people to feel in possession of the identities to which they have aspired throughout their lives – and this despite age-related declines in relevant skills and resources.

Summary and Conclusion

In the present chapter we suggested that people willfully pursue chosen identities (e.g., being a good mother, athlete, physician, lawyer). Based on self-completion theory, this process is described as a persistent pursuit of self-defining goals that demands the continuous accumulation of relevant symbols or indicators (e.g., verbal claims, relevant performances, possession of relevant tools and status symbols) pointing to the possession of the intended identity. We presented research stimulated by self-completion theory to delineate the basic principles that govern this goal pursuit. According to the substitution principle, the various identity symbols effectively substitute for each other in the sense that incompleteness experiences stemming from a noticed lack of one type of symbol are readily reduced by acquiring alternative symbols (i.e., through various forms of self-symbolizing efforts). According to the social reality principle, self-symbolizing that is noticed by others is particularly effective in reducing incompleteness experiences. We have speculated how different types of goal contents (e.g., performance goals versus mastery goals, positive-outcome focus versus negative-outcome focus) modify people's pursuit of self-defining goals, and have pointed out that the choice of identity, or self-defining, goals is governed by rules that are quite different from those that govern the pursuit of these goals.

In the final sections of this chapter we discussed various implications of self-completion theory and research for life-span psychology. Most important, the substitution principle of self-defining goal pursuit suggests that old and very old people may not have to give up on their identity claims. This is because easily accessible forms of self-symbolizing (e.g., positive self-descriptions pointing to relevant successes in the past) are as effective in reducing incompleteness experiences as less accessible forms (e.g., demonstrating identity-relevant skills). Moreover, the social reality

principle suggests that the tendency of old and very old people to reduce their social contacts to a few intimates is beneficial to their identity pursuits. Intimates provide a narrow and stable social reality that makes it easy to self-symbolize effectively and thus to maintain one's claim of possessing the intended identity.

References

- Adler, A. (1912). *Über den nervösen Charakter: Grundzüge einer vergleichenden Individual-Psychologie*. Wiesbaden: Bergmann.
- Bäckman, L., & Dixon, R. A. (1992). Psychological compensation: A theoretical framework. *Psychological Bulletin*, *112*, 259–283.
- Baltes, P. B., & Baltes, M. M. (1990). Psychological perspectives on successful aging: The model of selective optimization with compensation. In P. B. Baltes & M. M. Baltes (Eds.), *Successful aging: Perspectives from the behavioral sciences* (pp. 1–34). New York: Cambridge University Press.
- Barnett, R. C., & Baruch, G. K. (1985). Women's involvement in multiple roles and psychological distress. *Journal of Personality and Social Psychology*, *49*, 135–145.
- Baumeister, R. F. (1982). A self-presentational view of social phenomena. *Psychological Bulletin*, *91*, 3–26.
- (1986). *Identity: Cultural change and the struggle for self*. New York: Oxford University Press.
- Baumeister, R. F., & Tice, D. M. (1990). Anxiety and social exclusion. *Journal of Social and Clinical Psychology*, *9*, 165–195.
- Bem, D. J. (1972). Self-perception theory. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 6, pp. 1–62). New York: Academic Press.
- Blumberg, H. H. (1972). Communication of interpersonal evaluations. *Journal of Personality and Social Psychology*, *23*, 157–162.
- Braun, O. L., & Wicklund, R. A. (1989). Psychological antecedents of conspicuous consumption. *Journal of Economic Psychology*, *10*, 161–187.
- Brickenkamp, R. (1981). *Test d2* (4th ed.). Göttingen, Germany: Hogrefe.
- Brown, J. D. (1991). Accuracy and bias in self-knowledge. In C. R. Snyder & D. R. Forsyth (Eds.), *Handbook of social and clinical psychology* (pp. 158–178). New York: Pergamon Press.
- Brunstein, J. C., & Gollwitzer, P. M. (1996). Effects of failure on subsequent performance: The importance of self-defining goals. *Journal of Personality and Social Psychology*, *70*, 395–407.
- Brunstein, J. C., & Olbrich, E. (1985). Personal helplessness and action control: Analysis of achievement-related cognitions, self-assessments, and performance. *Journal of Personality and Social Psychology*, *48*, 1540–1551.
- Campbell, J. D. (1990). Self-esteem and the clarity of the self-concept. *Journal of Personality and Social Psychology*, *59*, 538–549.

- Carstensen, L. L. (1992). Social and emotional patterns in adulthood: Support for socioemotional selectivity theory. *Psychology and Aging*, *7*, 331–338.
- (1998). A life-span approach to social motivation. In J. Heckhausen & C. S. Dweck (Eds.), *Motivation and self-regulation across the life span*. New York: Cambridge University Press.
- Cooley, C. H. (1902). *Human nature and the social order*. New York: Scribner.
- Dweck, C. S. (1996). Implicit theories as organizers of goals and behavior. In P. M. Gollwitzer & J. A. Bargh (Eds.), *The psychology of action: Linking cognition and motivation to behavior* (pp. 69–90). New York: Guilford Press.
- (1998). The development of early self-conceptions: Their relevance for motivational processes. In J. Heckhausen & C. S. Dweck (Eds.), *Motivation and self-regulation across the life span*. New York: Cambridge University Press.
- Erikson, E. H. (1956). The problem of ego-identity. *Journal of the American Psychoanalytic Association*, *4*, 56–121.
- Flüge, R., & Gollwitzer, P. M. (1986, April). *Volitionale Aspekte der Selbstergänzung*. Vortrag auf dem 3. Workshop der Fachgruppe Sozialpsychologie, Erlangen, FRG.
- Gergen, K. J. (1982). From self to science: What is there to know? In J. Suls (Ed.), *Psychological perspectives on the self* (Vol. 1, pp. 129–149). Hillsdale, NJ: Erlbaum.
- Goffman, E. (1959). *The presentation of self in everyday life*. Garden City, NJ: Doubleday.
- Gollwitzer, P. M. (1983, July). *Audience anxiety and symbolic self-completion*. Paper presented at the International Conference on Anxiety and Self-Related Cognitions, Berlin.
- (1986a). Striving for specific identities: The social reality of self-symbolizing. In R. A. Baumeister (Ed.), *Public self and private self* (pp. 143–159). New York: Springer.
- (1986b). The implementation of identity intentions: A motivational-volitional perspective on symbolic self-completion. In F. Halisch & J. Kuhl (Eds.), *Motivation, intention, and volition* (pp. 349–382). Heidelberg: Springer.
- (1990). Action phases and mind-sets. In E. T. Higgins & R. M. Sorrentino (Eds.), *Handbook of motivation and cognition: Foundations of social behavior* (Vol. 2, pp. 53–92). New York: Guilford Press.
- Gollwitzer, P. M., Heckhausen, H., & Steller, B. (1990). Deliberative versus implementation mindsets: Cognitive tuning toward congruous thoughts and information. *Journal of Personality and Social Psychology*, *59*, 1119–1127.
- Gollwitzer, P. M., & Wicklund, R. A. (1985a). Self-symbolizing and the neglect of others perspectives. *Journal of Personality and Social Psychology*, *48*, 702–715.
- (1985b). The pursuit of self-defining goals. In J. Kuhl & J. Beckmann (Eds.), *Action control: From cognition to behavior* (pp. 61–85). Heidelberg: Springer.
- Gollwitzer, P. M., Wicklund, R. A., & Hilton, J. L. (1982). Admission of failure and

- symbolic self-completion: Extending Lewinian theory. *Journal of Personality and Social Psychology*, 43, 358–371.
- Gordon, C. (1968). Self-conceptions: Configurations of content. In C. Gordon & K. J. Gergen (Eds.), *The self in social interaction* (pp. 115–136). New York: Wiley.
- Greenberg, J., Pyszczynski, T., & Solomon, S. (1986). The causes and consequences of a need for self-esteem: A terror management theory. In R. F. Baumeister (Ed.), *Public self and private self* (pp. 189–212). New York: Springer.
- Greenwald, A. G. (1980). The totalitarian ego: Fabrication and revision of personal history. *American Psychologist*, 35, 603–618.
- (1982). Is anyone in charge? Personalism versus the principle of personal unity. In J. Suls (Ed.), *Psychological perspectives on the self* (Vol. 1, pp. 151–181). Hillsdale, NJ: Erlbaum.
- Havighurst, R. J. (1980). The life course of college professors and administrators. In K. W. Back (Ed.), *Life course: Integrative theories and exemplary populations* (pp. 79–96). Boulder, CO: Westview Press.
- Heckhausen, H. (1989). *Motivation and Handeln: Lehrbuch der Motivationspsychologie* (2. Aufl.). Berlin: Springer.
- Heckhausen, H., & Gollwitzer, P. M. (1987). Thought contents and cognitive functioning in motivational versus volitional states of mind. *Motivation and Emotion*, 11, 101–120.
- Heckhausen, J., & Schulz, R. (1995). A life-span theory of control. *Psychological Review*, 102, 284–304.
- (1998). Developmental regulation in adulthood: Selection and compensation via primary and secondary control. In J. Heckhausen & C. S. Dweck (Eds.), *Motivation and self-regulation across the life span*. New York: Cambridge University Press.
- Hentle, M. (1944). The influence of valence on substitution. *The Journal of Psychology*, 17, 11–19.
- Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review*, 94, 319–340.
- (1996). Ideals, oughts, and regulatory outcome focus: Relating affect and motivation to distinct pains and pleasures. In P. M. Gollwitzer & J. A. Bargh (Eds.), *The psychology of action: Linking cognition and motivation to behavior* (pp. 91–114). New York: Guilford Press.
- Higgins, T., & Loeb, I. (1998). Development of regulatory focus: Promotion and prevention as ways of living. In J. Heckhausen & C. S. Dweck (Eds.), *Motivation and self-regulation across the life span*. New York: Cambridge University Press.
- Hoppe, F. (1930). Erfolg und Mißerfolg. *Psychologische Forschung*, 14, 1–63.
- Hornuth, S. E. (1990). *The ecology of the self*. Cambridge: Cambridge University Press.
- James, W. (1890/1950). *The principles of psychology* (2 vols.). New York: Dover.
- Jung, C. G. (1939). *The integration of the personality*. New York: Farrar & Rinehart.
- Keniston, K. (1965). *The uncommitted: Alienated youth in American society*. New York: Harcourt, Brace, & World.
- Lewin, K. (1926). Vorsatz, Wille and Bedürfnis. *Psychologische Forschung*, 7, 330–385.
- Linville, P. W. (1987). Self-complexity and affective extremity: Don't put all of your eggs in one basket. *Social Cognition*, 3, 94–120.
- Lissner, K. (1933). Die Entspannung von Bedürfnissen durch Ersatzhandlungen. *Psychologische Forschung*, 18, 218–250.
- Liu, T. J., & Steele, C. M. (1986). Attributional analysis as self-affirmation. *Journal of Personality and Social Psychology*, 51, 531–540.
- Mahler, W. (1933). Ersatzhandlungen verschiedenen Realitätsgrades. *Psychologische Forschung*, 18, 27–89.
- Marcia, J. E. (1966). Development and validation of ego-identity status. *Journal of Personality and Social Psychology*, 3, 551–558.
- (1967). Ego-identity status: Relationship to change in self-esteem, general adjustment, and authoritarianism. *Journal of Personality*, 35, 118–133.
- (1980). Identity in adolescence. In J. Adelson (Ed.), *Handbook of adolescent psychology* (pp. 159–187). New York, Springer.
- Markus, H., & Nurius, P. (1986). Possible selves. *American Psychologist*, 41, 954–969.
- Marsiske, M., Lang, F. R., Baltes, P. B., & Baltes, M. M. (1995). Selective optimization with compensation: Life-span perspectives on successful human development. In R. A. Dixon & L. Backman (Eds.), *Compensating for psychological deficits and decline: Managing losses and promoting gains* (pp. 35–79). Hillsdale, NJ: Erlbaum.
- McBride, A. B. (1990). Mental health effects of women's multiple roles. *American Psychologist*, 45, 381–384.
- Mead, G. H. (1934). *Mind, self, and society*. Chicago: University of Chicago Press.
- Newman, B. M., & Newman, P. R. (1973). The concept of identity: Research and theory. *Adolescence*, 13, 157–166.
- Oettingen, G. (1996). Positive fantasy and motivation. In P. M. Gollwitzer & J. A. Bargh (Eds.), *The psychology of action: Linking cognition and motivation to behavior* (pp. 236–259). New York: Guilford Press.
- Ovsiankina, M. (1928). Die Wiederaufnahme unterbrochener Handlungen. *Psychologische Forschung*, 11, 302–379.
- Podd, M. H., Marcia, J. E., & Rubin, B. M. (1970). The effects of ego identity and partner perception on a prisoner's dilemma game. *Journal of Social Psychology*, 82, 117–126.
- Raynor, J. O. (1982). A theory of personality functioning and change. In J. O. Raynor & E. E. Entin (Eds.), *Motivation, career striving, and aging* (pp. 249–302). Washington, DC: Hemisphere.

- Raynor, J. O., & Entin, E. E. (1982). Theory and research on future orientation and achievement motivation. In J. O. Raynor & E. E. Entin (Eds.), *Motivation, career striving, and aging* (pp. 13-82). Washington, DC: Hemisphere.
- Rosenberg, M. (1979). *Conceiving the self*. New York: Basic Books.
- Rothbaum, F., Weisz, J. R., & Snyder, S. S. (1982). Changing the world and changing the self: A two-process model of perceived control. *Journal of Personality and Social Psychology*, 42, 5-37.
- Slugowski, B. R., Marcia, J. E., & Koopman, R. F. (1984). Cognitive and social interactional characteristics of ego-identity statuses in college males. *Journal of Personality and Social Psychology*, 47, 646-661.
- Stahlberg, D., Osnabrügge, G., & Frey, D. (1985). Die Theorie des Selbstwerteschutzes und der Selbstwerterhöhung. In D. Frey & M. Irle (Hrsg.), *Theorien der Sozialpsychologie* (Bd. 3, pp. 79-124). Bern: Huber.
- Steele, C. M. (1988). The psychology of self-affirmation: Sustaining the integrity of the self. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 21, pp. 261-302). San Diego, CA: Academic Press.
- Stryker, S., & Statham, A. (1985). Symbolic interaction and role theory. In G. Lindzey & E. Aronson (Eds.), *Handbook of social psychology* (Vol. 1, pp. 311-378). New York: Random House.
- Suls, J. (Ed.). (1993). *Psychological perspectives on the self* (Vol. 4). Hillsdale, NJ: Erlbaum.
- Suls, J., & Greenwald, A. G. (Eds.). (1983). *Psychological perspectives on the self* (Vol. 2). Hillsdale, NJ: Erlbaum.
- Swann, W. B., Jr. (1983). Self-verification: Bringing social reality into harmony with the self. In J. Suls & A. G. Greenwald (Eds.), *Psychological perspectives on the self* (Vol. 2, pp. 33-66). Hillsdale, NJ: Erlbaum.
- Taylor, S. E., & Gollwitzer, P. M. (1995). Effects of mindset on positive illusions. *Journal of Personality and Social Psychology*, 69, 213-226.
- Tesser, A. (1988). Toward a self-evaluation maintenance model of social behavior. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 21, pp. 181-227). New York: Academic Press.
- Tesser, A., Martin, L., Cornell, D. (1996). On the substitutability of self-protective mechanisms. In P. M. Gollwitzer & J. A. Bargh (Eds.), *The psychology of action: Linking cognition and motivation to behavior* (pp. 48-68). New York: Guilford Press.
- Tesser, A., & Rosen, S. (1975). The reluctance to transmit bad news. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 8, pp. 194-232). New York: Academic Press.
- Toder, N. L., & Marcia, J. R. (1973). Ego identity status and response to conformity pressure in college women. *Journal of Personality and Social Psychology*, 26, 287-294.
- Wagner, U., Wicklund, R. A., & Shaigan, S. (1990). Open devaluation and rejection of a fellow student: The impact of threat to a self-definition. *Basic and Applied Social Psychology*, 11, 61-76.
- Wicklund, R. A., & Gollwitzer, P. M. (1981). Symbolic self-completion, attempted influence, and self-deprecation. *Basic and Applied Social Psychology*, 2, 89-114. (1983). *Symbolic self-completion*. Hillsdale, NJ: Erlbaum.
- (1983). A motivational factor in self-report validity. In J. Suls & A. G. Greenwald (Eds.), *Psychological perspectives on the self* (Vol. 2, pp. 67-92). Hillsdale, NJ: Erlbaum.
- Wurf, E., & Markus, H. (1991). Possible selves and the psychology of personal growth. In R. Hogan (Series Ed.) & D. Ozer, J. M. Healy & A. Stewart (Vol. Eds.), *Perspectives in personality: Vol. 3A. Self and emotion* (pp. 39-62). London: Kingsley.
- Yardley, K., & Honess, T. (Eds.). (1987). *Self and identity*. New York: Wiley.
- Zeigarnik, B. (1927). Das Behalten erledigter und unerledigter Handlungen. *Psychologische Forschung*, 9, 1-85.