Implicit and Explicit Motives

9

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9.1 Theoretical Concepts and Background

From its beginnings, research into the motives behind people's efforts to be competent (the achievement motive), have an impact on others (the power motive), establish and maintain social contact with others (the affiliation motive), and become involved in affectionate relationships (intimacy motive) has been bound up with the question of which methods are best suited to assessing individual differences in underlying motives (cf. Schmalt & Sokolowski, 2000). As described in Chap. 6 of this volume, McClelland, Atkinson, Clark, and Lowell (1953) developed a version of the thematic apperception test (TAT) to measure the strength of the achievement motive. McClelland and colleagues considered the achievement motive to be an affectively charged need that is activated by challenging tasks and satisfied by the continual improvement of the skills involved and the outcomes achieved. The TAT was devised to allow the achievement motive to be assessed without the influence of:

- Response bias tendencies (e.g., social desirability bias)
- Cognitive abilities (e.g., the respondent's actual aptitude)
- Situational influences (e.g., external incentives)

McClelland (1958) doubted that methods of direct assessment, measures of achievement, or observations of behavior would permit conclusions to be drawn about the strength of the achievement motive. Instead, he worked on the assumption that the achievement motive can only be measured indirectly by tapping into the stream of thoughts and fantasies that people produce in response to motive-arousing picture cues. Soon afterward, Heckhausen (1963) presented a comparable but more differentiated TAT measure of the achievement motive that distinguished between "hope for success" and "fear of failure" (Chap. 6).

Definition

According to McClelland (1980, 1985b), a motive that has been activated by environmental stimuli fulfills three functions: it energizes, directs, and selects behavior instrumental for satisfying that motive.

In keeping with this definition, research has shown that the personality variable "need for

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achievement" as measured by the TAT method predicts criteria of effort expenditure, learning, and attention in achievement situations (Chap. 6). TAT-type procedures were soon developed to assess other motives, such as the needs for power, affiliation, and intimacy, based on the same principles (for an overview, see Smith, 1992).

Despite the initial success of the TAT approach in explaining both individual (McClelland et al., 1953) and collective achievement behavior (McClelland, 1961), other authors soon began using questionnaires to tap the achievement motive, among others.

In most cases they used Murray's (1938) classification and definition of "psychogenic" needs as their starting point. The best-known example of an instrument constructed in this manner is the *Personality Research Form* (PRF) by Jackson (1974). This questionnaire contains scales designed to tap people's strivings for achievement, dominance, and affiliation, among others. Researchers working on specific scales to capture the achievement motive soon returned to the findings of studies that had used the TAT. Mehrabian (1969) developed a particularly widely administered questionnaire ("Mehrabian Achievement Risk Taking Scale," MARPS) drawing on Atkinson's risk-taking model (1957). Other authors have based their questionnaires on Festinger's (1954) theory of social comparison processes:

- The theory of social comparison processes states that people have a need to assess their abilities by comparing them with the abilities of others.

The "Achievement Motives Scale" (AMS) constructed by Gjesme and Nygard (1970) includes a number of items relating to precisely this need.

From the outset, proponents of the TAT method took a skeptical view of questionnaire methods being used to measure individual differences in the strength of motives. Atkinson (1981), McClelland (1980), and Nicholls (1984) criticized the fact that the validation of achievement-motive questionnaires was actually limited to testing the extent to which self-reported achievement behavior (e.g., "I prefer difficult tasks to easy ones") corresponds with the behavior actually displayed in achievement situations (e.g., task choice and goal-setting). Although this approach provides data on the criterion validity of questionnaires, it tells us little about the explanatory power of theories of achievement motivation. These theories are supposed to explain why some people prefer challenging tasks, while others prefer easy ones. Yet the common practice of basing the statements to be rated in questionnaire measures on behavioral characteristics typical of achievement-motivated individuals, and then validating the questionnaires on the basis of the self-same behavioral characteristics in real-life achievement situations, provides little insight as to how the achievement-motive operates.

Questions about the reliability and validity of different methods of measuring motives have sparked lively debates (Entwisle, 1972; McClelland, 1980). These debates have overlooked the fact that TAT and questionnaire measures of nominally identical motives share hardly any common variance. Since the early 1950s, evidence has been growing that the motives captured by TAT and questionnaire measures (a) predict different kinds of behavior, (b) are activated by different situational characteristics, and (c) are associated with different factors in development and socialization. McClelland, Koestner, and Weinberger (1989; see also Weinberger & McClelland, 1990) were the first who integrated all of these findings into a coherent theoretical framework that assumes the coexistence of two different types of motives:

- Implicit motives: These are inaccessible to introspection, meaning that they can only be measured indirectly (e.g., by interpreting stories produced spontaneously in response to the motive-arousing picture cues that are based on the TAT).
- Explicit (or "self-attributed") motives: These reflect the individual's self-image, as assessed by means of self-report measures (questionnaires).

In the same vein, Stern (1935) had argued that motivation research should distinguish between

"phenomotives," which can be deduced from the surface characteristics of observable behavior, and "genomotives," which determine behavior without the awareness of the acting individual. Whereas phenomotives essentially just describe behavior, genomotives serve to explain what people do.

In the following sections, I will report research providing empirical support for the distinction that McClelland et al. (1989) made between implicit and explicit motives. Furthermore, I will consider differences in the needs underlying implicit and explicit motives. Even if we assume that the two types of motives are largely independent of each other, this does not rule out the possibility that they can have a combined impact on behavior and experience. Accordingly, I will discuss the interplay between the two types of motives – be it in the form of coalitions into which implicit and explicit motives enter or be it in the form of conflicts arising from contradictory motivational tendencies.

Summary

The line of thought that prompted David McClelland to distinguish "implicit" from "explicit" motives runs as follows: Implicit motives stem from affectively charged preferences for certain kinds of incentives (e.g., in the case of the achievement motive, task difficulty) that are learned early in life. Because these preferences develop from early, prelinguistic experiences, they are not represented in the medium of language and cannot be tapped by self-report methods. Neither the activation of an implicit motive nor its translation into instrumental behavior necessitates conscious acts of self-reflection or behavioral control. Explicit motives, in contrast, reflect the self-images, values, and goals that people attribute to themselves and with which they identify. They document people's conscious conceptions of the motives underlying their own behavior. Often, self-attributed motives do not correspond with the motives that drive people's action. In the following sections, I will present empirical evidence that supports these assumptions by showing that the two types of motives can be distinguished from each other in terms of their discriminant validity (i.e., they are empirically independent) and prognostic specificity (i.e., they predict different classes of behavior).

9.2 Evidence for the Independence of Implicit and Explicit Motives

9.2.1 Low Convergence Between Direct and Indirect Measures of Motivation

According to the traditional view on personality assessment, two tests that are supposed to measure the same construct (e.g., a specific motive) must correlate sufficiently with each other, even if their methods differ (Cronbach, 1990). In the TAT method, respondents are presented with ambiguous pictures, and an open-ended response format is used to record their reactions to these pictures (i.e., there are no structured responses; respondents generate stories of their own). In questionnaires, on the other hand, respondents react to structured statements, rating each in terms of how strongly it applies to them. Despite these differences, the scores yielded by the two instruments are expected to correlate substantially if they indeed capture the same motive:

- This criterion, known as convergent validity, is not met when motives are assessed using TAT and questionnaire measures. Rather, findings indicate that TAT-assessed and questionnaire-based measures of motives have discriminant validity, i.e., that they measure different constructs, even when both measurements pertain to the same theme (e.g., achievement, power, or affiliation).

DeCharms, Morrison, Reitman, and McClelland (1955) were among the first authors to report that marked discrepancies often emerge between implicit (TAT) and explicit (questionnaire) motives. They used TAT measure and self-descriptions (e.g., "I set myself challenging

goals") to assess respondents' striving for achievement. None of the self-ratings correlated significantly with the TAT measure of achievement motivation (nAchievement). This was no isolated finding. In an early meta-analysis, Spangler (1992) computed a mean inter-test correlation of just $r = 0.088$ for 36 same-sample comparisons of TAT and questionnaire measures of achievement motivation. Thus, someone classified as being high in achievement motivation on the basis of his or her TAT responses might describe him- or herself as being either high or low in achievement orientation on a questionnaire measure.

Similar results have been reported for other motives. Schultheiss and Brunstein (2001) obtained TAT scores for the achievement, power, and affiliation motives from two student samples and correlated these with the participants' scores on the nominally similar scales of the "Personality Research Form" (Table 9.1). The correlations between the TAT and the PRF scores were 0.06 (achievement), 0.04 (power), and 0.13 (affiliation). Schultheiss and Brunstein also administered the German version of the NEO Five-Factor Inventory (Borkenau & Ostendorf, 1993) to one group of participants. When motives were measured with the TAT, none of the 15 trait-motive correlations (5 traits × 3 motives) turned out to be significant. The correlation between extraversion and the affiliation motive was. 0.05, between conscientiousness and the achievement motive 0.00, and between agreeableness and the power motive 0.06. In contrast, when motives were measured using questionnaire methods, substantial correlations with the scales tapping fundamental personality traits were observed (e.g., power and affiliation correlated with extraversion; cf. Costa & McCrae, 1988).

The methodological variance of the two procedures, i.e., the differences in stimulus material and response formats, might explain why TAT motives share practically no common variance with their nominally similar counterparts in questionnaire measures. However, more recent studies show that the motives measured by TAT procedures are not substantially related to self-reported personal life goals either. Personal goals are assessed using open-ended formats rather than structured questionnaires, with respondents being instructed to describe in their own words their current intentions, projects, and concerns (Brunstein & Maier, 1996). Similar to TAT picture stories, this written material is then coded in terms of dominant themes. In four studies published in the 1990s, motives (TAT) and goals (free self-reports) relating to the same theme were compared directly (e.g., the TAT-measured achievement motive was compared with self-reports of achievement goals). The relationships discerned between motives and goals in the same domain were moderate (Emmons & McAdams, 1991) to nonexistent (Brunstein et al., 1995; Brunstein, Schultheiss, & Grassmann, 1998; King, 1995). This means that, although some people's explicit goals correspond thematically with their implicit motives, many others pursue goals that are not congruent with their motives as

Table 9.1 Test correlations between TAT motives and questionnaires tapping motivational self-descriptions (*PRF*; $N = 195$) and personality traits (*NEO*; $N = 111$) in two student samples

TAT			
	Power motive	Achievement motive	Affiliation motive
PRF: dominance	0.04	−0.00	−0.05
PRF: achievement	−0.02	0.06	0.01
PRF: affiliation	−0.06	0.15	0.13
NEO: extraversion	−0.01	0.00	0.05
NEO: neuroticism	0.05	−0.11	0.10
NEO: openness	0.04	0.00	−0.18
NEO: conscientiousness	−0.05	−0.00	0.13
NEO: agreeableness	0.06	−0.01	0.12

Based on Schultheiss and Brunstein, (2001), p. 80
NEO five-factor inventory, *PRF* Personality Research Form

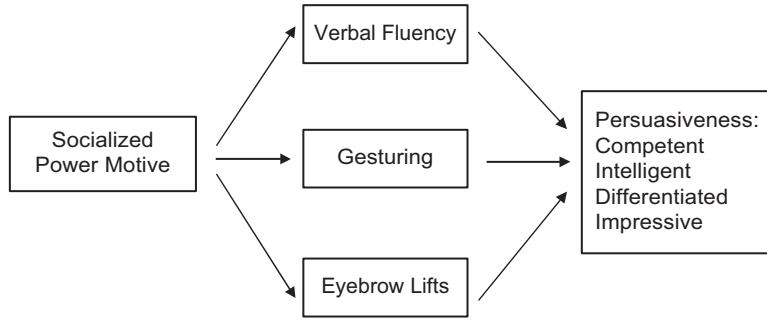

Fig. 9.1 Predicting persuasiveness: the effect of (a socially acceptable variant of) the power motive on external ratings of persuasiveness is mediated by paralinguistic and nonverbal behavior (Diagrammatic representation of the findings of Schultheiss & Brunstein, 2002)

measured by the TAT. More recently, Rawolle, Schultheiss, and Schultheiss (2013) confirmed these findings in three further samples (two from the United States and one from Germany). The extent to which participants aspired toward goals that were thematically linked to achievement, power, and affiliation was completely unrelated to the strength of their same-named TAT motives. In one case (power), there was even a negative correlation with the TAT measure. When motives were "explicitly" assessed with questionnaires, however, their strength corresponded with the pursuit of thematically related goals.

When correlations are calculated in single studies, there are at least three caveats that need to be kept in mind with regard to their interpretation: (a) the specificity of the respective sample, (b) the specific features of the testing and evaluation methods chosen, and (c) the limited number of participants. In a meta-analytic review including 56 samples with more than 6,000 participants, Köllner and Schultheiss (2014) investigated all available evidences of the (missing) convergence of direct (self-report) and indirect (TAT) measures of motivation. The correlations between implicit and explicit measures for thematically related motives were 0.116 (affiliation), 0.139 (achievement), and 0.038 (power). Even though slightly positive correlations were found for affiliation and achievement, direct and indirect measurements did not share more than 2% of variance for any of the three thematic domains.

In the studies reported thus far, all data were derived from a common source, namely, the respondent under investigation. Taking a rather different approach, Schultheiss and Brunstein (2002) explored how well external raters are able to infer an implicit motive, such as the power motive, by observing the behavior of another person. The participants in this experiment were given the task of presenting their position on animal experiments as persuasively as possible to a person sitting opposite them. According to the ratings of external observers, who were shown video recordings of the participants' arguments, participants high in the power motive (more specifically, a variant of the power motive associated with socially acceptable behavior) performed this task much more convincingly than participants low in the power motive (Fig. 9.1). However, power-motivated participants were not judged to be more dominant, more assertive, or less agreeable than their counterparts. Rather, they were ascribed attributes such as higher levels of intelligence and competence. These characteristics, however, are associated with achievement and success. The observers formed these impressions primarily on the basis of nonverbal and paralinguistic features of the participants' communicative behavior, i.e., on characteristics that do not tend to be consciously controlled by the acting individual. Participants with a strong power need were characterized by the speed of their speech and by lively gestures and facial expressions. These participants did not differ from other less power-motivated participants in the quality of their arguments, however.

These findings show that the motives driving behavior cannot simply be "read off" from observable behavior. This seems to apply to both

external observations and self- perception. Depending on the demands of the situation, social norms, and personal abilities and attitudes, one and the same motive may be expressed in a variety of different behaviors.

Veroff, Depner, Kulka, and Douvan (1980) reported that power-motivated men tend to choose achievement contexts to satisfy their need for social recognition and interpreted this finding as indicating that crude ways of exercising power (e.g., social oppression) are increasingly discredited as modern societies embrace the principles of democracy (see also Peterson & Stewart, 1993). The power motive may be expressed in socially competent and responsible behaviors, including achievement-oriented behavior, or in socially unacceptable behaviors (Winter & Barenbaum, 1985; Winter & Stewart, 1978). As Stern (1935) had already pointed out, it thus is important to distinguish the purpose of behavior (e.g., striving for personal strength and social recognition) from the outer appearance of this behavior (e.g., using communicative strategies that give the impression of competence). There is otherwise a danger that the explanations given for the observed behavior are circular. Simply suffixing the attribute "motivated" to the behavior observed may be a common approach in everyday life, but it does not serve the scientific explanation of behavior – the "explanation" is spurious.

Given the weak relationships observed between TAT and questionnaire measures of certain motives, the practice of using the same label (e.g., "the" achievement motive) for both types of measures seems a questionable one. The same term is used to describe constructs that are not or only weakly related to each other. As Kagan (1988) and Block (1995) pointed out, this lack of linguistic precision can contaminate even the level of theorizing. Yet the weak correlations observed between different instruments might equally be due to psychometric shortcomings in one of the two instruments (e.g., a lack of reliability of the TAT or response bias tendencies in questionnaire methods).

- Correlations between different tests are not a sufficient basis for conclusions to be drawn on the similarities or differences between the constructs the respective tests were designed to measure. Rather, we need to answer the question whether the instruments differ in their predictions of relevant behavioral characteristics.

9.2.2 Behavioral Correlates of Implicit and Explicit Motives

McClelland (1980) advanced the hypothesis that implicit and explicit motives influence behavior in different ways. The former are expressed in "operant" behavior and the latter in "respondent" behavior.

Definition

According to McClelland's definition, operant behavior is behavior that a person enacts spontaneously, i.e., without premeditation, and that entails recurrent preferences for particular experiences over extended periods of time (e.g., striving for career success). Respondent behavior, on the other hand, is elicited by clearly identifiable environmental stimuli, may be the subject of conscious thought and deliberation, and can be wittingly influenced by an acting person. This applies, for example, to decisions or appraisals that an individual thinks through carefully or that are imposed from outside.

The following studies illustrate McClelland's argument. Using a time-sampling method (participants were beeped several times a day via an electronic diary), Constantian (cf. McAdams & Constantian, 1983; McClelland, 1985b) surveyed the affiliative behavior of students in everyday situations and found that the implicit affiliation motive (TAT) predicted the frequency with which participants were in direct (e.g., engaged in conversation) or indirect (e.g., writing a letter) contact with others when beeped. Questionnaire measures of the same motive did not predict

behavior in the same way. Conversely, when asked directly whether they would rather undertake certain activities alone or in company, the students' stated preferences reflected in the strength of their explicit but not of their implicit affiliation motive. In other words, students who described themselves as sociable also reported that they would rather engage in the activities in question with someone else than on their own.

Studies on the achievement motive have revealed a similar pattern of results. DeCharms et al. (1955) and Biernat (1989) both found that, in contrast to self-reported achievement orientation, the TAT-assessed achievement motive predicted higher levels of effort expenditure and steeper learning gains when participants were administered tasks without being specifically instructed to do well. In both studies, task choice and personal values were predicted by questionnaire measures, but not by the TAT. Individuals who described themselves as achievers were more likely to express views on the quality of paintings that were in line with the opinions of alleged experts. Moreover, they voiced high levels of approval for people who had been successful in their lives and discredited less successful people. Given the choice of taking on a leadership role in a teamwork setting, they regularly chose to do so. In other words, the behavior of achievement-oriented individuals in situations involving decisions and evaluations was in line with their self-image and thus consistent with the expectations made of them.

In an experimental study, Brunstein and Hoyer (2002) contrasted the capacity of implicit (TAT) and explicit (self-report) achievement motives to predict effort-related and choice-dependent criteria of achievement behavior. They found that the implicit achievement motive predicted effort expenditure (i.e., performance gains on a repetitive task), whereas the explicit achievement motive predicted the continuation of an achievement-related activity (i.e., the decision to carry on working on an achievement-related task rather than to switch to a neutral task).

Study

Predicting Effort-Related and Choice-Dependent Criteria of Achievement Behavior by Indirect (TAT) and Direct (Questionnaire) Motive Measures

Brunstein and Hoyer (2002) investigated how well implicit (TAT) and explicit (questionnaires) achievement motives predict effort expenditure and task choice as criteria of achievement behavior within one and the same experimental setting. The effort criterion was intended to tap spontaneous achievement behavior, the task choice criterion to tap controlled achievement behavior. Student respondents working on a computerized mental concentration test were given continuous feedback over a number of trials on how their achievement changed relative to their previous performance (individual appraisal) as well as in social comparison (normative appraisals). Feedback was manipulated to signal either an increase or a decrease in achievement. After a scheduled number of tasks, participants were given the choice of continuing with the same kind of task or switching to a neutral activity (judging the aesthetic quality of pictures). The findings are presented in Fig. 9.2. Task performance (change in working speed on the mental concentration task) was predicted by the implicit achievement motive, but not by self-reported achievement motivation. Participants high in the achievement motive (TAT) tended to increase their working speed when informed that their performance was falling short of their previous achievement (Fig. 9.2a). Task choice, on the other hand, was predicted by self-reported achievement motivation. When achievement-oriented participants (questionnaire) were given feedback that was detrimental to their self-image (indicating a drop in

(continued)

performance relative to other participants' performances), they tended to decide to continue working on the task at hand (Fig. 9.2b). Thus, implicit and explicit achievement motives were responsive to different evaluation norms (individualized vs. normative feedback) and predicted different achievement criteria (effort expenditure vs. task choice).

These findings fit the notion that the achievement motive as measured by the TAT energizes behavior aimed at increasing one's competence, whereas the self-reported desire for achievement is influenced by social standards and comparisons and has an impact on people's conscious decisions. What both motives have in common is that they are most responsive to negative achievement trends. When feedback indicated an increase in achievement, neither of the two motives significantly predicted behavioral criteria. Where task choice is concerned, this pattern of results can be explained as follows: People with an achievement-oriented self-image generally have a positive self-concept of their abilities. A decrease in performance relative to others contradicts this view and prompts achievement-motivated individuals to obtain further information about their capacity to perform the task at hand (Trope, 1986). Positive normative feedback (indicating an improvement in performance relative to others), on the other hand, corresponds with the expectations of achievement-oriented individuals, meaning that there is no further need to sound out their ability on the task. Likewise, people with a high implicit achievement motive (TAT) respond to an alleged decrease in individual performance by mobilizing effort, illustrating that the driving force behind this motive is the need for self-improvement. Effort expenditure is triggered by a status quo considered to be unsatisfactory (decrease in one's own performance) and the prospect of being able to turn this situation around by investing more effort (increase in one's performance). When feedback is positive, there is no corresponding reason for the achievement motive (TAT) to trigger an increase in effort.

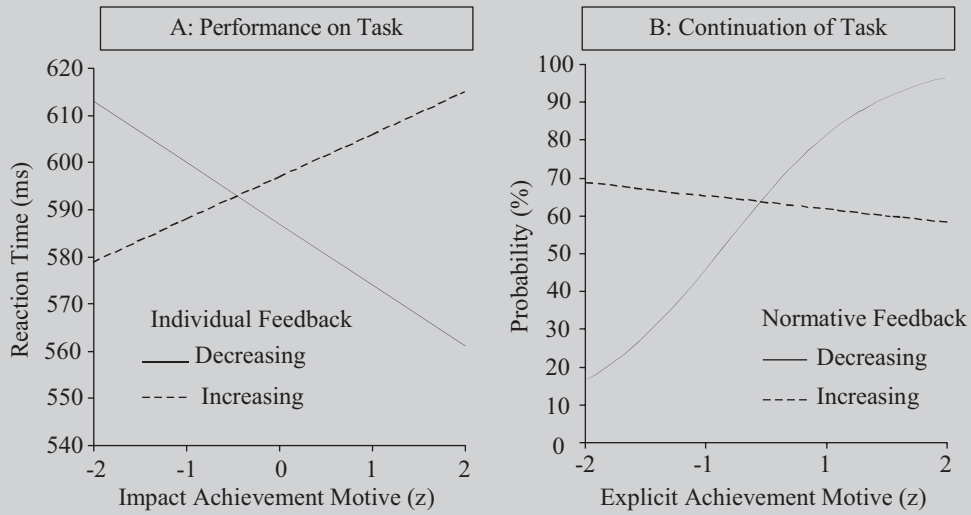

Fig. 9.2 Effort expenditure and task choice as a function of achievement motivation and feedback. (**a**) An alleged drop in individual performance (*decreasing* individual feedback) prompts participants high in the implicit achievement motive (TAT) to increase their working speed. (**b**) An alleged drop in performance relative to the social reference group (*decreasing* normative feedback) increases the likelihood of participants high in the explicit achievement motive (questionnaire) deciding to continue working on the task at hand (Based on Brunstein & Hoyer, 2002, p. 58)

In a study with sports students as participants, Wegner and Teubel (2014) found that such decoupling in the prediction of implicit and explicit achievement criteria can be observed not only in the laboratory but also in real-life contexts. Whereas the self-chosen target distance in throwing games (e.g., handball, basketball) was determined most accurately by using explicit achievement motivation, the in-game performance in a tournament-like competition depended only on the strength of implicit achievement motivation.

9.2.2.1 Findings on the Achievement Motive in Academic Settings

Studies conducted in realistic achievement situations have yielded further evidence for the validity of McClelland's (1980) distinction between operant and respondent behavior. Dahme, Jungnickel, and Rathje (1993) found that a questionnaire measure of the achievement motive (AMS) predicted whether or not young people considered entering a prestigious competition for young researchers. Yet the same questionnaire failed to predict how hard entrants in the competition actually worked on their projects. It is in precisely this domain that implicit motives show predictive power.

- A high achievement motive (TAT) predicts occupational, business, and economic success (Chap. 6) – sometimes independently (McClelland, 1961) and sometimes in combination with a high power motive (McClelland & Boyatzis, 1982). This relationship remains intact even when controlling for differences in educational level, intelligence, temperament, and socioeconomic status (McClelland & Franz, 1992).
- Explicit motives do not have comparable validity in predicting aspects of productivity, innovation, and creativity in adulthood.
- In comparison, educational outcomes tend to correlate more strongly with explicit than with implicit achievement motives. McClelland (1980) explained this finding by reasoning that there is little scope for spontaneous and self-determined work and learning to occur in school settings. Rather, tasks are assigned by teachers, and outcomes are evaluated using standardized procedures. McClelland's explanation is something of an overgeneralization in this form, however. It is, in fact, possible to activate the implicit achievement motives of individual students in the classroom setting by tailoring academic demands and achievement feedback to their specific needs (Heckhausen & Rheinberg, 1980; O'Connor, Atkinson, & Horner, 1966). For example, achievement-motivated students seem to prefer their performance to be measured against individual rather than social reference norms (Rheinberg, Duscha, & Michels, 1980). What is more, gearing task difficulty to individual abilities creates an atmosphere in which all students are able to focus on their own performance (Rheinberg & Krug, 2005).

Although the distinction between operant and respondent behavior provides some insight into the differences between implicit and explicit motives, it is still based on a drastic oversimplification, with motives being set in direct relation to specific behavioral characteristics. In actual fact, the correlations between motive measures and behavioral criteria rarely exceed the level of 0.30 (Spangler, 1992). Correlations of this kind may provide initial evidence for the specific validity of a given motive measure. Yet to establish more substantial relationships between motives and behavior, it is imperative to take the incentives present in the respective situational context into account as well.

9.2.3 Motive-Arousing Incentives

One of the fundamental principles of motivation psychology is that a motive first has to be activated by a corresponding incentive before it can unfold its influence on behavior. An incentive is defined as a situational characteristic that, based on previous learning experiences, is associated with the possibility of satisfying a motive and, as a result, experiencing a rewarding affect (feelings of pride, strength, interpersonal attachment, etc.). The following study by Andrews (1967) on the advancement of employees in two very different companies illustrates this principle.

Example

One of the companies, denoted as the Achievement company, offered its employees a broad range of achievement-related incentives, such as autonomy, variety, challenging tasks, and informative feedback. The other company, dubbed the Power company, was characterized by a hierarchical management structure. Using the TAT method, Andrews measured the achievement and power motives of employees in both companies. He then ascertained how often these employees had been promoted in the previous years. A strong achievement motive was associated with more rapid advancement in the Achievement company, but not in the Power company. The opposite was true of the power motive, with employees high in the power motive being promoted much more often in the Power company than in the Achievement company. Neither motive was a general predictor of promotion. Rather, the critical factor was whether the incentives offered at the workplace coincided with the employees' motivational preferences (for similar findings, see Jenkins (1994)). It is only when the environmental incentives – and hence the motivating potential of a situation – correspond with a person's dominant motives that these motives can be expected to have an impact on behavior (Kleinbeck, 1996).

Numerous studies indicate that implicit and self-attributed motives react to different classes of incentives. Provided that tasks are tackled in a task-oriented atmosphere, with no pressure being exerted by external agents, the implicit achievement motive triggers high levels of effort and persistence. The incentive resides solely in the difficulty, complexity, or novelty of the task at hand and the opportunity it affords to do something better, faster, or more effectively. In the presence of external incentives, such as time pressure and social evaluation, however, the prognostic power of the achievement motive as measured with the TAT decreases markedly. This has been shown in experimental studies (Entin, 1974; Horner, 1974; Miller & Worchel, 1956; Wendt, 1955) as well as in real-life achievement settings.

McKeachie (1961) reported that highly achievement-motivated (TAT) college students do particularly well in classes if their lecturers refrain from setting goals, voicing demands or expectations, or laying down rules. But precisely these kinds of additional incentives, which are not inherent in the task itself, seem to be needed to activate the explicit achievement motive. People with an achievement-oriented self-image often only really apply themselves when they are explicitly challenged to demonstrate their ability and secure social recognition in competition with others (Patten & White, 1977). Such incentives divert attention from the actual task of mastering a given challenge and direct it toward the social and personal implications of potential success or failure. For this reason, they are often termed "extrinsic" incentives and contrasted with the "intrinsic" incentives inherent in a task (Chap. 13). In contrast to individuals high in implicit achievement motivation, individuals high in self-attributed achievement motivation experience joy, fun, and interest precisely when they are able to measure their abilities in direct competition with others (Tauer & Harackiewicz, 1999).

In the above meta-analysis, Spangler (1992) undertook a thorough investigation of whether and how different types of incentives predict achievement behavior. Regarding individual characteristics, Spangler distinguished between indirect (TAT) and direct (questionnaire) measures of the achievement motive; regarding situational characteristics, between activity incentives (challenging tasks) and social incentives (e.g., social recognition as a consequence of success); and regarding behavioral characteristics, between operant criteria (e.g., life outcome variables) and respondent criteria (e.g., attitudinal measures). Spangler classified studies on

achievement motivation along these three dimensions, with the following results:

1. Neither the implicit (TAT) nor the explicit (questionnaire) achievement motive was substantially correlated with criteria of achievement behavior.
2. The implicit achievement motive predicted operant, but not respondent forms of achievement behavior. The validity of questionnaire measures was low, even when the analysis was limited to studies investigating respondent behavior.
3. This picture brightened up when the different kinds of incentives that had been used in the various studies to activate achievement-motivated behavior were taken into account. The validity of the TAT achievement motive increased from $r = 0.22$ to $r = 0.66$ when operant behavior was measured in the presence of activity incentives and without social incentives. Likewise, the validity of the achievement motive questionnaires increased when only studies involving social incentives were considered. However, the validity coefficients computed for the questionnaires could not compete with those determined for TAT measures of the achievement motive.

From these findings, Koestner, Weinberger, and McClelland (1991) concluded that only individuals high in implicit achievement motivation (TAT) are genuinely interested in mastering difficult tasks. For individuals with an achievement-oriented self-image, significant achievements have another function entirely – they serve as a means to the end of gaining the recognition of the social environment.

- The main lesson to be learned from Spangler's (1992) findings is that motivation analyses can only produce satisfactory results if different types of incentives are taken into account as well as differences in personality motives when predicting achievement behavior (see also Bornstein, 2002).

9.2.4 Differences in Child-Rearing Practices and Development

9.2.4.1 Child-Rearing Practices

McClelland et al. (1989) speculated that implicit and explicit motives have different antecedents in child-rearing and socialization. McClelland and Pilon (1983) (see also McClelland (1985b)) reported one of the few studies that has related implicit and explicit motives measured in adulthood to the way that respondents were brought up (for a detailed account of motivational development, see Chap. 15). In a longitudinal study initiated by Sears, Maccoby, and Levin (1957), a total of 379 mothers were interviewed on their child- rearing practices in 1951, when their children were 5 years old. Twenty-six years later, the social motives of the 31-year-old "children" were measured using the TAT and self- descriptions (adjective scales). McClelland and Pilon found that implicit (TAT) and explicit (self-report) motives were associated with different child-rearing practices. Because this only applied to the achievement and power motives, the following account is limited to these two motives (Table 9.2).

Adults scoring high in implicit power were, according to their mothers' reports, brought up in a permissive atmosphere, characterized by tolerance of both aggressive and sexual behavior on the child's part. Women high in the power motive had been expressly encouraged by their mothers to fight back in conflict situations. In contrast, adults who described themselves as power oriented had been punished and spanked more often as children, particularly when they showed hostility toward their parents. Adults high in the implicit need to achieve had been toilet trained very early in childhood, and their mothers had insisted on fixed mealtimes. The self-attributed achievement motive correlated with different parenting practices. Achievement-oriented adults had been expected to show independence and to succeed on difficult tasks at an early age.

These findings must be interpreted with due caution. Neither do we know what happened in

Table 9.2 Correlations of child-rearing variables (mothers' reports) with implicit (TAT) and explicit motives (self-descriptive adjective checklists) in adulthood ($N = 76–78$)

Child-rearing practices	Correlations with motive variables	
	Implicit achievement motive (TAT)	Explicit achievement motive (self-report)
Scheduled feeding	0.33[a]	0.06
Strict and early toilet training	0.41[a]	−0.10
Early and difficult tasks set for child	−0.10	0.31[a]
Permissiveness about sex and aggression	0.31[a]	0.08
Punishment of aggression toward parents	−0.17	0.32[a]
Physical punishment (spanking) by mother	−0.07	0.39[a]

Based on McClelland & Pilon, (1983), pp. 567, 570; McClelland et al., (1989), p. 699
[a]Statistically significant

the lives of the "children" between the ages of 5 and 30, nor is it possible to say with any certainty that the child-rearing practices reported by the mothers determined the development of the children's implicit and explicit motives. Despite these limitations, the findings of McClelland and Pilon (1983) are worthy of note in at least two important respects:

1. They lend support to the idea that implicit motives are acquired earlier in life than explicit motives. In the sample examined, toilet training had been completed long before parents began teaching their children to act independently and responsibly. Furthermore, verbal communication is much more relevant to the parenting practices that McClelland and Pilon (1983) found to be associated with the acquisition of explicit motives than to the practices found to correlate with the development of implicit motives. Parental demands, expectations, and even punishments tend to be communicated in words or at least accompanied by verbal messages. Neither the establishment of fixed mealtimes nor permissive child-rearing practices necessitate a similar extent of verbal communication and language comprehension.
2. The findings presented by McClelland and Pilon (1983) correspond with other observations, as well. It seems that a strong implicit power motive develops only if children are able to enjoy early experiences of efficacy unhindered – though reservations seem warranted where aggressive behavior is concerned. Other studies have shown that a strong power motive can be channeled into prosocial behavior when children are slightly older by teaching them to behave responsibly. The father is an important role model here (Winter & Stewart, 1978). In the study by McClelland and Pilon, a high self-attributed power motive was related to less pleasurable experiences in childhood, at least if the mothers' reports are to be believed. The mothers of dominant adults tended to endorse physical punishment. It is conceivable that self-images characterized by the need for superiority develop as a form of compensation, i.e., in reaction to childhood experiences of inferiority. Clearly, without further evidence this interpretation remains pure speculation.

Similar observations can be made for the implicit and explicit achievement motives. The data presented by McClelland and Pilon (1983) indicate that the control of physical needs plays a key role in the development of the implicit achievement motive. In a sense, this idea is in line with findings reported by Mischel and Gilligan (1964), who observed that achievement-motivated children are particularly good at resisting temptation and delaying gratification. Control of physical needs and the capacity to resist competing incentives are important prerequisites enabling people to apply themselves to difficult tasks and work with persistence and mental concentration over longer periods.

High explicit achievement orientation, on the other hand, is socialized in the context of verbally

controlled and culturally mediated demands, as shown by the findings of McClelland and Pilon (1983). Besides parenting, experiences in the school setting play a major role here. Students form their assessments of their own ability by engaging in social comparisons with their classmates (Koeller, 2000; Marsh, 1989; Stipek, 1996). As early as primary school age, students who describe themselves as achievers rate their mathematical and verbal abilities to be higher than those of their peers (Helmke, 1997).

9.2.4.2 Development of Two Types of Achievement Motives

Along the same lines as McClelland (1987) and Veroff (1969) suggested that children develop two different kinds of achievement motivation. First, the autonomous achievement motive develops at preschool age (or even earlier). At this stage, standards of achievement are personal, and the achievement motive is satisfied by gradual gains in mastery. Children with an autonomous achievement motive compete with themselves, aiming to build on their abilities progressively. This description is reminiscent of the concept of the implicit achievement motive introduced later, which is also held to be closely linked to efforts to improve one's self, i.e., one's knowledge and skills (see Breckler & Greenwald, 1986; Koestner & McClelland, 1990; Koestner et al., 1991). At this first stage, then, achievements are evaluated on the basis of (temporal) self-comparisons ("What can I do now that I couldn't do before?" or "What can't I do yet that I'd like to be able to do better?"). Situations characterized by this motive produce a motivational state that Nicholls (1984) termed "task involving": People are completely focused on the challenge posed by the task at hand and infer their ability from the learning gains they observe as they gradually come to master the task.

It is only later, at primary school age that a social achievement motive develops (Veroff, 1969). Standards of achievement are now social; performance is assessed with reference to normative demands and in comparison with one's peers. It is at around the same age that children recognize the concepts of difficulty, effort, and ability as factors having distinct effects on performance (Nicholls, 1978). Only then is it possible for children to draw specific conclusions about their own abilities based on their performance (Nicholls, 1984). There are strong parallels between the ensuing efforts to obtain information about one's strengths and weaknesses by systematically comparing one's abilities with those of one's peers and the concept of explicit achievement motive, as assessed by self-report methods (cf. Koestner & McClelland, 1990). Nicholls (1984) termed this form of achievement motivation "ego involving."

Definition

Ego involvement means that individuals rank their performance relative to the performance of others in order to gauge their relative position on an ability dimension. Ego involvement is intensified when it comes to demonstrating competence in socially desirable activities and gaining social recognition.

The development of a self-concept of ability based on self-other comparisons prompts a change in the character of achievement-motivated behavior. The focus is no longer on increasing one's personal competence and mastering tasks by means of effort and persistence. Rather, it is now important to seek out information about one's abilities in social comparison and to demonstrate one's command of these abilities in competition with others (Nicholls, 1989). Studies on the development of self-evaluation in children and adolescents (Butler, 1999; Stipek & Gralinski, 1996; Stipek, Recchia, & McClintic, 1992) show that the social ranking of abilities becomes the main focus of achievement behavior in the early and middle school years. The autonomous achievement motive that developed earlier in life becomes less relevant, but it does not disappear altogether. According to Veroff, the two motives can in fact be combined in an integrated system, permitting great flexibility across different situations. Butler (1999) reported that young people with this kind of fully developed self-evaluation system can gauge their abilities either

with reference to their own gains in mastery or relative to the abilities of others, just as the situation requires. In the following section, it will be reported that these two forms of self-evaluation reflect the different needs at the root of implicit and explicit motives.

Summary

The motives tapped by picture story exercises (TAT) and questionnaire measures (self-reports) do not correlate substantially, even when they relate to the same theme. This suggests that the motives captured by the TAT are either not readily accessible to introspection or that they are not easily tapped by self-report measures owing to response tendencies (e.g., social desirability bias). Another explanation would be that the TAT does not correlate with other motive measures simply because it is not sufficiently reliable. However, the finding that external observers also ascribe to the behavioral expression of a specific motive (as measured with the TAT) characteristics that are not associated with that motive (e.g., achievement-related characteristics in the case of the power motive) contradicts this view. Overall, correlational findings show that motives assessed by indirect (TAT) and direct (self-report) measures have little convergent validity, meaning that they do not tap the same construct, even though the use of identical labels would seem to indicate otherwise.

Three groups of findings provide evidence for the prognostic specificity of implicit and explicit motives:

1. The two types of motives are related to different patterns of behavior. Implicit motives predict spontaneous behavior and behavioral trends over time. Explicit motives, in contrast, have an impact on deliberate choices and conscious responses that can be intentionally attuned to a person's self-image.
2. Implicit and explicit motives are responsive to different types of incentives – implicit achievement motives are responsive to incentives inherent in an activity or task (difficulty and challenge); explicit achievement motives are responsive to evaluative or social incentives (e.g., competition for social recognition).
3. Evidence from developmental psychology suggests that the two types of motives emerge via different socialization experiences. Implicit motives develop via preverbal experiences, whereas explicit motives are acquired somewhat later, as self-concepts become represented in the medium of language. It can be assumed that implicit achievement motives involve internal standards of excellence (competing with oneself), whereas explicit achievement motives involve normative standards of excellence (competing with others). Self-comparisons occur earlier in development than social comparisons, which may explain why the implicit achievement motive is developed earlier than the explicit achievement motive. The question of whether, when, and how the two motives are combined to form an integrated system cannot yet be answered with any certainty. Depending on the demands of the situation, young people can evaluate their abilities on the basis of either self-comparisons or social comparisons.

9.3 Cognitive and Affective Needs

The findings reported thus far suggest that the motives captured by the TAT are not rooted in the same needs as the motives tapped by self-report measures. Explicit motives are closely linked to self-concepts. People who describe themselves as achievers tend to have a positive image of their intellectual capacity. In fact, the empirical relationship between questionnaires measuring the achievement motive and self-assessments of intellectual ability is so substantial that many authors consider differences in perceived ability to be the true core of the (explicit) achievement motive (Brunstein & Schmitt, 2004; Covington & Omelich, 1979; Kukla, 1972; Meyer, 1984; Nicholls, 1984; Trope, 1986). Self-concepts of ability can affect achievement-motivated behavior in a multitude of ways. They are closely related to the anticipated probability of success,

which in turn mediates their influence on personal levels of aspiration and hence task choice (Eccles & Wigfield, 2002; Wigfield & Eccles, 2000). The much cited finding that people who are confident of success tend to attribute their accomplishments to different factors than do people who are afraid of failure also falls into place against this background (Weiner & Kukla, 1970; see also Chap. 14).

In the respective studies, participants were divided into success- and failure-oriented groups based on their scores on the Mehrabian scale (MARPS). Yet responses on this scale also reflect how people evaluate their abilities (Chap. 6):

- Success-oriented individuals (i.e., people scoring high on the Mehrabian scale) are confident in their capabilities. Thus, it is logical for them to attribute their successes to innate ability but explain their failures with a lack of effort or external influences (e.g., bad luck).
- Failure-oriented individuals (i.e., people scoring low on the Mehrabian scale) are much more skeptical about their abilities relative to those of others. Accordingly, they put their failures down to a lack of ability but attribute their successes to luck or to the ease of the task:
- The same pattern of results does not emerge when the TAT is used to measure the achievement motive. The reason for this is that – as McClelland had intended – the achievement motive tapped by means of the TAT method is not significantly related to the self-concept of ability (Chap. 6).

If interindividual differences in the strength of the achievement motive are reduced to differences in perceived competence or ability, one may well ask whether the concept of motives still has a meaningful part to play. Terms such as "hope for success" and "fear of failure" indicate that what we are dealing with here is not in fact the study of motives but the analysis of affectively tinged expectancies. Yet the expectancy of being able – or unable – to achieve a goal should not be equated with the motive of aspiring to attain that goal. Trope's (1986) studies on task choice provided important insights here. His data showed that achievement-motivated individuals are much keener to obtain meaningful information about their abilities than are less achievement-motivated individuals. Like Weiner and Kukla (1970), Trope used the Mehrabian scale to tap differences in the strength of the achievement motive. People scoring high on this scale evidently have a strong need to seek new information about their abilities. Following Sorrentino, Short, and Raynor (1984), these efforts can be interpreted as an expression of a cognitive need. In this context, the term "cognitive" means quite literally that people strive to acquire information about, and gain insights into, their abilities, just as Festinger (1954) postulated in his theory of social comparison processes. Knowledge of one's own strengths and weaknesses is crucial, e.g., when it comes to choosing tasks or fields of activity (e.g., deciding on a career) where it is of the essence to be competent and successful (Trope, 1986). This cognitive need for self-assessment may at times be eclipsed by other needs that also relate to self-evaluation of one's abilities (Sedikides & Strube, 1997). Some authors argue that achievement-motivated individuals are more interested in demonstrating their abilities than in seeking realistic feedback (Kukla, 1972; Sorrentino & Hewitt, 1984). The need to obtain accurate information about one's abilities does not always prevail over the need to bolster one's self-concept and thus enhance one's self-esteem. This suggests that affective processes associated with self-esteem are always involved in the evaluation of one's personal abilities.

In Heckhausen's (1975) model of achievement motivation (Chap. 6), self-evaluative emotions are assumed to play an important role in the self-regulation of achievement-related behavior. Individuals who fear failure tend to avoid challenging tasks in order to avoid thoughts and feelings that would be detrimental to their self-esteem and that would ensue from failures being attributed to lack of ability. In general, however, cognitive models of motivation tend not to introduce affect until much later phases of operation. For example, in Weiner's (1986) emotion theory

affect first emerges in direct reaction to the evaluation of an outcome; only then is it further elaborated in a multistage process of causal attribution (Chap. 14).

9.3.1 The Function of Affect

McClelland (1985b) viewed motives as affective needs. In his model, emotions have a dual function (McClelland et al., 1953; Schultheiss & Brunstein, 2005; Weinberger & McClelland, 1990):

- First, affect serves to satisfy motives and to reinforce the behavior executed (e.g., in the form of the pride a person experiences when she or he has mastered a difficult task).
- Second, affect is the driving force behind motivated behavior.

Cues that previous experience has shown to be associated with the satisfaction of a specific motive can activate motives in anticipation, i.e., before people begin to act. In this way, they trigger affective states that then take on the form of anticipatory emotions (e.g., hope for success or the pride associated with a potential success). This foretaste (or anticipated affect) serves to activate instrumental behavior. The driving force here is the prospect of effecting a change from a state of low need satisfaction to a state of higher need satisfaction. Differences in the strength of an implicit motive can thus be interpreted as differences in the individual capacity to take pleasure in the incentives present during or after an activity. This links up with Atkinson's (1957) notion that the success motive describes the ability to take pride in success:

- For an implicit motive to be activated, it is essential that the anticipatory affect be weaker than the affect experienced upon attainment of the desired goal state. There would otherwise be no reason to take action.

Thus, failure leads to the activation and success to the satisfaction of the (implicit) achievement motive (McClelland, 1985b; McClelland et al., 1953). The tension between an unsatisfactory situation (a difficult task that cannot be solved straight away) and the anticipation of a more satisfactory state of affairs in the future (mastering the difficulty) prompts achievement-motivated individuals to intensify their efforts to achieve that goal state. But it is only when this tension is shored up by positive anticipatory emotions that it has an energizing effect on behavior (see the following example). In this sense, the incentive to succeed is generated by the experience of failure itself, because individuals know from previous experience that they have the capacity to master even difficult challenges. A success attained only after repeated efforts is worth more to us than one that "comes naturally" (because the task was easy). Thus, the striving for competence is at the very core of the achievement motive.

Example

We are not proud of things that come easy to us but of things that we work hard to achieve by means of effort, persistence, and resourcefulness. People who do not experience positive anticipatory emotions when faced with difficult tasks are less motivated to invest effort in achieving the desired goal state. For them, achievement is not a way of making the transition from subdued mood to pleasure. This may be the result of people being understretched for lengthy periods of time or of a lack of encouragement and support being provided for those tackling achievement-related demands (e.g., when children doing their homework are not encouraged to keep trying to solve the problems themselves; Trudewind & Husarek, 1979).

As Kuhl (2001) has argued, these observations imply that achievement-motivated behavior is rooted in the inhibition of positive affect – it is only under this condition that the achievement motive takes effect (Chap. 12). A state of complacency and self-satisfaction is unlikely to activate the achievement motive. However, satisfaction and pride can function as rewards, and – if associated with the experience of attaining success through the exertion of effort – can positively reinforce achievement-motivated behavior. Thus, we come full circle: Based on this experience, positive anticipatory emotions are activated whenever individuals come up against challenges in new situations or actively seek out such challenges themselves.

9.3.2 Hormonal Correlates of Motives

In his later work, McClelland moved away from the links between implicit motives and the expression of feelings such as pride (achievement), strength (power), and joy (affiliation and intimacy) and instead advocated the hypothesis that each motive is rooted in a specific hormonal process that functions to reward the preceding instrumental behavior (see Chap. 10). Studies conducted by Schultheiss into the power motive have provided particularly interesting data here (Schultheiss, Campbell, & McClelland, 1999; Schultheiss & Rohde, 2002; for an overview, see Hall, Stanton, & Schultheiss, 2010; Schultheiss, 2007). Schultheiss reported that the gonadal steroid testosterone is directly related to the need for power. He set up a competition in which two respondents sitting opposite each other thought they were performing against each other. In fact, the winner and loser had already been determined by chance. Immediately after the competition, power-motivated (TAT) "winners" showed the highest increase in testosterone, as measured in saliva samples. High testosterone scores were also linked to steeper learning gains (the task involved connecting sequences of numbers). Power-motivated "winners" outperformed all other participants on this aspect, as well.

What is more, Schultheiss found that the testosterone levels of highly power-motivated participants increased even before the competition began. The mere idea of competing with another person and emerging victorious triggered increased testosterone production in power-motivated participants. Yet the increase in testosterone levels observed before the competition began was much smaller than the surge shown by power-motivated participants after "winning" the competition. In line with previous testosterone studies (Mazur & Booth, 1998), self-attributed power motives did not predict either testosterone scores or learning gains in the studies by Schultheiss.

Research on autobiographical memories (Conway & Pleydell-Pearce, 2000) shows that implicit motives are closely related to affectively charged experiences. More specifically, these findings show that when respondents are asked to describe the emotional highlights of their lives, they tend to report events that correspond with their implicit motives. Power-motivated individuals remember experiences of personal strength, whereas intimacy-motivated individuals remember experiences of interpersonal attachment (McAdams, 1982). Explicit motives are also linked to episodic memories. Unlike implicit motives, however, they are associated with routine experiences. In her extensive studies, Woike (1995, Woike, Gershkowich, Piorkowski, & Poco, 1999; for an overview, see Bender & Woike, 2010) found that the retrieval of memorable affective experiences was predicted by TAT motives, whereas the retrieval of behavioral routines was predicted by self-reported motives. Thus, people's explicit motives are not reflected in their most memorable affective experiences but in habitual everyday activities.

Summary

The findings summarized in this section suggest that affect is a key factor in the activation and satisfaction of implicit motives. Implicit motives are related to our most memorable affective experiences in life. What is more, they have neuroendocrine correlates that are assumed to reinforce the preceding instrumental behavior (e.g., testosterone in the power motive). Explicit motives, on

the other hand, express cognitive needs associated with the formation and maintenance of positive and stable self-concepts and tend to be expressed in the routines of daily life rather than in particularly memorable experiences. Weinberger and McClelland (1990) speculated that implicit motives are rooted in a system of incentives that developed relatively early in evolution but was later supplemented and overlaid by a cognitive motivational system. The development of language, and the opportunity it affords to plan and reflect on one's behavior in view of culturally mediated rules, was decisive here. Assuming that two independent motivation systems do coexist side by side, the next question to arise is whether and how these systems are coordinated and interact with each other in the regulation of behavior.

9.4 The Interaction of Implicit and Explicit Motives

The findings reported thus far lend support to the notion that implicit and explicit motives constitute two different motivation systems that are activated by different incentives and are expressed in different types of behavior, even within the same domain (e.g., achievement, power, or affiliation). However, this duality hypothesis does not rule out the possibility that the two types of motives can interact with each other to jointly affect human behavior and experience. What evidence is there for such an interaction hypothesis? In this section, I will first report findings on coalitions observed between implicit and explicit motives and then move on to the conflicts that may occur between the two systems.

9.4.1 Coalitions

McClelland (1985a) and Biernat (1989) suggested that implicit and explicit motives frequently enter into productive partnerships:

- When working in coalition, implicit motives have an energizing function and explicit motives a directive function in the regulation of behavior.

Implicit motives imply generalized preferences for certain forms of incentives that can be present in various domains of life. "Where" (i.e., in which situations) and "how" (i.e., through which behaviors) an implicit motive is expressed hinges largely on a person's conscious goals, values, and attitudes, as well as on the opportunities and constraints of their life situation.

First indications that implicit and explicit motives may enter into coalitions were found in a study reported by French and Lesser (1964). The study was designed to investigate the behavioral expression of the achievement motive (as measured by the TAT) in women with a traditional role orientation and in more career-minded women. French and Lesser administered tasks tapping intellectual competence and tasks tapping social competence to both groups of women. Among career-minded women, the strength of the achievement motive predicted achievement on the cognitive tasks. Among women with a traditional role orientation, a high achievement motive was associated with higher scores on the social competence tasks. We tend to think of the concept of achievement as being intimately bound up with the demands of academic and working life. Yet the influence of the implicit achievement motive is not restricted to school settings or occupational contexts. Rather, it implies increasing one's own efficiency and mastery, regardless of the skills involved. The achievement motive can thus be expressed across a broad variety of behavioral domains and situational contexts, depending on the individual's outlook on life and personal values.

Interaction effects of this kind have not only been observed in the lab, but they can also occur in real life. In a reanalysis of data collected as part of a motivation training program for Indian businessmen, Langens (2001) analyzed how the implicit achievement motive (TAT) interacts with discrepancies between actual and ideal selves (in short, self-discrepancies). The level of business activity after the training program served as the dependent variable. Self-discrepancies (e.g., between actual and desired work-related selves) did not produce either particularly stimulating or particularly inhibiting effects on business activities. In combination with the need to achieve,

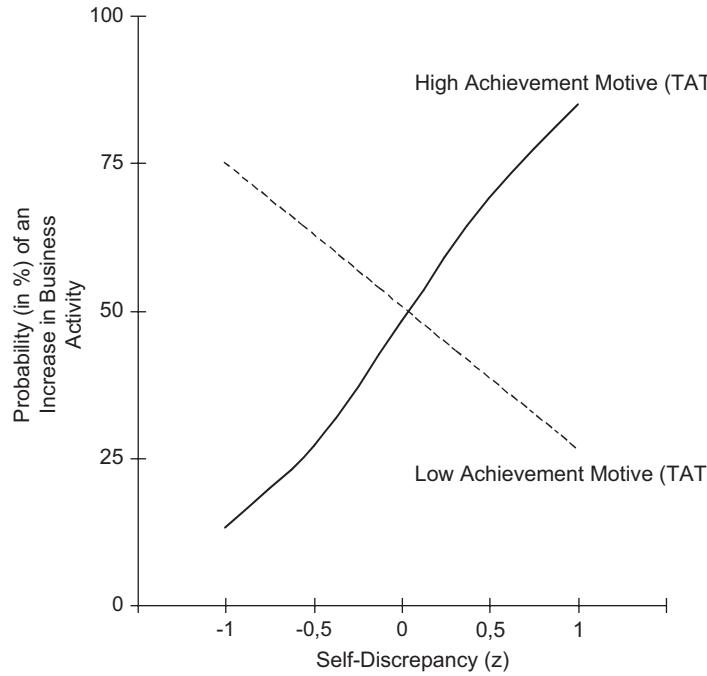

Fig. 9.3 Interaction between self-discrepancy and (implicit) achievement motive (TAT) in predicting the business activity of participants in a motivation training program (Based on Langens, 2001, p. 9)

however, self-discrepancies predicted marked differences in such activities (Fig. 9.3). Participants who reported a marked discrepancy between their actual and their ideal work selves, and were high in the achievement motive, turned out to be the most active. In the absence of this motive, a negative correlation was observed between self-discrepancies and business activity. But even a strong achievement motive did not trigger increased business activity among businessmen who were satisfied with the current state of affairs. Metaphorically speaking, self-discrepancies acted like a lock channeling achievement-motivated behavior. In addition to a strong achievement motive, the precondition for this happening was that the lock gates were open (i.e., that there were discrepancies between current states and hoped-for future selves).

Two studies that provided direct evidence for an interaction between implicit and explicit achievement motives were reported by Brunstein and Maier (2005) and Lang, Zettler, Ewen, and Hülsheger (2012). In a laboratory setting, Brunstein and Maier (2005) examined how student participants reacted to challenging feedback on their performance in a mental concentration test presented either in a task-involving or in an ego-involving context.

When the feedback focused on task incentives, the (implicit) TAT-assessed achievement motive predicted an increase in effort once a participant's performance became worse in comparison with a personal standard (similar to the study by Brunstein & Hoyer, 2002; see Sect. 9.2.2). The results for ego-involving situations, in which the importance of good performance was particularly stressed through the experimental instruction, were different. Participants who had both a strong implicit achievement motive (TAT) and a strong explicit achievement motive (questionnaire) displayed the most favorable achievement development in this case. In contrast to all other participants, this group of participants very effectively battled feedback that signalized a threat to their social standing. Brunstein and Maier (2005) explained this interaction finding by arguing that a strong explicit achievement motive is required to attract a person to ego-relevant achievement goals. If this requirement is met, a person with a strong implicit desire to achieve will be drawn

into social comparisons and will be energized to show behavior that serves to improve his or her achievement ranking. Veroff (1969) had reported similar findings in studies about reactions to failure in school children.

Lang et al. (2012) also reported that the combination of a strong implicit achievement motive (Operant Motive Test by Kuhl & Scheffer, 1999) and an equally strong explicit achievement motive (confidence to succeed in a short version of the Achievement Motives Scale by Lang & Fries, 2006) represents a very solid foundation for performing well in social-evaluative contexts. The sample consisted of employees whose work performance was evaluated by their supervisors. The implicit achievement motive predicted the quality of an individual's work performance (the stronger the motive, the better the performance) but only if their explicit achievement orientation was above average. Employees who were implicitly and explicitly characterized by a strong desire to perform well performed best based on supervisors' evaluations. If one of the two motives was weak, supervisors' ratings became more negative. Lang et al. interpreted these findings in accordance with the aforementioned assumption by McClelland and Biernat: A strongly developed explicit motive directs or "channels" the energizing effect of the implicit achievement motive toward taking on challenging tasks in social-evaluative contexts. If, however, the achievement-oriented self-image is weak, the expression of the implicit achievement motive is blocked in a behavioral context characterized by social competition.

9.4.2 Conflicts

Implicit and explicit motives do not always interact as harmoniously as the examples reported above might suggest. Indeed, the two types of motives can come into conflict with each other, which may increase the risk of negative developments or emotional struggle.

The two examples that follow illustrate this point. Using data from two longitudinal studies, Winter et al. (1998) analyzed how personality traits interact with motives to shape the development of adult women. They focused on the trait of extraversion–introversion and the motives of power and affiliation, both of which were measured by a TAT (remember that power and affiliation constitute facets of extraversion if measured with questionnaires rather than the TAT method). In line with the interaction hypothesis outlined above, Winter et al. assumed that traits determine the ways in which (implicit) motives are expressed in behavior. The criteria they assessed were significant events and outcomes in the domains of personal relationships, careers, and leisure activities. The statistical interactions between extraversion– introversion, on the one hand, and power and affiliation motives, on the other, indeed proved to be significant predictors of the life outcome variables under investigation. The following example highlights some of the findings.

Study

Women's Motive Profiles

Winter et al. (1998) found that extraverted women high in the power motive had careers associated with high levels of social impact and prestige. They attached great importance to maintaining social relationships at work. Extraverted women high in the affiliation motive, in contrast, were characterized by having achieved satisfying intimate relationships and by involvement in volunteer work. The picture to emerge for introverted women was a different one entirely. For them, the power motive was not linked to having a prestigious career, nor was the affiliation motive associated with the development of satisfying relationships. On the contrary, marital problems and divorces were particularly common among introverted women who were high in the affiliation motive. Relative to extraverted women, it seems to be much more difficult for introverted women to express their social needs in interpersonal relationships. Indeed, it is only logical that a person

who would rather be alone than with others will find it difficult to fulfill a latent need for close relationships. Yet shy and withdrawn individuals can have a strong need for interpersonal attachment, as illustrated by the findings reported by Winter and colleagues. The same holds for introverted individuals who crave social recognition. In other words, whether and in what way a motive is expressed in behavior hinges on the personality traits that distinguish a person's actions, thoughts, and feelings.

To summarize, the findings presented by Winter et al. (1998) demonstrate that more precise – and arguably more interesting – predictions can be made about social behavior when a combination of different personality characteristics (here: traits and motives) is taken into account than when just only one kind of personality variable is examined.

Incongruence between implicit motives and explicit life goals can also trigger emotional problems, as Brunstein and colleagues (1995; Brunstein et al., 1998; for an overview, see Brunstein, 2010; Brunstein, Schultheiss, & Maier, 1999b) reported in studies on the emotional well-being of college students. In these studies, the participants reported their current agentic (achievement and power) and communal (affiliation and intimacy) goals representing the consciously accessible and personally meaningful objectives, purposes, and projects they were striving for and sought to attain in their present life situation. At the same time, the strength of their implicit agentic and communal motives was assessed using the TAT. The participants rated their emotional well-being on scales of positive and negative mood in everyday life, with ratings being taken regularly over a period of several weeks to months. The results can be summarized as follows (Fig. 9.4): The more strongly committed students were to goals that corresponded with their motives (i.e., agency-motivated students to agentic goals and communion-motivated students to communal goals), the higher their emotional well-being. Conversely, participants who were committed to goals that were ill-suited to satisfying their implicit motives or were even in direct opposition to these motives (i.e., communion-motivated students pursuing agentic goals or agency-motivated students pursuing communal goals) reported a marked decrease in positive affect and a corresponding increase in negative affect in everyday life. Even when participants succeeded in accomplishing goals that did not correspond with their motives, this was not reflected in a relevant increase in emotional well-being. In fact, successes of this kind must often be considered Pyrrhic victories: The more intensely participants focused on achieving goals that were incongruent with their needs, the more they neglected other goals that would have been better suited to satisfying their motives.

Brunstein et al. (1998) explained these findings as follows (see also Schultheiss, Jones, Davis, & Kley, 2008). If self-generated goals exhibit incentives that are compatible with strongly developed (implicit) motives, the respective incentives are affectively enhanced, in accordance with the idea that the valence of a goal is equivalent to the multiplication of incentive and motive (see Chap. 6). The satisfaction felt once the goal in question is accomplished is proportionately intensive in this case – as is the disappointment if its realization fails. The reason for this is that success implies that a strong motive is satisfied whereas failure signalizes that a strong motive remains unsatisfied. If, however, incentives are paired with weak motives, the goals in question remain relatively neutral. Accordingly, emotional reactions to successes and failures when trying to achieve the goal are comparatively subdued.

Follow-up studies focused primarily on the idea that a high degree of motivational congruence exerts positive effects on certain aspects of mental health while motivational incongruence represents a risk factor potentially impairing psychological well-being. Hofer and colleagues (e.g., Hofer, Chasiotis, & Campos, 2006b; for an overview, cf. Hofer, 2010) have been able to show these relationships consistently in Western and non-Western cultures. Another trend is that

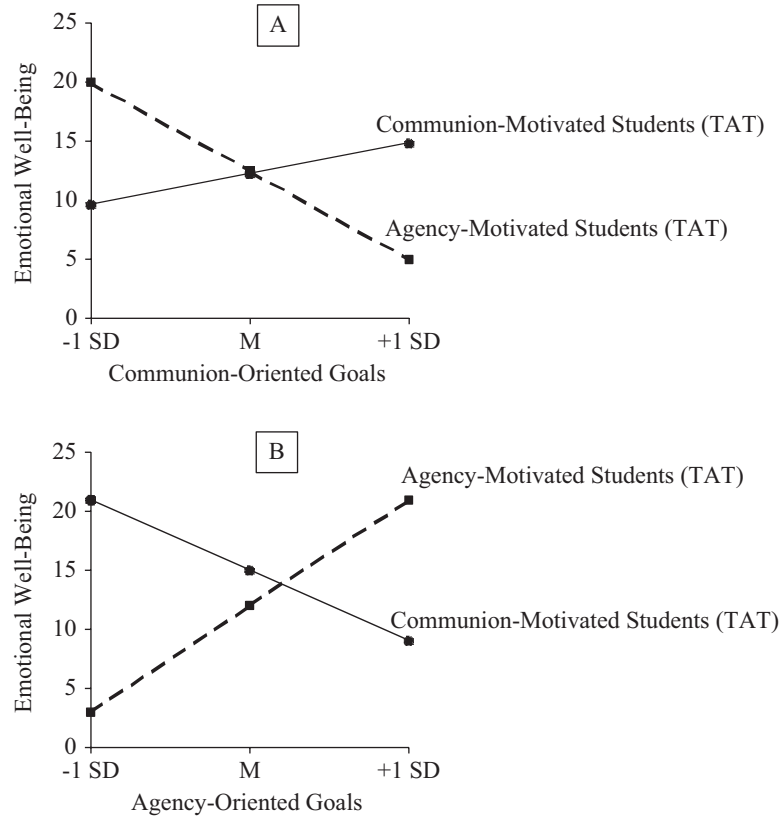

Fig. 9.4 Emotional well-being as a function of implicit agentic motives (achievement and power) and communal motives (affiliation and intimacy) and self-reported goals in everyday life. (**a**) Communion-oriented goals (self-report) are associated with high emotional well-being among participants high in implicit communal motive (TAT) but with relatively low emotional well-being among those high in implicit agentic motive. (**b**) Agency-oriented goals (self-report) are associated with high emotional well-being among participants high in implicit agentic motive (TAT) but with relatively low emotional well-being among those high in implicit communal motive (TAT) (Based on Brunstein et al., 1995, p. 7)

the concept of motivational incongruence is receiving an increasing amount of attention. Baumann, Kaschel, and Kuhl (2005) suggested that motivational incongruence acts as a "hidden stressor," i.e., as a source of tension that is located within the individual, yet difficult to identify, and that creates internal conflicts and negative affect (see Chap. 13). The following study about couple relationships shows that it is quite useful to consider all available information, covered by the interaction between implicit and explicit motives, when analyzing motivational phenomena (for a similar example about work, see Sect. 9.5).

9.4.2.1 Study: Quality and Stability of Couple Relationships as a Function of Implicit and Explicit Needs for Closeness

Hagemeyer, Neberich, Asendorpf, and Neyer (2013) measured the needs for closeness to the partner in a sample of 547 heterosexual couples, both as implicit motives (with a picture story test they had created for this purpose) and explicitly stated needs (questionnaires). They then analyzed how these two motive measures were involved in the prediction of relationship satisfaction (measured both concurrently with the two

motives and 1 year after the motive measures had been taken) and stability (continuation of the relationship or breaking up within 1 year). The authors based their predictions and statistical tests (a moderated regression analysis adapted for dyads) on a careful analysis of all possible combinations of the two measured needs.

Hagemeyer et al. expected positive effects on perceived quality of relationship particularly in cases in which both the implicit and the explicit need for closeness are strong (congruence among strong needs), but not if both are weak (congruence among weak needs) – because it is much more likely in the first scenario that closeness to the partner is established and perceived as rewarding. Results confirmed these expectations. Participants who had expressed a strong need for closeness, both implicitly and explicitly, were the most satisfied with their relationship. This was true regardless of whether the prediction was tested concurrently or 1 year later. Congruence in cases of weaker needs, on the other hand, was associated with far lower relationship satisfaction. Motivational incongruence was particularly important for predicting relationship stability, and it did not matter in which direction the two needs for closeness differed (high implicit/low explicit or low implicit/high explicit). Either way the risk of breaking up was higher for participants with incongruent needs compared to their counterparts whose needs were congruent. Remarkably, this finding was still significant when differences in couple satisfaction were controlled statistically. For instance, participants who expressed a strong explicit desire for closeness although their implicit need was only weak were more prone to break up with their partner even in cases in which they had not been particularly dissatisfied with their relationship.

The analysis conducted by Hagemeyer et al. (2013) is relevant to research on motivational (in) congruence in multiple ways. Firstly, it is not enough to reduce the concept of motivational congruence to a small difference between implicit and explicit motives. To put it in algebraic terms, Hagemeyer et al.'s findings about couple satisfaction were based on a *multiplication* (implicit times explicit) rather than a *difference* (implicit minus explicit) of the indirect and direct measures of need for closeness. Without considering the strength of the needs in this way, the authors would not have been able to find their reported results on relationship quality. The prognostic capacity of direct and indirect motive measures can only be fully exhausted if both are combined with each other in every way possible. Secondly, the analysis furthermore shows that motivational incongruence *alone* is a risk for relationship maintenance: the direction of discrepancy (implicit < explicit or implicit > explicit) does not matter. This was not the result of a preliminary calculation (making an absolute difference of the two need measurements) but instead the result of the statistical analysis. Thirdly, Hagemeyer et al.'s findings confirm Baumann et al.'s (2005) assumption that motivational incongruence constitutes a *hidden* stressor. How participants with incongruent needs rated their relationship satisfaction was not a red flag indication for an increased risk of breaking up.

Winter (1996) distinguishes two kinds of discrepancies that may arise between implicit and explicit motivational tendencies:

- First, a person might set a goal that is not backed up by a corresponding motive (e.g., a career goal despite a weak achievement or power motive).
- Second, achieving a personal goal might come into direct conflict with satisfying a motive in another domain (e.g., forming a harmonious relationship despite a strong need for exercising power).

Given discrepancies of this kind, it is all the more important for strategies of self-control to be applied in goal attainment settings (Kuhl, 2001; Sokolowski, 1993; see also Chap. 12). The first kind of discrepancy may make it necessary to boost the incentive value of a goal that is not very attractive in its own right. The second kind of discrepancy may make it necessary to control impulses emanating from a latent motive that impede the realization of consciously selected goals, values, and norms. However, behavioral

regulation of this kind is steered by volitional control rather than emotional preferences, and thus requires effort and mental resources that, to use the analogy introduced by Muraven and Baumeister (2000), resemble a muscle that can become fatigued up to the point of exhaustion by constant exertion. Volitional self-control may be indispensable for adaptive behavior, but it can have adverse effects on mental health if accompanied by long-term conflict and stress (Kuhl, 2001). In a study with managers, Kehr (2004a) showed that chronic discrepancies between implicit and explicit motives are associated with the risk of volitional depletion or exhaustion, one effect being reduced well-being.

9.4.3 Harmonization of Explicit and Implicit Motives

The notion that implicit and explicit motives often exist side by side but that discrepancies between the two types of motives increase the risk of adaptation problems raises two further questions:

1. How do people whose implicit and explicit motives are compatible differ from people whose implicit and explicit motives are less well attuned?
2. Which interventions can reduce or bridge the gap between implicit and explicit motives?

9.4.3.1 Moderating Variables

Both of these questions have been addressed in studies with a primary focus on short-term and long-term goal setting. To answer the first question, we need to identify personality characteristics that moderate the relationship between implicit motives and explicit goals. The finding that the relationship between implicit motives (TAT) and explicitly stated goals (self-reports) tends not to be significant only really indicates that, although some people commit to need-incongruent goals, there are others whose goals do correspond with their motives. In accordance with their function in statistical analysis, variables that allow these two groups of people to be distinguished are known as moderators. Subsequently, I will discuss three known examples for this (for an overview of the application of the moderator concept to questions of motivational congruence, cf. Thrash, Cassidy, Maruskin, & Elliot, 2010).

Action Versus State Orientation Brunstein (2001) established in a student sample that the disposition for failure-related action versus state orientation, as described by Kuhl (1983; Kuhl & Beckmann, 1994a, 1994b; see Chap. 13), is associated with the strength of the correlation between implicit motives (TAT) and explicit goals (self-report). The study included motives and goals pertaining to agency (achievement and power) and to communion (affiliation and intimacy). Whereas action-oriented individuals pursued goals that thematically matched their motives well, the goals of state-oriented individuals did not show any clear relationship with their implicit preferences. In their studies on achievement motivation, Baumann, Kaschel, and Kuhl (2005) showed for both student and clinical samples that state-oriented individuals tend to take on goals that differ substantially from their implicit motives, particularly under stressful circumstances.

The explanation for such findings is the difficulty state-oriented individuals have with regulating negative affect (Kuhl, 2001). Even smaller instances of failure can cause them to ruminate, which effectively creates negative affect, such as feelings of tension, to last longer. In a state of continuous tension, personal emotional preferences can no longer be evaluated and integrated into the formation of personal goals. The situation for action-oriented individuals is quite different. They are specialists in alleviating states of tension (e.g., unpleasant or threatening situations; Kuhl, 2001) and transforming them into more relaxing states. According to Kuhl, relaxation is an important condition for accessing motive-relevant memory systems ("extension memory") when setting personal goals. Such memory systems store information about personal preferences that are represented in an associative network linking the execution of behavior to affective experiences. This information is fre-

quently inaccessible to state-oriented individuals, particularly when they face smaller or larger stressors. When setting personal goals, individuals high in state orientation are thus affectively blind with regard to their own intrinsic needs. Instead, their intentions are determined by social expectations and external influences (Baumann & Kuhl, 2003; Kuhl & Kazen, 1994).

Self-Determination and Identity Development Based on Deci and Ryan's (2002) self-determination theory, Thrash and Elliot (2002) demonstrated that students whose sense of self-determined behavior was strongly developed showed a higher similarity between implicit motives (TAT) and explicit goals (self-report) with regard to achievement. Students whose behavior tended to be influenced by the expectations of others showed clear differences between the strength of their implicit achievement motive and the degree of self-ascribed achievement orientation. The self-determination scale (SDS) functioned as moderating variable. This questionnaire measures two aspects of self-regulated behavior: (a) the extent to which individuals' behavior is based on their own choices and core interests and (b) the extent to which individuals are aware of their own feelings and their sense of self. Further studies by Thrash, Elliot, and Schultheiss (2007) showed that high scores on scales that measure attentiveness to internal states (e.g., a person's physical awareness) were associated with higher motivational congruence. Scales that measure attentiveness directed toward social demands and expectations, however, correlated negatively with the degree of motivational congruence. Hofer et al. (2010) reported further evidence for the assumption that motivational congruence benefits from self-determination. They confirmed the moderating effect of self-determination (SDS) cross-culturally in samples in Germany, Hong Kong, and Cameroon. This study, too, focused exclusively on achievement.

Two further sources match these findings: Hofer, Busch, Chasiotis, and Kiessling (2006a) tested what kind of relationship exists between motivational congruence (measured by TAT and questionnaires thematically relating to affiliation) and interpersonal differences in identity development (measured with scales that determine different aspects of identity status according to Marcia, 1980) in a study with high school students and college freshmen. Participants who had made substantial progress in forming a "self-developed identity" (high degree of personal commitment to chosen aspects of identity paired with intensive exploration of alternatives) showed much higher motivational congruence than those who lacked similar development. The opposite was true for aspects of "adopted identity" (high personal commitment paired with little exploration). The higher the extent to which identity targets were oriented toward social expectations, the higher was the probability that the implicit need for affiliation, depending on its strength, did not have a match in the participants' motivational self-image.

A study by Schattke, Koestner, and Kehr (2011) contributed important insights into the developmental origin of motivational incongruence. These authors reexamined archived data from the aforementioned (see 9.2.4) longitudinal study by Sears et al. (1957). Based on the young adults' (31 years) responses to a TAT and adjectives for self-description, the authors constructed an aggregate index of motivational incongruence covering the three areas of achievement, power, and affiliation. This index represented the dependent variable of interest. The authors extracted potential predictors of incongruence from available data relevant to development and upbringing which had been collected for the same individuals at age 5. High incongruence in young adults was predicted by (a) parenting styles that constrained autonomy during childhood and (b) experiences of separation during the time of inchoate language development as well as excessive parental demand in the relationship between mother and child. As Schattke et al. argued, both factors can impair the development of a self-aware personality. Symptomatically, such individuals are unable to sufficiently integrate latent wishes, needs, and interests into their own self-image.

Referential Activity The moderators discussed so far are without exception variables that are

measured with questionnaires. Even though there are theoretically sound reasons for the effect of these variables on the degree of motivational congruence, the question remains which mechanisms lead to the observed moderating effects. A study by Schultheiss, Patalakh, Rawolle, Liening, and MacInnes (2011) provides interesting insights with regard to this question. Their central assumption was that implicit motivational systems primarily process nonverbal information whereas the system of explicit motives is based on verbal representations. An exchange of information between both systems is a prerequisite necessary for their coordination. For this it is required that nonverbal information is "translated" into verbal information and vice versa. This process is known as "referential activity."

Bucci (1984) had developed a color-naming test in order to measure referential activity. Participants of the test have to both read words and name colors; a score of referential activity is then formed based on the difference of the respective latency periods (the smaller the difference, the higher the referential activity). Schultheiss et al. tested this method with student samples from the United States and Germany. They first discovered that the resulting difference scores of referential activity made it possible to determine reliable differences across people. In further studies, they measured implicit motives for achievement, power, and affiliation with the TAT and thematically corresponding goals with self-report methods. The absolute discrepancy between implicit motives and explicit goals was determined and subsequently summed up for each theme in order to create a total score of motivational congruence. As expected, a higher degree of referential activity was associated with a higher level of congruence between the motives measured by TAT and the goals based on self-report. In addition to correlational studies, Schultheiss et al. also conducted a study in which they experimentally manipulated referential activity. Based on their results, it seems more likely that a high degree of referential activity is the cause – rather than the consequence – of high motivational congruence.

9.4.3.2 Interventions

The second question mentioned above is about the identification of processes that can increase the congruence between conscious goals and implicit motives. Schultheiss and Brunstein (1999) reported that goal imagery serves this kind of mediating function that promotes congruence.

Definition

Goal imagery can be defined as the perception-like mental simulation of the pursuit and attainment of a potential goal.

Goal imagery is initiated even before an individual has committed to a particular goal (see the following study). It simulates a course of action, is rich in sensory details, focuses affective experiences, and involves the direct experience of one's (imagined) behavior (e.g., the feelings that occur when one engages in the respective behavior). To use Epstein's (1994) terminology, goal imagery is an "experiential" form of information processing, to be distinguished from the rational processing of symbolic and linguistic information.

Experiential means that information is processed quickly and intuitively, with people being guided by their previous affective experiences. Rational, on the other hand, means that information is processed analytically and usually involves conscious deliberation and considered judgments.

Study

Study on Goal Imagery

Schultheiss and Brunstein (1999) assumed that the functioning of implicit motives is much better suited to an experiential than to a rational form of information processing (for a detailed account of this model, see Schultheiss, 2001). Therefore, they hypothesized that implicit motives only affect the formulation of intentions if a goal is translated from its original format in the medium of language to the experiential format. Goal imagery is ideally suited to fulfill this translative function, as Schultheiss and Brunstein (1999) found in two studies. After exploring a specific goal and the actions associated with it in

a goal-imagery exercise, students only felt committed to the goal if it corresponded with their implicit motives (TAT). Without goal imagery, no systematic relationship was observed between participants' implicit motives and their goal commitment. Furthermore, it emerged that participants in the goal-imagery group were more likely to achieve the respective goal than participants who had not engaged in the goal-imagery exercise. Langens (2002) corroborated this finding in a field study that examined the effects of daydreams on the attainment of personal goals. Daydreams led to the "revitalization of goal incentives" in achievement-motivated individuals, with positive effects on the execution of goal-directed behavior.

Goal imagery leads to the activation of implicit motives in the context under consideration. This puts people in a better position to decide whether the goal in question corresponds with their needs – or contradicts them. Moreover, goals can be attained much more effectively if they are backed up by corresponding motives (Kehr, 2004b), on the condition that people are able to visualize clearly and vividly what pursuing and attaining a specific goal will mean to them emotionally.

The method of goal imagery is rather complex and requires external guidance, at least initially. Job and Brandstätter (2009) showed that the formation of motive-congruent goals can be facilitated with a comparatively parsimonious procedure, namely, the activation of *affect-focused goal fantasies*. Student participants were asked to indicate which goals they would pursue in a hypothetical job scenario (starting a job as project leader). For this purpose, they were provided with a list of goals that could be classified into the categories achievement, power, and affiliation. Even before making their choices, one group of participants were asked to imagine how much the respective goals would elicit emotions that are associated with the pursuit of affiliative- (study 1) or achievement-related (study 2) concerns, namely, feelings of joy and happiness in the case of affiliation and feelings of interest and challenge in the case of achievement (for the motive specificity of affect, see McClelland, 1985b). Subsequently, participants were asked to compare how much the different goals suited them and pick accordingly. If the focus was on affiliation-related emotions, the proportion of affiliation-related goals in the total number of chosen goals grew alongside the strength of the affiliation motive (TAT). In an analogous manner, if the focus was on achievement-related emotions, the proportion of achievement-related goals increased, the higher the individual's achievement motive was. Participants who had not dived into a goal fantasy did not show a systematic relationship between the goals chosen and the strength of their implicit motives. The procedure chosen in this study, however, can only be used with people who are able to imagine themselves in the respective scenario. Nevertheless, in a third study, Job and Brandstätter could show that the congruence-increasing effect of affect-focused goal fantasies can also be found for more daily or realistic goals.

Summary

Explicit preferences, traits, role images, and values influence the way that motives are expressed in behavior. Certain combinations, such as high extraversion in conjunction with motives for power and affiliation, facilitate the satisfaction of implicit motives, whereas other combinations make it harder for implicit motives to be satisfied (e.g., high introversion in conjunction with power and affiliation motives). Both for achievement and interpersonal relationships, simultaneously high implicit and explicit motives are associated with positive effects on how successful people act and feel satisfied with the outcomes of their behavioral engagement.

Discrepancies between implicit and explicit motives, however, can have two kinds of adverse effects:

1. Motivational conflicts can occur, resulting in emotional strain.
2. There is a need for increased self-control, the effects of which are limited if attempts to harmonize the two types of motives do not succeed.

A self-determined approach to goal setting and the ability to visualize the emotional implica-

tions of one's future actions are two examples of ways in which explicit goals can be attuned to implicit motives.

9.5 Challenges and Perspectives

The research discussed in this chapter demonstrates that there is solid empirical support for the notion of distinguishing implicit from explicit motives. The two types of motives are associated with specific behavioral characteristics. They are responsive to different kinds of incentives and reflect different types of needs. It can also be assumed that the two types of motive are influenced by different child-rearing practices, operational in different stages of development. McClelland, Weinberger, and Koestner's (1989) model of dual motives has led to more insightful interpretations of empirical findings in the field of motivation psychology. Originally this analysis was based on a post hoc interpretation of studies that had only in a few cases tried to distinguish between implicit and explicit motives. In fact, the two kinds of motives have rarely been assessed in the same study, let alone in the same sample. In the meantime, however, the pioneering work of the aforementioned theorists has stimulated a large number of new and insightful studies. These studies do not only analyze the specific or separate effects of the two types of motives but also address the issue of how implicit and explicit motives interact with one another and work together in the prediction of behavior and subjective experiences.

Findings have shown that a high level of coherence between implicit and explicit motives is associated with greater efficiency and better adaptation, whereas conflicts between implicit and explicit motives are interpreted as potential causes for motivational conflicts and their resulting detriments for behavior and well-being. Which challenges and perspectives can be delineated based on empirical evidence so far?

1. The observation that direct and indirect motive measures taken within the same thematic content area are (almost) uncorrelated could be interpreted as evidence that implicit and explicit motives represent constituents of two independent motivational systems. However, there are two caveats.

   On the one hand, low correlations resulting from a lack of covariation of two variables across individuals are not the same as independence within the same person. Correlations provide hardly any information about whether implicit and explicit motives work independently or in a parallel manner, whether they interact with one another, create conflicts or cooperate synergistically. However, such questions about the internal dynamics of motivational systems, including relevant external factors (triggers, incentives and stimuli that are relevant to motives), must be addressed in order to develop strong explanations for how implicit and explicit motives work and relate to each other in the prediction of behavioral correlates.

   On the other hand, it is important to keep in mind that convergence across procedures is low even among different indirect motive measures (e.g., TAT, OMT, grid technique). Inter-test correlations are low enough to be virtually indistinguishable from zero (see Schüler, Brandstätter, Wegner, & Baumann, 2015). Because of this it seems difficult, or even impossible, to map different indirect motive tests on the same latent variable (e.g., the construct of implicit need for achievement) yielding unbiased parameter estimates in the prediction of motive-relevant behavior. Methodological variance remains an inveterate problem for the measurement of implicit motives. It is therefore all the more impressive that such barely correlated instruments have been able to deliver so much consistent empirical evidence.

2. In the meantime various moderators that might influence the strength of the correlation between implicit and explicit motives have been identified. In general, motivational congruence appears to be more strongly developed among people with high levels of self-regulatory abilities (self-determination,

action orientation) and people with a high sensibility to inner experiences, respectively. However, both the moderators tested and the motivational dispositions that were measured mostly represent trait-like variables. From a statistical point of view, it is completely arbitrary which feature is treated as predictor, which one as criterion and which one as moderator variable. It is impossible to draw any clear conclusions about the causal direction. For instance, it is imaginable that individuals with higher levels of motivational congruence compared to those with lower levels are more adept at regulating their own behavior and emotions. Therefore, further research that experimentally controls the phenomenon of motivational congruence will be necessary. Such research requires a clear understanding of interventions that can create or potentially dismantle a connection between implicit and explicit motives.

Apart from moderators that provide information about the conditions of motivational (in)congruence, more and more attention has been directed toward moderators pertaining to the effects of motivational (in)congruence. In a study with employees, Thielgen, Krumm, and Hertel (2015a) found that motivational incongruence for achievement and affiliation can have negative effects on job motivation. Cases in which strong implicit motives (measured with the Multi-Motive Grid by Sokolowski, Schmalt, Langens, & Puca, 2000) did not have a corresponding counterpart in participants' self-attributed motives (measured with the Personality Research Form) were particularly problematic. Due to the size of their sample (N = 756) Thielgen et al. were able to further refine their analysis. They found that job motivation was much less afflicted by motivational incongruence in older employees as was the case for younger ones. The more conflicts between motives were added through a close network of motive-stimulating incentives in participants' work environment, the stronger this age difference became. The authors explained this age dependence of the observed incongruence effects with the age-correlated ability to use volitional strategies to overcome motivational conflicts (for similar findings on job satisfaction, see Thielgen, Krumm, Rauschenbach, & Hertel, 2015b). In addition to the aforementioned studies by Hagemeyer et al. (2013) and Lang et al. (2012), the findings reported by Thielgen et al. (2015a) provide another example for how impressive progress has been made in modelling the effects of congruence and incongruence, particularly in the applied fields of motivational psychology (relationships and work). What remains is the analysis of intervening processes that could explain the observed effects even better, e.g., by integrating in the analysis of moderator variables the examination of mediating processes.

3. The conceptual introduction of dual motives was inspired by the assumption that implicit and explicit motives represent two independent motivational systems. Consequently, the introduction of the conception of motivational (in)congruence focused on the interplay of implicit and explicit motives (Brunstein, 2010; Brunstein, Maier, & Schultheiss, 1999a). The idea that incongruence between the two systems increases the risk of negative developments has been particularly influential. This idea has even applied in clinical psychology and psychotherapy (Neumann & Schultheiss, 2015; Pueschel, Schulte, & Michalak, 2011; Schultheiss et al., 2008). It is important to remember, however, that a completely coherent (total) system of motivational tendencies would be neither dynamic nor flexible and therefore at best a desirable temporary state in which all motivational forces are in balance.

Essentially, motivational (in)congruence is about interactions into which the various motivational systems can enter under certain circumstances (i.e., in the presence of adequate situational incentives). The resulting questions are complex, however. On the one hand, interactions between implicit and explicit motives are possible not only within the same domain but also across different domains (see Trapp & Kehr, 2016). On the other hand, conflicts and coalitions

are also imaginable between motives of the same system (e.g., between implicit desires for power and intimacy) as well as motives of different systems. Moreover, it is possible that motives that are frequently co-activated merge into complex configurations that then influence behavior as a crystallized combination of closely interlinked preferences (McClelland, 1992). Even though such interactions are theoretically sound, restrictions of empirical research make it anything but easy to find evidence for them. Big samples are the minimum requirement for reliable findings. Right now, there is no indication that a unifying theory drawing on a small number of principles to explain the interaction between different motivational systems (implicit and explicit motive incentive entanglements) in different behavior domains (achievement, power, affiliation, intimacy) will be developed anytime soon. For the time being, it therefore seems reasonable to analyze coalitions and conflicts between implicit and explicit motives – including their relevant situational influences and processing mechanisms – using clear and well-defined problems. This chapter provided several such examples.

Review Questions

1. *Which findings inspired and lend support to the idea that implicit and explicit motives represent two different constructs?*

   McClelland et al. (1989) reported four groups of findings.

   Measurements of the two types of motives are statistically almost independent of each other. Direct (questionnaire) and indirect (TAT) methods of measuring nominally similar motives have only 2% or less of their variance in common.

   The two types of motives predict different classes of behavior. Implicit motives predict spontaneous, unprompted behavior and long-term behavior trends (e.g., investing more effort in difficult tasks; the frequency of engaging in social contact with others in everyday life). Explicit motives predict behavior that is subject to volitional control and that corresponds with the self-concept (e.g., deliberate decisions and considered appraisals).

   The two types of motives are activated by different incentives. Implicit motives are activated by incentives inherent in the activity or task itself (e.g., difficulty and novelty in the case of the achievement motive). Explicit motives are activated by social incentives (e.g., the recognition and appreciation of an achievement).

   Implicit motives develop via early, affectively charged learning experiences (e.g., increasing mastery of a task, unhindered experience of social efficacy), whereas explicit motives are not developed until later in life, usually hand in hand with the development of self-concepts represented in the medium of language.

2. *Outline an experimental design to test the results of Spangler's meta-analysis. Which factors would have to be varied systematically?*

   Three factors would have to be accounted for:

   The method used to measure the achievement motive (indirect/TAT vs. direct/questionnaire)

   The type of behavioral criterion (spontaneous behavior vs. behavior that is under volitional control)

   The type of achievement incentive (activity incentives vs. social incentives)

3. *Explain the concept of "affective" needs with reference to the implicit achievement motive (in particular for the "hope for success" component of this motive).*

   The activation of the implicit achievement motive is tied up with anticipatory emotions (hope for success). These give a foretaste of the self-evaluative emotions (pride in mastering a challenging task)

experienced upon reaching the desired goal state and are the driving force behind the behavior instrumental in attaining a goal. The achievement motive specializes in change of affect. It is activated by the prospect of converting an unsatisfactory situation (difficulty in mastering a task) into an emotionally more satisfactory one (mastering the difficulty). This is where effort and persistence come in. If the efforts are successful, they are rewarded by satisfaction and pride.

4. French and Lesser (1964) *found that the behavioral expression of the achievement motive is influenced by people's role orientations. How might the power motive interact with prosocial value orientations?*

   Social responsibility might be assessed as a value orientation alongside the power motive (cf. Winter & Barenbaum, 1985). In conjunction with high social responsibility, we can expect the power motive to be associated with prosocial and generative behavior (e.g., involvement in human rights organizations, willingness to assume management duties in groups, support for weaker members of society, choice of a teaching career). In conjunction with low social responsibility, we can expect the power motive to be expressed in egocentric and socially unacceptable behaviors (criminality, physical conflicts, impulsive and inconsiderate behavior toward others, high-risk behavior in traffic, promiscuity and sexual possessiveness).

5. *Name three examples of studies that could show that high congruence between implicit and explicit motives is only adaptive in cases in which this congruence is achieved in the presence of strong needs.*

   Brunstein and Maier (2005) found that only individuals who had both a strong implicit need and a strong explicit need for achievement increased their efforts in ego-involving situations if their performance was at risk of worsening in comparison to others.

   Lang et al. (2012) reported that supervisors evaluated the performances of employees highest when the latter had both a high implicit and a high explicit achievement motive.

   Hagemeyer et al. (2013) could show that satisfaction in close relationships was highest when the need for partner-related closeness was strongly developed both implicitly as well as explicitly.

6. *Explain why motivational congruence is less beneficial if the strength of the needs involved is weaker.*

   If implicit and explicit motives are weak in a specific domain (e.g., achievement or intimacy), the valence of all incentives within this domain is to a large extent neutralized (valence = incentive times motive). No strong behavioral impulses are generated – at least not spontaneously. Furthermore, the rewarding experiences that make the respective domain attractive and appealing are missing.

7. *Which personality traits have an impact on the extent to which people commit to goals that correspond with their implicit motives?*

   It is ability to "tone down" negative affect and thus gain access to the affectively charged networks in which one's preferences are stored. This ability is more pronounced in action-oriented than in state-oriented individuals (Chap. 13).

   High levels of self-determination (cf. Deci & Ryan, 2002) make it more likely that people will choose goals that are congruent with their inner needs and protect them from rashly adopting goals that reflect the interests of others rather than their own needs. Referential activity (cf. Bucci, 1984) can be understood as the ability to

(continued)

translate verbal into nonverbal information and vice versa. According to Epstein (1994), this facilitates the exchange between the experiential format in which implicit preferences are processed and the rational-verbal format in which explicit motives are stored (see Schultheiss, Patalakh, Rawolle, Liening, & MacInnes, 2011).

8. Schultheiss and Brunstein (1999) *reported that goal imagery leads to higher congruence between implicit motives and the goals pursued. What other methods or interventions might help to harmonize implicit and explicit motives? Give examples and explain how they could work.*

Possible examples include:

Social assertiveness training (to reject goals induced by others)

Fantasizing about one's wishes and desires (to explore one's action preferences)

Acquiring the necessary skills to self-regulate emotional well-being (and reduce the negative affective states that block access to implicit motives)

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