CHAPTER 26

Achievement Motivation

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The pursuit of competence is ubiquitous in our daily experiences at work, school, and play. Achievement motivation theories seek to explain the processes that energize, direct, and sustain efforts to be competent (A. J. Elliot & Dweck, 2005). Although research has often emphasized outcomes such as performance and related processes (e.g., level of aspiration, persistence, enjoyment), competence pursuits typically occur in social contexts—either before an evaluative audience (real or imagined) or as a part of a team or group with a shared goal. Thus social behavior is another significant outcome that may be explained, at least in part, by achievement motivation.

Some of the most well-established approaches to understanding achievement motivation have focused on constructs such as levels of aspiration (Lewin, Dembo, Festinger, & Sears, 1944), achievement motives (McClelland, Atkinson, Clark, & Lowell, 1953), test anxiety (Mandler & Sarason, 1952), risk taking (Atkinson, 1957), attributions (Weiner & Kukla, 1970), perceived competence (Harter, 1983), achievement goals (Maehr & Nicholls, 1980), self-efficacy (Bandura, 1997), and implicit theories (Dweck, 1999; for a review, see Thrash & Hurst, 2008). This chapter focuses specifically on the motive- and goal-based approaches to achievement motivation that have been integrated in the hierarchical model of achievement motivation (Elliot, 1999; Elliot & Church, 1997). We begin by describing key theoretical concepts and tenets in the motive and goal-based approaches, with particular attention to how these concepts are measured and their implications for social behavior. Following this introduction, we review extant research linking both motives and goals to social behavior. The chapter concludes with our perspective on an agenda for future research in this area.

Motive-Based Approaches to Achievement Motivation

In a seminal study of individual differences in college-age men, Murray (1938) posited the existence of a variety of *needs* that underlie human behavior. Needs may represent either "a temporary happening ... [or] a more or less consistent trait of personality" (p. 61). They were conceptualized as hypothetical entities that represent "potentiality or readiness to respond in a certain way under given conditions" (p. 61) and as "a force which organizes perception, apperception, intellection, conation and action in such a way as to transform in a certain direction an existing, unsatisfying situation" (p. 63).

Several of the desired effects on perception, cognition, affect, and behavior noted by Murray (1938) were specifically linked

to the pursuit of competence. For example, the *need for achievement* was conceived as "the desire or tendency to do things as rapidly and/or as well as possible" (p. 164). Likewise, the *need for infavoidance* represents a desire "to avoid humiliation, to quit embarrassing situations or to avoid conditions which may lead to belittlement: the scorn, derision or indifference of others, to refrain from action because of fear of failure" (p. 192). These two needs parallel the appetitive and aversive achievement motives that later emerged in the motive-based approach to achievement motivation.

Achievement Motives

The seminal theorizing and research on achievement motives per se was conducted by David McClelland, John Atkinson, and their colleagues (e.g., Atkinson, 1957; McClelland, Atkinson, Clark, & Lowell, 1953). They conceived of motives as the learned association between "a cue [and] a change in an affective situation" (McClelland et al., 1953, p. 28). In other words, motives link cognitive representations of environmental cues with learned affective responses to those cues in such a fashion that the cue is sufficient to arouse an anticipatory affective response and to energize corresponding achievement behavior in a particular direction.

This definition raises an important question: Which emotions energize achievement behavior? At the broadest level of analysis, any pleasant emotion linked to success or unpleasant emotion linked to failure could provide the foundation for an achievement motive. Such a broad-based approach has merits, but it also limits us to relatively straightforward approach–avoid behavioral predictions for achievement motives based on the hedonic principle. A more common approach has focused on emotions that are most central to competence pursuits.

From this perspective, it is important to recognize that competence has close relations to the self. Self-perceptions emerge from perceptions of competence (Harter, 1983), and, from a very early age, competence and incompetence appear to generate self-evaluative emotional responses (Heckhausen, 1984; Lewis, Alessandri, & Sullivan, 1992; Lewis, Sullivan, Stanger, & Weiss, 1989; Stipek, Recchia, & McClintic, 1992). One class of emotions can be distinguished for their unique role in self-evaluative processing: the self-conscious or social emotions (Tracy, Robins, & Tangney, 2007). These emotions include pride and shame, which are the two exemplars most frequently posited to be associated with achievement motives. Anticipatory pride in succeeding was proposed as the basis for the need for achievement (nAch), and anticipatory shame in failing was proposed as the basis for fear of failure (FF) (Atkinson, 1957; McClelland et al., 1953).

Assessing Achievement Motives

Murray (1938) held that humans were unlikely to be aware of the motivations underlying their behavior. As such, he developed a projective ("apperceptive") method using the Thematic Apperception Test (TAT; Murray, 1943) for assessing individual differences. McClelland and colleagues (1953) later adapted this fantasy-based method and developed a scoring protocol for assessing the need for achievement using this approach (for a summary of differences between these methods, see Winter, 1999). Other scoring systems also have been developed for both nAch and FF (Birney, Burdick, & Teevan, 1969; Heckhausen, 1963; Schultheiss, 2001; Winter, 1994). Tables 26.1 and 26.2 summarize the thematic content that these different systems code for nAch and FF, respectively.

As seen in Table 26.1, the McClelland and colleagues (1953) system for nAch has the most extensive set of coding categories. Because it was empirically derived, the relevance of some categories is not intuitive and may even be theoretically questionable. For example, it is not clear why nAch scores should increase when achievement imagery depicts negative affective states, negative anticipatory goal states, or unsuccessful instrumental activities. The Heckhausen (1963) coding system was developed in part to address these limitations and to provide a more theoretically congruent measure of the nAch motive. It is a simpler system, with only six major coding categories, but it was not available for English-language researchers until translated by Schultheiss (2001). Winter (1994) developed a system for coding running text that may be the most flex-

TABLE 26.1. Summary of Thematic Categories in Implicit Need for Achievement Coding Systems

McClelland, Atkinson, Clark, & Lowell (1953)	Heckhausen (1963) (English translation by Schultheiss, 2001)	Winter (1994)
Achievement imagery[a]	Need for achievement and success	Adjectives that positively evaluate performances
Stated need for achievement	Instrumental activity to achieve success	Goals or performances that are described in ways that suggest positive evaluation
Instrumental activity (successful, doubtful, or unsuccessful)	Expectation of success	Mention of winning or competing with others
Anticipatory goal states (positive or negative)	Praise	Failure, doing badly, or other lack of excellence
Obstacles or blocks (personal or environmental)	Positive affect	Unique accomplishments
Nurturant press	Success theme	
Affective states (positive or negative)		
Achievement thema		

[a]Stories in which achievement imagery is altogether absent receive a negative achievement motivation score. Those in which achievement imagery is doubtful receive a zero score.

ible of the available coding systems because it can be applied to any data that are at least partly imaginative (e.g., speeches, conversations, fictional writing). This system is similar to the Heckhausen (1963) system in that the number of coding categories is limited compared with the McClelland and colleagues system; however, the content of the categories is somewhat unique compared with the other systems. This coding system also focuses exclusively on approach-based motives and does not differentiate them from avoidance-based motives—a nuance that may help to explain why text concerning "failure, doing badly, or other lack of excellence" (Winter, 1994, p. 10) is coded positively for the achievement motive.

The categories in the two major coding systems for FF are summarized in Table 26.2. The Heckhausen (1963) system has seven major coding categories and is theoretically consistent with prevailing concepts of FF. Working independently of Heckhausen, Birney and colleagues (1969) used an approach similar to that of McClelland and colleagues (1953) to develop a system for coding Hostile Press in stories. This Hostile Press score was based on imagery depicting a threat presented by the situation to the participant and interpreted as an indicator of FF. Not surprisingly, this coding system is also vulnerable to concerns about content relevance. For example, it is not clear from a theoretical standpoint why one would infer high FF from stories that depict successful instrumental activity, anticipation of successful goal attainment, or pleasant affective reactions. Overall, we concur with the conclusions of McClelland (1987) and Schultheiss (2001)—the Heckhausen coding

TABLE 26.2. Summary of Thematic Categories in Implicit Fear of Failure Coding Systems

Heckhausen (1963) (English translation by Schultheiss, 2001)	Birney, Burdick, & Teevan (1969)
Need to avoid failure	Hostile Press imagery
Instrumental activity to avoid failure	Need press relief
Expectation of failure	Successful/unsuccessful instrumental activity
Criticism	Goal anticipation
Negative affect	Affective reactions to press
Failure	Blocks
Failure theme	Press thema

system provides the best fantasy-based approach for assessing nAch and FF motives.

The more recently developed fantasy-based methods for assessing achievement motives are quite refined and are less vulnerable to methodological criticisms that were frequently leveled in the 20th century (for details on these improved methods, see Schultheiss & Pang, 2007; Smith, 1992). The Picture Story Exercise described by Schultheiss and Pang (2007) is one example of a methodologically rigorous protocol for administering and scoring fantasy-based measures that yields psychometrically sound scores for motives. In addition to the projective measures described previously, the nAch and FF were also commonly assessed using self-report measures (e.g., Atkinson & Litwin, 1960; Conroy, Metzler, & Willow, 2002; Feather, 1965; Hagtvet & Benson, 1997; Herman, 1990; Jackson, 1974; Spence & Helmreich, 1983). Examples of items used to assess nAch include "I like to work hard" and "Once I undertake a task, I persist" (Spence & Helmreich, 1983, p. 42). Examples of items used to assess FF include "When I am failing, it is embarrassing if others are there to see it" and "When I am failing, I believe that my doubters feel that they were right about me" (Conroy et al., 2002, p. 90). In our view, the self-report measures that presently provide the most valid scores for nAch and FF are the Work–Family Orientation Questionnaire (particularly the work-mastery score; Spence & Helmreich, 1983) and the Performance Failure Appraisal Inventory (Conroy et al., 2002), respectively. Semiprojective tests have even been proposed to try to capitalize on the strengths of both projective and self-report assessments (e.g., Schmalt, 1999), although these measures have been used less frequently than either projective or self-report measures.

One source of great controversy and, ultimately, insight in the achievement motivation literature is the fact that scores from projective and self-report measures tend to correlate less strongly than would be expected if they were assessing a common motive (Spangler, 1992). Critics from either side often took this as evidence that the other approach did not yield valid scores of the relevant motive. In early writings, what we now call self-attributed or explicit (i.e., questionnaire-based) scores were intentionally distinguished and even distanced from motives by denying them status as a motive and calling it instead a *value* (e.g., deCharms, Morrison, Reitman, & McClelland, 1955). McClelland later backed off this position and recognized the existence of explicit motives as a separate motivational system (McClelland, Koestner, & Weinberger, 1989). This theoretical reconciliation was based on the conclusion that different motivational systems exist: a primitive implicit motive system that is grounded in affective arousal and a cognitively elaborated system that is based on an "elaborate system of explicit goals, desires, and commitments" (McClelland et al., 1955, p. 700). The former system is expressed in fantasy-based measures such as the Picture Story Exercise, whereas the latter is consciously accessible and may be assessed using self-report methods.

Schultheiss (2007) linked these motivational systems and their corresponding assessment methods to different memory systems—implicit motives and fantasy-based measures tap into nondeclarative memory systems of which the individual is not consciously aware, whereas explicit motives and self-report questionnaires tap into declarative memory systems of which the individual is consciously aware. The differences in these underlying memory systems may help to explain differences in the outcomes predicted by implicit and explicit motives. The nondeclarative memories tapped by implicit motives may be linked to procedural learning and Pavlovian conditioning that likely underlie the acquisition of skills, habits, and emotional associations. In contrast, the declarative memory system tapped by explicit motives may be linked most directly to outcomes based in semantic and episodic memories, such as conscious attitudes, retrospective judgments, and future intentions. Much remains to be learned about why implicit and explicit motives differ, but the ideas articulated by Schultheiss (2007; Schultheiss & Pang, 2007) provide fruitful ground for theory development and testing.

A significant emerging line of work in this area examines the factors that influence the relationship between implicit and explicit achievement motives. As Thrash, Elliot, and Schultheiss (2007) noted, the conclusion that implicit and explicit nAch are largely uncorrelated is reminiscent of early reports

of poor consistency between traits and behavior and between attitudes and behavior (Mischel, 1968; Wicker, 1969). In both of these prior consistency literatures, researchers subsequently uncovered two types of evidence that traits or attitudes are more systematically related to behavior than had been apparent in early research. First, methodological refinements resulted in stronger consistency coefficients. Second, consistency itself was found to vary systematically as a function of moderator variables. In parallel to the developments in these literatures, motive researchers have documented two classes of factors—methodological factors and moderator variables—that predict the degree of association between implicit and explicit nAch.

Regarding a methodological factor, Thrash and colleagues (2007) argued that the correlation between implicit and explicit nAch may have been underestimated in past research due to poor correspondence of content between implicit and explicit measures. Many popular measures of explicit nAch are based on Murray's (1938) conceptualization of nAch (e.g., Jackson, 1974), whereas McClelland and colleagues' (1953) widely used coding system for implicit nAch was derived empirically by examining how achievement imagery changes when the motive is and is not aroused. One unintended consequence of this approach was that the coding system deviates from Murray's conceptualization of the nAch (Koestner & McClelland, 1990). For example, the scoring system used by McClelland and colleagues counts negative anticipatory goal-state imagery toward the nAch score (e.g., "The boy thinks he just can't make it through college"; p. 129)—this content is exclusive of the achievement need described by Murray (1938). Thrash et al. (2007) reported that implicit nAch, assessed using Schultheiss's (2001) translation of Heckhausen's coding system, was uncorrelated with three existing measures of explicit nAch (*r*s = .00, .00, and .02); in contrast, it was significantly correlated with a new measure of explicit nAch ($r = .17$) that was designed to closely match the implicit nAch coding system in content. This finding indicates that implicit and explicit nAch are systematically related, albeit weakly, when assessed with measures that are properly matched for content.

Several studies have sought a fuller characterization of the relationship between implicit and explicit nAch by identifying dispositional variables that function as moderators. Thrash and Elliot (2002) examined the moderating role of *self-determination*, which refers to autonomy or authenticity (Deci & Ryan, 1985). Thrash and Elliot argued that feelings of self-determination reflect the development of explicit values that are well aligned with deeply grounded implicit motivational tendencies. As expected, self-determination was found to moderate the relation between implicit and explicit nAch. Implicit nAch was a robust predictor of explicit nAch among individuals high in self-determination ($r = .40$) but was unrelated to explicit nAch among individuals low in self-determination ($r = -.07$).

More recently, Thrash and colleagues (2007) examined three additional dispositional moderators: private body consciousness, self-monitoring, and preference for consistency. *Private body consciousness* refers to a sensitivity to internal bodily processes (Miller, Murphy, & Buss, 1981). Thrash and colleagues proposed that private body consciousness may promote congruence between implicit and explicit nAch, because the effects of implicit motive arousal are embodied and may be perceptible as diffuse gut feelings or surges of energy. *Self-monitoring* is the tendency to monitor the social environment and to adjust one's behavior or attitudes accordingly (Snyder & Gangestad, 1986). Self-monitoring was posited to impede congruence, because the achievement values internalized from the social environment are less likely to correspond to one's implicit motives than are internally generated values. *Preference for consistency* refers to a tendency to seek consistency among cognitions (Cialdini, Trost, & Newsom, 1995). Preference for consistency was expected to predict greater congruence, because individuals high in this trait would be more motivated to reconcile discrepancies between explicit motives and any rudimentary knowledge of one's implicit motives. Results showed that all three traits moderated the association between implicit and explicit nAch. Moreover, all three traits functioned as independent moderators, suggesting that multiple, distinct processes are responsible for motive congruence.

In related research on the congruence between implicit motives and explicit goals, Brunstein (2001) reported that state-oriented individuals, who have a tendency toward indecisiveness and hesitation (as opposed to action-oriented individuals, who have a tendency toward decisiveness and initiative), are more likely to adopt goals that are incongruent with implicit motives. More recently, Baumann, Kaschel, and Kuhl (2005) reported that state orientation predicted incongruence between implicit and explicit nAch only when individuals were under stress. In addition, motive incongruence led to lower well-being and partially mediated the effect of the state orientation × stress interaction on well-being.

Summary of Motive-Based Approaches

The motive-based approaches to achievement motivation are based on relatively stable individual differences in affective associations with success and failure. Motives exist at two levels of analysis—implicit motives that are grounded in deeply rooted affective structures and are not readily accessible to awareness and explicit motives that are grounded in consciously held values, beliefs, or attitudes. These motive systems do not necessarily converge for all individuals, and the available evidence indicates that they predict quite different outcomes. Recent research has shown that implicit and explicit nAch are not strictly independent and that methodological and dispositional factors influence the association between them. Poor alignment between implicit and explicit nAch is associated with low levels of well-being.

Strengths of this motive-based approach to achievement motivation include the focus on how behavior is energized (via learned anticipatory affect, particularly involving pride and shame) and the general distinction between approach and avoidance orientations for achievement behavior (Elliot, 1997). Two major limitations of this approach have also been identified: (1) it does not differentiate beyond omnibus approach or avoidance strivings and (2) as decontextualized constructs, motives are not well suited for predicting context-specific processes and outcomes (Elliot, 1997). This latter point is important because motives are decontextualized with respect to both the specific achievement context and time. In theory, motives may be "canalized," or channeled into specific achievement contexts (e.g., sports or classroom achievement) in different individuals (Thrash & Elliot, 2001), but researchers have generally not exploited this fact to maximize the predictive validity of their instruments (Thrash & Hurst, 2008).

From a methodological perspective, it should also be noted that it can be difficult to interpret many findings in the achievement-motives literature. Researchers often focused their analyses on "resultant motivation" scores that represented the difference between standardized scores for nAch and FF in a sample. Large positive and large negative resultant scores have clear interpretations (i.e., high scores for one motive and low scores for the other), but it is less clear what resultant scores of zero indicate about the level of individual motives. Participants may have scored high for both motives, average for both motives, or low for both motives. In contemporary research, it is preferable to examine main and interactive effects of the achievement motives instead of losing valuable information by calculating a resultant motivation score.

Goal-Based Approaches to Achievement Motivation

An alternative approach to studying achievement motivation emerged in the form of achievement goal theory. Achievement goal theory grew from the observation of two very different patterns of responses to failure among young children: a *mastery response*, characterized by low-effort attributions, persistence, increased competence expectancies, selection of challenging tasks, and improved performance; and a *helpless response*, characterized by low-ability attributions, unpleasant affect, decreased competence expectancies, selection of easy tasks, and reduced performance (Diener & Dweck, 1978, 1980; Dweck, 1975). Dweck (1986; Dweck & Elliott, 1983; E. S. Elliott & Dweck, 1988) proposed that these responses reflected different goals that children adopt in achievement pursuits. Some view achievement pursuits as opportunities to learn and to increase their competence (learning goals);

others view achievement pursuits as opportunities to establish their standing with respect to intelligence or ability in comparison with their peers (performance goals). Learning goals were presumed to facilitate mastery responses because they orient the person to the process of learning and improving. In contrast, performance goals were thought to engender helpless responses because they orient the person to factors outside of his or her control and create a threatening environment for achievement pursuits.

A similar approach grew from the work of Nicholls (1976, 1978, 1984) on developmental changes in children's conceptions of ability. In early childhood, children possess an undifferentiated concept of ability that equates competence with learning and effort. By trying hard, they are able to improve and therefore feel competent. Around age 12, children begin to differentiate between two primary internal sources of achievement outcomes: effort and ability. This differentiated concept of ability leads to changes in how children construe competence. Ability is now inferred from the amount of effort required to produce a successful performance—outperforming a peer while exerting minimal effort would lead to perceptions of greater ability than if one had to work very hard to outperform a peer. Nicholls (1984) extended these ideas about different conceptions of ability by proposing that they are the basis for two major achievement goals. People who pursued competence in an undifferentiated sense—meaning that they focused on effort and learning—were said to be in a state of *task involvement.* People who pursued competence in a differentiated sense—meaning that they focused on demonstrating ability by outperforming others with an economy of effort—were said to be in a state of *ego involvement.* These task and ego states of involvement represented the purpose of achievement behavior and overlap considerably with the aims or foci of behavior associated with learning and performance goals, respectively.

These converging lines of work provided the foundation for what has come to be known as the dichotomous model of achievement goals. The dichotomous model of achievement goals inspired a large volume of research that consistently demonstrated adaptive qualities of task involvement and learning goals and mixed consequences for ego involvement and performance goals. For example, whereas task involvement and learning goals exhibit consistent positive relations with intrinsic motivation for a task, ego involvement and performance goals typically exhibit a mixed profile of null and negative relations. To resolve ambiguities about the consequences of this goal, Elliot (1997; Elliot & Harackiewicz, 1996) proposed that it was necessary to consider the valence of goals in addition to how competence is defined in the goal.

The valence of an achievement goal refers to whether the individual is focused on succeeding (an approach goal) or on not failing (an avoidance goal). Early goal theorists intimated that avoiding incompetence may be a relevant achievement goal (e.g., Nicholls, Patashnick, Cheung, Thorkildsen, & Lauer, 1989); however, research in the dichotomous-goals tradition focused explicitly on approach-valenced achievement goals that differed only in how competence was defined. Crossing the *definition of competence* (task- or self-referenced competence vs. normatively referenced competence) with the *valence of the competence-based possibility represented in the goal* (e.g., being competent vs. avoiding incompetence) yields the 2 × 2 achievement-goal framework proposed by Elliot (1999; see also Elliot & McGregor, 2001) and depicted in Figure 26.1.

Mastery-approach (MAp) goals focus the person on performing a task as well as possible (task-referenced competence) or surpassing his or her previous level of performance on that task (self-referenced competence). For example, a student with an MAp goal could strive to ace an exam or to exceed his or her score on previous exams in that course. *Mastery-avoidance (MAv) goals* focus the person on not making mistakes (avoiding task-referenced incompetence) or on maintaining a previously established level of performance (avoiding self-referenced incompetence). A politician with an MAv goal might be focused on not making a mistake in a speech or on not doing worse than she or he did while practicing the speech. *Performance-approach (PAp) goals* focus the person on outperforming others (normatively referenced competence), such as the salesperson who is focused on producing the best sales figures in her or his division. Fi-

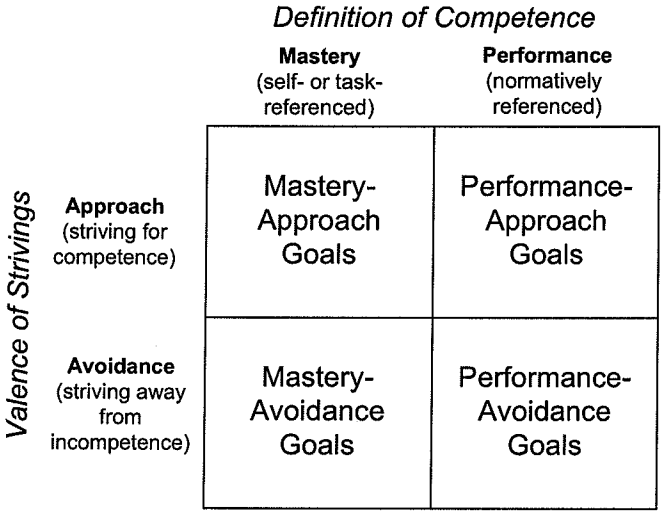

FIGURE 26.1. The 2 × 2 achievement goal framework. Adapted from Elliot and McGregor (2001, p. 502). Copyright 2001 by the American Psychological Association. Adapted by permission.

nally, *performance-avoidance (PAv) goals* focus the person on not being outperformed by others (avoiding normatively referenced incompetence), such as the swimmer whose primary objective is to avoid finishing last in his or her qualifying heat during a meet. An emerging body of evidence from social-personality, educational, sports, and industrial/organizational psychology has made it increasingly apparent that considering both dimensions of achievement goals (i.e., definition of competence and goal valence) enhances the predictive power of the goal construct (for a review, see Moller & Elliot, 2006).

Summary of Goal-Based Approaches

Goal-based approaches to achievement motivation are based on the different competence-based aims or purposes of achievement strivings. Early research focused on a dichotomous model of goals that emphasized the distinction between mastery- and performance-based definitions of competence. Recent work has convincingly demonstrated the conceptual and predictive value of attending to the approach–avoidance valence of goals. The corresponding 2 × 2 achievement-goal framework has received substantial attention, and results consistently demonstrate that these four goals have unique profiles of antecedents and consequences.

The strengths and weaknesses of the goal-based approach to achievement motivation generally complement those of the motive-based approach reviewed earlier (Elliot, 1997). Recall that the motive-based approach emphasizes the energization of achievement behavior but offers only general insight into how such behavior is directed (e.g., toward competence, away from incompetence). The goal-based approach offers little with respect to the energization of achievement behavior, but it specifically accounts for the different ways that individuals can orient their achievement behavior to feel competent (e.g., definitions of competence). The dynamic nature of the goal construct itself also makes it possible to account for intraindividual variability in the quality of achievement strivings that is more difficult within the motive-based tradition.

The Hierarchical Model of Achievement Motivation

The hierarchical model of achievement motivation was proposed to integrate these complementary approaches and to increase the conceptual clarity of the achievement

motivation literature (Elliot, 1997, 1999, 2005; Elliot & Church, 1997; Elliot & McGregor, 1999). In a nutshell, the hierarchical model of achievement motivation posits achievement goals as proximal regulators of achievement-related processes and outcomes. In the Lewinian tradition, a host of individual differences, situational factors, and their interactions can serve as antecedents of these goals (Elliot, 1999). These factors include neurophysiological predispositions, motives, self-based variables, relational variables, and the motivational climate surrounding the activity, to name but a few examples.

Of all these variables, achievement motives are perhaps the most robust and well-established antecedents of achievement goals. The nAch orients people to the possibility of success and increases the likelihood of MAp, PAp, and MAv goal adoption; the FF orients people to the possibility of failure and increases the likelihood of MAv, PAp, and PAv goal adoption (Conroy & Elliot, 2004; Elliot & McGregor, 2001; Elliot & Murayama, 2008). Although the hierarchical model of achievement motivation posits a sequential path from stable individual differences (motives) to dynamic self-regulatory strategies (goals) to achievement-related processes and outcomes, it does not preclude the possibility of direct effects from individual differences to achievement-related processes and outcomes. The remainder of this chapter reviews what is known about links between achievement motivation and social behavior and frames an agenda for future research in this area.

Achievement Motives and Social Behavior

Research on achievement motives has largely focused on predicting and explaining outcomes such as academic achievement, entrepreneurial activity, challenge seeking, and persistence (Koestner & McClelland, 1990; McClelland et al., 1953). It is somewhat surprising that social behaviors have received so little attention given their important role in determining achievement outcomes. Most of the research involving social behaviors has focused on identifying factors that contribute to the socialization of achievement motives. We exclude this developmentally oriented research from our review and focus instead on social behaviors that are plausible *consequences* of implicit and explicit achievement motives.

Implicit Motives

Two studies have linked children's implicit nAch with peer perceptions. In the first study, children high in nAch in a kibbutz were perceived by their peers as having greater learning and leadership abilities (Lifshitz, 1974). Children high in nAch also have higher sociometric status than children low in nAch, as indicated by their peers' expressing a greater preference to work and play with them (Teevan, Diffenderfer, & Greenfield, 1986). Thus it appears that implicit nAch in childhood is valuable for establishing status.

When implicit nAch is aroused, people exhibit decreased interpersonal sensitivity—they are less accurate in rating the characteristics of people with whom they work (Berlew & Williams, 1964). Decreased accuracy of social perception may be a cost of devoting limited attentional resources to the achievement task. On the other hand, implicit nAch has been linked with more cooperative behavior during a prisoner's dilemma task, especially when one's partner initially exhibits cooperative behavior (Terhune, 1968). Cooperating on this task represents the best strategy for ensuring mutual productivity with minimal risk and therefore satisfies the need to excel, as well as the need to be efficient in one's achievement pursuits. As a whole, these findings suggest that implicit nAch facilitates task-relevant behavior to the exclusion of broader social perceptions.

Less is known about the social consequences of implicit FF. One study documented that Reserve Officer Training Corps (ROTC) cadets who scored high in implicit FF were less active in structuring roles for themselves or group members during training exercises (Dapra, Zarrillo, Carlson, & Teevan, 1985). These cadets also demonstrated less initiative during training exercises compared with cadets low in FF. Dapra and colleagues (1985) suggested that cadets high in FF may come across as less assertive because they are concerned about earning the approval of others. This interpretation is

consistent with the finding that implicit FF was associated with greater impression management during a purported creativity test (Cohen & Teevan, 1974). Birney and colleagues (1969) also reported a series of studies demonstrating that FF was linked with greater conformity to others' judgments and opinions, but that this association exists only when the person is in a social context. Collectively, these results suggest that relational concerns and insecurities are intertwined with implicit FF. Young adults appear to regulate these concerns with appeasing behaviors. In contrast, maternal reports indicate that children high in FF engage in more attention-seeking behavior than children low in FF (Singh, 1992).

Overall, these results present a picture of two implicit motives with quite different social consequences. Implicit nAch appears to facilitate successful social interactions, although the achievement pursuit may draw the individual's attention to the task, may reduce the accuracy of person perception, and may enhance social status. On the other hand, implicit FF may inhibit social behavior in different ways at different points in life. Children high in FF may act out and engage in problem behaviors to solicit parental attention, whereas young adults may inhibit agentic behavior because their concerns over social approval and acceptance take precedence over genuine competence.

Explicit Motives

Compared with the implicit-motives literature, considerably less evidence is available regarding links between explicit achievement motives and social behaviors. The following review is limited to studies that focused on nAch or FF; related constructs such as test anxiety are beyond the scope of this coverage. Studies that focused on resultant motivation (i.e., standardized nAch minus standardized FF) also were excluded, because it is impossible to interpret which motive is responsible for any observed effects. Unfortunately, this delimitation leads us to exclude some very interesting studies concerning achievement motivation and leadership (e.g., Sorrentino, 1973; Sorrentino & Field, 1986; Sorrentino & Sheppard, 1978).

In one study that specifically examined explicit motives and social behavior, the nAch was linked with prosocial and noncompliant behaviors in the workplace (Puffer, 1987). Supervisors in a chain of retail stores rated employees who were high in nAch as demonstrating more prosocial behaviors, such as assisting coworkers and pursuing solutions to customer service problems. They also rated these employees as demonstrating fewer noncompliant behaviors, such as complaining about work conditions, lying to customers, and taking excessive breaks. In another study, high nAch participants allocated rewards to a partner based on the partner's performance instead of the partner's reward-allocation strategy (O'Malley & Schubarth, 1984). These findings are consistent with proposals that the nAch orients people toward efficient and just behaviors in their competence pursuits; however, the study neither evaluated nor controlled for the influence of FF.

Explicit FF has been linked to self-protective behavior. Children high in FF engage in cheating more frequently than peers low in FF, presumably to enhance their probability of avoiding failure (Monte & Fish, 1987; Shelton & Hill, 1969). In college students, FF has been shown to negatively predict students' likelihood of telling their parents about their performance on a task they just completed if they failed at the task and to positively predict their likelihood of telling their parents if they succeeded at the task (McGregor & Elliot, 2005).

Emerging results from our research also suggest that achievement motives have distinct relations with different forms of interpersonal problems. Anticipatory pride (i.e., explicit nAch) has a very limited association with interpersonal problems; if anything, low levels of the nAch may be associated with submissive interpersonal problems (Conroy, Elliot, & Pincus, in press). On the other hand, anticipatory shame (i.e., explicit FF) is associated with significant interpersonal distress. This distress is reported by individuals high in FF themselves, as well as being reported by knowledgeable peers. Although self-reported FF was not associated with specific interpersonal problems, peers described friends high in FF as being more exploitable, overly nurturant, and intrusive than friends low in FF.

In another study that focused on college students with high FF, two clusters of self-

reported interpersonal-problem profiles emerged (Wright, Pincus, Conroy & Elliot, in press). The first cluster of people with high FF, labeled Appeasers, had problem profiles characterized by submissive behavior. The second cluster of people with high FF, labeled Aggressors, had problem profiles characterized by dominant to hostile–dominant behavior. These problem profiles converged with distinctive styles for coping with shame: appeasement/withdrawal and rage (Gilbert & McGuire, 1998; Lewis, 1971). The extent to which these individual differences in shame regulation influence broader aspects of social behavior, productivity, and well-being will need to be established in future research.

Summary

Looking at the literature reviewed so far, it is clear that achievement-motive research has sampled only a very limited scope of social behaviors. Methodological difficulties have plagued this literature, as implicit and explicit motives have not always been distinguished clearly. Despite these limitations, two working conclusions can be drawn: (1) Explicit nAch is associated with high-quality task engagement and social behaviors in support of productivity and status, and (2) explicit FF is associated with self-protective behavior that creates interpersonal difficulties. As this literature grows, we anticipate that constructs will be operationalized more consistently, studies will control complementary motives, and designs will shift to focus on patterns of behavioral variability *within* people who vary in motive strength to strengthen conclusions that can be drawn regarding the influence of achievement motives on social behavior.

Achievement Goals and Social Behavior

In contrast to the achievement-motive literature, a broad range of social behaviors have been linked to achievement goals, and it is apparent that many of these social behaviors have strong interpersonal components. That is, they reflect elements of agency and communion—the primary dimensions of interpersonal behavior (Bakan, 1966; Kiesler, 1996; Leary, 1957; Wiggins, 1991). Agentic behaviors involve variability along an axis ranging from dominance to submission. Communal behaviors involve variability along an axis from friendly to hostile, although the hostile end represents cold/distant behaviors rather than open hostility. These dimensions are independent and form the interpersonal circumplex (Kiesler, 1996; Leary, 1957) shown in Figure 26.2. This circumplex encapsulates behavioral phenotypes that vary in terms of their agentic and communal properties. These behaviors are often identified within octants of the interpersonal circumplex and include pure forms of dominant, submissive, friendly, and hostile behaviors, as well as agentic–communal hybrids such as friendly–dominant, friendly–submissive, hostile–submissive, and hostile–dominant behaviors. The interpersonal circumplex model provides a useful organizing framework for reviewing and interpreting the literature on achievement goals and interpersonally based social behavior. Other important social behaviors have less pronounced interpersonal components. These outcomes typically involve group processes and are reviewed in a later section.

Interpersonal Social Behaviors

Submissive to Friendly–Submissive Behavior: Help Seeking

Help seeking is among the most well-investigated social consequences of achievement goals and has received substantial attention in research on academic achievement. Help seeking refers to a class of strategies used by self-regulated learners when they need assistance with a task. These strategies may be adaptive when students seek instrumental help that supports their autonomy in the achievement pursuit (e.g., requesting a hint on how to proceed) or maladaptive when they simply request executive or expedient help to complete the task (e.g., requesting a solution; Nelson-LeGall, 1985). Adaptive help seeking appears to be greater for people who adopt MAp goals (Butler & Neuman, 1995; Karabenick, 2003; Linnenbrink, 2005; Ryan & Pintrich, 1997). Expedient help seeking is negatively associated with MAp goals in some studies (Linnenbrink, 2005) and unassociated with MAp

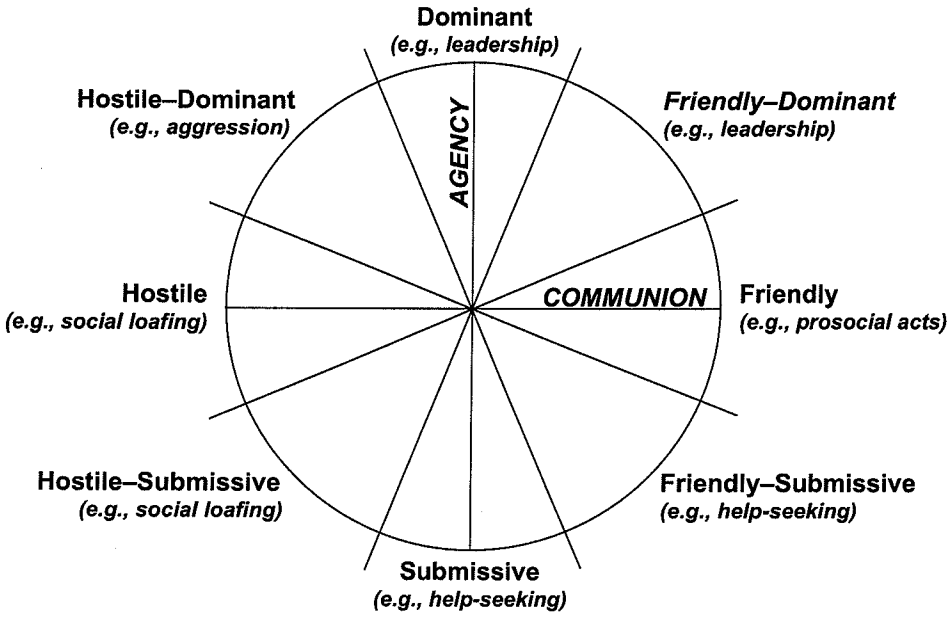

FIGURE 26.2. The interpersonal circle with illustrative examples of social behaviors that have been linked to achievement goals.

goals in other studies (Karabenick, 2003). Avoidance of help seeking has been linked with low levels of MAp goals (Linnenbrink, 2005), as well as high levels of MAv and PAv goals (Karabenick, 2003; Middleton & Midgley, 1997). Such avoidance has been positively associated with PAp goals in college students, but not in elementary school students (Karabenick, 2003; Linnenbrink, 2005).

Ryan and Pintrich (1997) provided additional evidence that linked achievement goals with attitudes toward help seeking. Not surprisingly, a focus on learning and improving (i.e., MAp goals) has been associated with more positive attitudes toward help seeking. Students with MAp goals are also less likely to endorse a belief that their teachers will have negative reactions to help seeking. In contrast, PAp goals have been linked to perceptions that help seeking leads to negative reactions from both teachers and peers. Ryan and Pintrich concluded that attitudes toward help seeking may provide an indirect pathway for achievement goals to influence help-seeking behavior (or the avoidance thereof).

Friendly Behavior: Prosocial Behaviors

This category involves prototypically communal behaviors in which the focus is on connecting and forming a positive bond with another social being. Cheung, Ma, and Shek (1998) focused on self-reported tendencies to engage in helping behavior, to cooperate and share, to maintain empathic and friendly relations with others, and to go along with social norms. In their sample of Chinese adolescents, MAp goals were consistently associated with high levels of these prosocial behaviors, whereas PAp goals were not associated with any of these prosocial behaviors. In a related study, students with dominant MAp goals expressed a greater willingness to cooperate with their peers, regardless of the peers' social status, whereas students with dominant PAp and PAv goals expressed a preference for cooperating with ingroup and high-status peers (Levy, Kaplan, & Patrick, 2004). These findings suggest that status concerns may moderate relations between performance-based achievement goals and communal behavior during competence pursuits. LePine (2005) found that MAp goals were associated with

judges' ratings of respectful and supportive communication from members of a triad whose achievement pursuit was disrupted. When the triad was given a difficult goal, PAp goals were negatively associated with judges' ratings of respectful and supportive communication; PAp goals were unassociated with judges' ratings when triads were given an easy goal. In the sport domain, MAp goals have been positively associated with athletes' respect for their opponents, rules, and officials, whereas PAp goals have been negatively associated with these important indicators of sportspersonship (Stornes & Ommundsen, 2004). The PAp goal effects were somewhat moderated by athletes' perceptions of the motivational climate; a strong mastery-motivational climate weakens relations between PAp goals and poor sportspersonship.

Dominant Behavior (Hostile to Friendly): Leadership

One of the central challenges of leadership involves influencing others. Although there are many ways of exerting influence (see House & Singh, 1987), leadership in its varied styles remains a prototypically agentic interpersonal behavior. Yamaguchi (2001) used a qualitative analysis to compare the leadership styles that emerged in 10 groups of children working on a task. Groups that were given MAp goals at the beginning of the task exhibited a shared leadership style between the members, whereas groups that were given PAp goals exhibited a dominant leadership style in which one member "overtook and overpowered the [task] and group processes" (p. 683). This effect is consistent with other findings that children who adopt performance-based goals are exceedingly focused on social status (e.g., Levy et al., 2004).

Hostile–Dominant Behavior: Aggression

Aggressive behavior involves an immediate intent to injure another individual (Anderson & Bushman, 2002). Limited research exists on links between achievement goals and aggressive behavior. An early study in the sports domain found that aggressive behavior was perceived as more legitimate by athletes who had low MAp goals and moderately high PAp goals (Duda, Olson, & Templin, 1986). Self-reported use of aggression to gain a competitive advantage has also been linked with high PAp goals in athletes (Stornes & Ommundsen, 2004). Based on these limited results, it appears that normative definitions of competence (performance-based goals) are associated with the potential for increased aggressive behavior—perhaps because individuals with performance-based goals are so preoccupied with social status that, in their basest moments, they resort to primitive means of attaining it.

Hostile to Hostile–Submissive Behavior: Social Loafing

Social loafing refers to the phenomenon of a "decrease in individual effort due to the social presence of other persons" (Latané, Williams, & Harkins, 1979, p. 823). This behavior is submissive because the individual is reducing her or his efforts to influence the group or the group's performance. The fact that such behavior may harm the group suggests that it may be a hostile interpersonal process, although that need not always be the case. Social loafing in academic work has been positively associated with students' PAp goals, but not their MAp goals (Linnenbrink, 2003). From a different perspective, athletes with high PAp goals are more likely to report that their teammates are withholding effort during performances; however, goals were not associated with athletes' reports that they themselves would withhold effort if they perceived teammates to be loafing (Hoigaard & Ommundsen, 2007). Performance-based achievement goals may lead to effort reductions because ability is inferred in part from the amount of effort an individual must expend to be successful at a task (Nicholls, 1984). In other words, the hostile–submissive act of withholding effort may actually be a strategy for demonstrating competence in group work. One would assume that this effect would be more pronounced for individuals focused on avoiding incompetence than for those focused on being competent.

Group Processes

There are many possible examples of social behaviors that do not map directly onto the

interpersonal circle. Three relevant examples that have been linked to achievement goals involve information exchange, conflict regulation, and role structure adaptation within groups.

Information Exchange

Dyadic and group achievement processes frequently require people to share information about task requirements or the situation in which the task is being performed. As a bidirectional process, information exchange can be characterized both by people's openness to sharing information with others and by the degree to which they implement information that they receive from others. Achievement goals can influence these exchange processes by orienting individuals either toward reciprocity (when they are interested in developing competence) or exploitation (when they seek to enhance their status relative to others) in their information exchanges (Poortvliet, Janssen, Van Yperen, & Van de Vliert, 2007). One experiment demonstrated that performance-based goals resulted in less openness in sharing information and greater utilization of high- but not low-quality information compared with both mastery-based goals and a condition in which participants were not assigned a particular achievement goal (Poortvliet et al., 2007). Goal valence manipulations had no effect on information exchanges in this study. The effects of performance-based relative to mastery-based goals in the experiment were at least partially mediated by hypothesized reciprocity and exploitation orientations. These findings suggest that mastery-based goals engender more cooperative behavior than performance-based goals.

Conflict Regulation

When people work together, disagreements are inevitable. Cognitively and socially focused strategies for dealing with such disagreements have been identified (Doise & Mugny, 1984). Epistemic conflict-regulation strategies involve evaluating the factual accuracy of each proposition in the disagreement, whereas relational conflict-regulation strategies focus on self-protection by asserting the superiority of one's own position. As expected, MAp goals have been associated with the use of epistemic conflict-regulation strategies, whereas PAp goals have been associated with the use of relational conflict-regulation strategies (Darnon, Muller, Schrager, Pannuzzo, & Butera, 2006).

Role Structure Adaptation

When a group's performance on a task is disrupted and roles need to change, the group members' success in adapting to their new roles will influence their groups' performance. In a computer-based decision-making task for triads, LePine (2005) created an equipment failure that disrupted normal communication channels between members, thereby forcing them to adapt their communications. Neither MAp nor PAp goals had direct links with participants' success in adapting to their new roles in the communication process; however, both goals interacted with the difficulty of a group's goals to predict their likelihood of adapting. MAp goals positively predicted role structure adaptation when groups had difficult goals, and PAp goals negatively predicted role structure adaptation when groups had difficult goals. Neither achievement goal was associated with role structure adaptation when groups had easy goals. Thus it appears that, under challenging situations, mastery-based goals may promote more flexible social behavior than performance-based goals.

Summary

Achievement goals have been linked to a variety of social behaviors that vary in their levels of agency and communion. Based on the evidence reviewed here, it is clear that performance-based goals are more strongly and consistently associated with social behavior than are mastery-based goals. This difference reflects the heightened sensitivity to social comparisons that performance-based goals engender. Moreover, these performance-based goals seem to orient individuals to their status and lead to more agentic variation in interpersonal behavior (e.g., dominance, social loafing). In contrast, mastery-based goals appear to facilitate communal behaviors (e.g., help seeking, prosocial acts).

We offer a few caveats to these conclusions. First, social behavior is a very com-

plex phenomenon, and a relatively narrow range of behavior has been studied. Some of the seemingly simple behaviors that were reviewed may have multiple components (e.g., help seeking); (Nelson-LeGall, 1985), and it may be simplistic to cast all of these behaviors into a single interpersonal circumplex octant. Second, few studies have examined the social impact of avoidance goals. It will be important to determine how this characteristic of achievement goals influences social behaviors. Finally, most research in this area has focused on individual differences in goals and has not considered how the motivational climate might influence social behavior (either as a main effect or in an interaction with states of goal involvement).

Future Directions

This chapter opened with the proposal that competence strivings frequently involve social behavior and that achievement motivation theories should speak to these processes as well as proximal achievement processes and outcomes. The evidence reviewed herein clearly indicates that individual differences in achievement motivation are associated with different patterns of social behavior.

Looking forward, we see great potential for using achievement motivation theories to explain social behavior during competence pursuits. As noted at the beginning of this chapter, many approaches have been employed in achievement motivation research, and this chapter focused on two specific approaches that have been integrated in the hierarchical model of achievement motivation (Elliot, 1999). Other approaches, such as those that focus on attributions for achievement outcomes or implicit theories of intelligence and ability, also seem to hold great promise for explaining social behavior during competence pursuits.

One of the challenges in moving this literature forward will be the sheer scope of possible social behaviors that can be investigated. The interpersonal circumplex may provide a valuable framework for generating hypotheses and organizing findings in this complex domain. Not every social behavior is neatly captured by this model, and we do not advocate limiting investigations to interpersonal behaviors alone. Nevertheless, we encourage researchers to consider ways in which they can anchor their measures of social behavior in broad nomological networks to facilitate future theorizing.

Finally, it seems appropriate to conclude by returning to a fundamental point in individual-differences research. Both the person and situation are important factors to consider when predicting social behavior. Our best chance for understanding how achievement motivation influences social behavior will require us to engage in more process-focused research that highlights consistencies in behavioral variability as a function of situational characteristics (e.g., Mischel & Shoda, 1995).

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