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An Achievement Goal Theory Perspective on Issues in Motivation Terminology, Theory, and Research

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There are a number of important issues raised by Murphy and Alexander in the lead article of this issue. In this response, four general issues are discussed in light of current research and achievement goal theory. The four issues include: (1) the general definition and theoretical clarity of motivational constructs, (2) the accessibility and consciousness of motivational beliefs, (3) the interdependent or independent nature of the relations between motivational constructs, and (4) the stability of motivation over time, domains, and contexts. These issues are considered in the context of current achievement goal theory research with the hope that the discussion will help to clarify the four issues for both motivational theory and research in general as well as for specific theoretical and empirical efforts within goal theory research. © 2000 Academic Press

The lead article in this issue by Murphy and Alexander explores the definition and meaning of different motivational constructs and raises a number of important issues regarding the future of motivational research. In particular, I believe they raise four general issues concerning motivational constructs. The first issue, and the one that in some way encompasses the remaining three issues, concerns the general definition and theoretical clarity of current motivational constructs. The second issue bears on the accessibility or relative consciousness of motivational beliefs. The third issue they raise involves the interdependent or independent nature of the relations between different motivational constructs. The final issue concerns the stability of motivation over time, domains, and contexts, usually presented as the age-old trait-vs-state issue. I examine each of these issues in the context of achievement goal theory and attempt to represent current thinking in goal theory in light of the issues raised by Murphy and Alexander.

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THEORETICAL AND DEFINITIONAL CLARITY OF ACHIEVEMENT GOAL CONSTRUCTS

Murphy and Alexander note that the area with the greatest proliferation of categories and subcategories is research on goals and goal orientations. They correctly point out that a number of different labels have been used for similar constructs. At the same time, there are some subtle, perhaps, but nevertheless, important theoretical differences among different types of goals that need to be signaled with the use of different terms. In current research on goals in achievement contexts, it seems to me that there are three general perspectives on goals, each reflecting a somewhat different level of analysis of the goal construct. At the most task-specific level is the social cognitive research on individuals' goals for a particular task or problem (see Bandura, 1997; Locke & Latham, 1986), also called target goals (see Harackiewicz & Sansone, 1991). For example, a student playing a pinball game might set a target goal of scoring 20,000 points or a student taking an exam or quiz might set a target of trying to get 8 of 10 correct. These target goals do specify the standards or criteria by which individuals can evaluate their performance, but they do not really address the reasons or purposes individual may be seeking to attain these target goals for their achievement.

In contrast, a second level of goals concerns more general goals that individuals may pursue that address, not just the target goal, but also the reasons ''why'' an individual is motivated (Ford, 1992). This goal content approach attempts to specify the range of potential goals that could subserve motivated behavior. For example, Wentzel (this issue) discusses how social goals for friendship or social responsibility can be related to academic outcomes. Ford (1992) proposes that there are 24 basic categories of goals in his motivational systems taxonomy including goals of exploration, understanding, superiority, resource acquisition, mastery, creativity, happiness, safety, and belongingness, to name a few. These general goals should apply to all areas of life and serve to characterize what individuals want or are trying to accomplish as well as the reasons why they do something (Ford, 1992). At the same time, these general goals do not necessarily have the same level of specificity in terms of standards or criteria for evaluation as target goals. There are a large number of other general goal content constructs such as personal strivings, personal projects, current concerns, possible selves, and life tasks that reflect a more general perspective on goals and reflect different goal contents that individuals may be striving for in many contexts, not just achievement contexts (see Austin & Vancouver, 1996; Emmons, 1997 for reviews)

A third perspective on goals, achievement goals, reflects an intermediate level between the very specific target goals and the more global goal content approach. Achievement goals refer to the purposes or reasons an individual is pursuing an achievement task, most often operationalized in terms of aca-

demic learning tasks, although they can be applied to other achievement contexts such as athletic or business settings (Pintrich & Schunk, 1996). Task specific goals and the more general goal content approach may be applied to many different contexts or type of goals (e.g., happiness, safety), but achievement goal constructs were specifically developed to explain achievement motivation and behavior. As Elliot (1997) points out, classic achievement motivation research has been concerned with the energization and direction of competence-related behavior which includes evaluation of competence relative to a standard of excellence. Given this general definition, current achievement goal constructs address the issue of the purpose or reason students are pursuing an achievement task as well as the standards or criteria they construct to evaluate their competence or success on the task. Accordingly, achievement goal constructs represent an integrated and organized pattern of beliefs about, not just the general purposes or reasons for achievement, but also the standards or criteria (the ''target'') that will be used to judge successful performance (Urdan, 1997).

In this sense, achievement goal constructs represent a combination of general goals or purposes like mastery or superiority (cf. these two goals in Ford's 1992 taxonomy) as well as more specific criteria or targets by which performance will be judged (e.g., progress or self-improvement vs. higher grades than others). Beyond this type of integration across different levels of analysis, achievement goal constructs such as mastery and performance goals are assumed to reflect an organized system, theory, or schema for approaching, engaging, and evaluating one's performance in an achievement context. In this way, the term ''goal orientation'' is often used to represent the idea that achievement goals are not just simple target goals or more general goals, but represent a general orientation to the task that includes a number of related beliefs about purposes, competence, success, ability, effort, errors, and standards. For example, in many discussions of mastery and performance goals, there is a list or table of the different ways that competence or success is defined, how ability and effort are used, how errors are judged, and general standards for evaluation of performance (see Anderman & Maehr, 1994; Maehr & Midgley, 1991; Pintrich & Schunk, 1996). From an achievement goal perspective, it is the integrated and organized nature of these different beliefs about competence and purpose that provides the theoretical utility and power of the achievement goal construct. In contrast, it is not clear that target goal or general goal perspectives assume that the different elements about purpose, competence, and standards operate in an integrated and systematic manner. An important question for future research on goals concerns the nature of the integrated system and how and when it operates to influence achievement.

Beyond these differences between the three general perspectives on goals, different labels and terms have been used for similar goals within achieve-

ment goal theory research. For example, the terms ''learning,'' ''task,'' ''task-involved,'' and ''mastery goals'' have all been used to refer to goals that orient the individual to focus on the task in terms of mastering or learning how to do the task. Labels like ''performance,'' ''relative ability,'' and ''ego-involved goals'' have been used to refer to goals that orient the individual to focus on the self, ability, or performance relative to others. At a general functional level of analysis in terms of how these goals are linked to various outcomes such as attributions, self-efficacy, levels of cognitive engagement and self-regulation, affect, interest, persistence, and choice behaviors, the different models that generate these different terms all predict a generally adaptive pattern of outcomes is associated with mastery goals and a generally less adaptive pattern is associated with performance goals (Ames, 1992; Dweck & Leggett, 1988; Pintrich & Schunk, 1996). Accordingly, at a functional level in terms of goal–outcome linkages, the proliferation of terms is troublesome and may impede scientific progress as noted by Murphy and Alexander.

On the other hand, there are some important theoretical distinctions underlying some of the different labels and an analysis of terms may not suffice without a deeper investigation of the theoretical and meta-theoretical assumptions underlying the different terms. For example, some of the models assume that achievement goals can be strongly influenced by personal and individual characteristics (e.g., personal theories of intelligence in Dweck & Leggett, 1988) and therefore may be more stable, while others assume that goals are more a function of contextual factors (e.g., classroom structures as in Ames, 1992) and are therefore more malleable. Some models assume that goals set in motion an approach to, or way of viewing, success and that judgments of competence, ability, and effort flow from these goals (e.g., Nicholls, 1990), while others see judgments of ability and intelligence as predisposing individuals to adopt certain kinds of goals (e.g., Dweck & Leggett, 1988). More recently, Elliot and his colleagues (see Elliot, 1997; Elliot & Church, 1997; Elliot & Harackiewicz, 1996) as well as others (Middleton & Midgley, 1997; Skaalvik, 1997) have suggested that performance goals need to be separated into two distinct approach and avoidance performance goals because these two different types of performance goals do result in divergent outcomes, not all of them less adaptive as predicted by normative goal theory.

Given these important distinctions about the stability of goals, the causal relations among important components of goal orientations, and even differential goal–outcome linkages, there may be very good scientific reasons to have different terms to signify these differences. The important issue for future theory and research is to maintain distinctions in terms or labels when they reflect important and real differences in the terms, theories, and supporting empirical data, but to not let terms proliferate when they signify distinc-

tions without any real theoretical or empirical differences. Accordingly, we need not just a survey of the terminology, but a deeper analysis and examination of the theoretical models and empirical support for the models, the metatheoretical assumptions made in the models, and how the various constructs (and accompanying terms) are embedded in a nomological network that includes both mediators and moderators of the relations among the different constructs.

The remaining three issues raised by Murphy and Alexander all extend the discussion of the theoretical nature of motivational constructs as these three issues are important for how motivational constructs are represented, the relations between the different constructs, and how stable or unstable motivation is over time and contexts.

ACCESSIBILITY AND CONSCIOUSNESS OF MOTIVATIONAL CONSTRUCTS

In their discussion of the accessibility of motivational constructs, Murphy and Alexander really raise two issues; one concerns the consciousness or cognitive accessibility of motivational constructs and the other concerns the accuracy of individuals' reports of their motivation. From an achievement goal theory perspective, the issue of cognitive consciousness or accessibility is not as major a problem as it may be for models that assume there are some ''deeply-held, pervasive motives, needs, or drives'' to use Murphy and Alexander terms (this issue). Goal theory assumes that goals are cognitive representations of what individuals are trying to accomplish and their purposes or reasons for doing the task. As such, they are inherently cognitive and assumed to be accessible by the individual; they are not unconscious motives as in psychodynamic theory, nor are they deeply held needs or motives as in some models of motivation (cf. Deci & Ryan, 1985; McClelland, Atkinson, Clark, & Lowell, 1953; Murray, 1938). In fact, the metaphor of ''excavating'' deeply held motives or needs and bringing them to the ''surface'' or into the ''light'' of day through various methods such as projective tests or intensive psychotherapy is not really applicable to achievement goal theory. In contrast, the discussion of goal constructs flows from the general cognitive revolution in psychology and goals are assumed to be internal, cognitive representations or knowledge structures.

Of course, this being said, it still begs the question of the nature of the cognitive representation of goals and how to measure these representations accurately. Cognitive psychologists have developed a host of different models for explicating how knowledge is represented by individuals including associative, schema, exemplar or prototype, and connectionist or PDP models and these different models do make different assumptions and predictions about the ease of accessibility and consciousness (Smith, 1998). As Murphy and Alexander correctly point out, motivational psychologists generally have

not been explicit as to the nature of the cognitive representation of goals, although it seems that most achievement goal models implicitly rely on schema-theoretic ideas about representation. As such, achievement goals would represent a structured knowledge unit, or subjective, personal conception or ''theory'' (cf. Nicholls, 1990; Smith, 1998) about the purposes for an achievement task as well as other elements in terms of how success and competence are defined, the role of effort and errors, and standards for evaluation. These elements would be activated together—that is, the whole schema or theory would be activated—as the individual encounters relevant information in the context (e.g., the experimental inductions and manipulations in lab studies or the actual classroom task, authority, and evaluation structures in correlational studies) or through conscious explicit thought and awareness about the achievement task. The issue is not whether these schemas or theories are conscious and accessible—by definition they can be—the issue for achievement goal theorists is to determine when and how they become conscious and operate, either consciously or preconsciously, to influence motivation, affect, cognition, and behavior before, during, and after an achievement task.

Given this type of model, the assessment of student achievement goals can be accomplished with verbal report methods (e.g., self-report surveys, interviews, think-alouds, stimulated recall). Accuracy is still an issue, but the issue under a schema-theoretic model is not quite the same as one of trying to tap deeply seated unconscious motives or finding the deeply buried ''true'' self. In some of those models, it is not clear what methods can be used to bring these deep-seated motives to consciousness or what criteria can be used to judge the veridicality of the data. In contrast, given that goals, by definition are cognitive and can be brought into conscious awareness and individuals can have access to them, the issue is designing measures that provide reliable and valid measures of these goals. This includes issues of measuring the appropriate level of a goal such as a very specific target goal for a particular situation or general goal orientations toward school work as well as appropriate domain specificity (e.g., math, science, reading, etc.). The issues of whether these different levels of goals are generated from the same cognitive knowledge structure, and how internal knowledge structures interact with contextual information to give rise to the current goal, need to be explored in future research on the measurement of goals.

Nevertheless, standard psychometric procedures can and should be used to establish reliability and validity of our measures of goals taking into consideration various sources of error variance such as social desirability, cognitive and developmental constraints on memory, cognition, and metacognitive self-awareness as well as general contextual influences that may bias these same cognitive and metacognitive processes. At the same time, psychometric concerns have to be tempered with a concern for the theoretical model that

underlies the construct of interest (see Pintrich, Wolters, Baxter, forthcoming), so a model that assumes that goals are very unstable and responsive to the situation would not use the same type of reliability estimates to demonstrate reliability as a model that assumes that goal orientations are a more stable individual difference. At a minimum, our measures should be internally consistent within a situation and reflect an accurate and faithful assessment of the students' own personally constructed goals in that situation.

At the same time, schema-theoretic models may imply a more object-oriented approach to goals that assumes they operate like ''things'' which can be searched for, retrieved, used, put away, and so on. In contrast, there are models of cognitive representation such as connectionist or PDP models which would suggest that cognition is more state-like and fluctuating as a function of both immediate contextual factors as well as internal representations (Smith, 1998). Under this type of model, goals might be conceptualized as part of a network of connections between different aspects of goals as well as the strategies or means to accomplish them (Shah and Kruglanski, 2000). In achievement goal terms, the different elements discussed above such as purposes, definition of success, role of effort and errors, and standards could be nodes in a network that display different patterns of activation as a function of contextual and internal personal factors. In addition, various other ''outcomes'' of goals such as affect, cognition, and behavioral strategies may be tied into these networks by patterns of spreading activation. Moreover, in these models, the individual does not have to be aware or conscious of the pattern of activation for the pattern to have an influence on cognition and behavior.

There has not been much formal research on this type of representational model by achievement goal theorists, but there are a number of implications of this type of model. First, this type of representational model would suggest that goals are dynamic states which are fluctuating in response to contextual information as well as internal feedback between the different nodes or units in the network. This conceptualization renders the question of accurately assessing the *one* ''true'' self irrelevant since goals are not ''things'' but dynamic states, although it does highlight the crucial need for the development of more dynamic on-line measures of goal orientations. Second, by allowing for multiple connections and paths between nodes, it may be able to handle issues regarding the activation of multiple goals. For example, aspects of mastery nodes may be activated by certain features of the context, but performance aspects could also be activated at the same time. The resultant pattern of activation would reflect some combination of both mastery and performance goals, depending on the relative weights of the connections between nodes. Finally, although there may not be stability in the sense of one true goal or trait of the individual, certain patterns of activation may become stronger over time and more readily evoked, thereby providing some

intraindividual consistency over time. This type of model may provide some answers to long-standing questions in goal theory and there is a clear need for more formal and explicit research on how goals are cognitively represented by individuals.

INTERDEPENDENCE AND INDEPENDENCE OF MOTIVATIONAL CONSTRUCTS

Murphy and Alexander raise two concerns regarding the interdependence of motivational constructs, one regarding the oppositional character or use of dichotomies in some motivational theories (e.g., intrinsic vs extrinsic motivation; mastery vs performance goals) and the other regarding the general independent functioning of all motivational constructs. In terms of the use of dichotomies, goal theory has traditionally viewed mastery and performance goals in opposition to one another. However, the empirical results from correlational studies with survey data have found that mastery and performance goals may be negatively correlated, uncorrelated, or even positively correlated (Pintrich, 2000). Some of this variance in empirical results is due to methodological considerations such as use of different measures, designs, and age of participants. Nevertheless, there is a need to clarify the relations between mastery and performance goals both theoretically and empirically.

Recent research on approach and avoidance performance goals by Elliot and his colleagues (Elliot, 1997; Elliot & Church, 1997; Elliot & Harackiewicz, 1996) suggests that it may not be productive to view all performance goals as maladaptive or in opposition to mastery goals. In their model, they distinguish between performance goals where the individual is motivated to approach or try to be the best or smartest in the class relative to others, while an avoidance performance goal reflects the goal of trying not to be the worst or look stupid or dumb relative to others. They have shown that mastery goals are related to interest; approach performance goals can have positive relations with actual performance; and that only avoidance performance goals seem to be related to poor outcomes like less interest and lower performance. There also may be aspects of performance goals that are not in reference to besting other students, but in terms of performance and self-presentation of ability to the teacher or other adults. The implication of this work is that simple dichotomies or oppositional categories will not capture the complexity of the relations between different goals and outcomes.

Following the logic of separating approach and avoidance performance goals, Pintrich (2000) has suggested that there may be both approach and avoidance versions of mastery goals as well. Table 1 displays a 2×2 matrix that crosses mastery and performance goals with approach and avoidance states. Listed within the cells are the two general aspects of achievement goals including the general purpose or reason for engaging in the task as

TABLE 1
Two Goal Orientations and Their Approach and Avoidance States

	Approach state	Avoidance state
Mastery orientation	Focus on mastering task, learning, understanding	Focus on avoiding misunderstanding, avoiding not learning or not mastering task
	Use of standards of self-improvement, progress, deep understanding of task	Use of standards of not being wrong, not doing it incorrectly relative to task
Performance orientation	Focus on being superior, besting others, being the smartest, best at task in comparison to others	Focus on avoiding inferiority, not looking stupid or dumb in comparison to others
	Use of normative standards such as getting best or highest grades, being top or best performer in class	Use of normative standards of not getting the worst grades, being lowest performer in class

well as the standards or criteria that individuals might use to judge their performance. In his review, Pintrich (2000) points out that the four different cells might show very different relations to various outcomes such as attributions, efficacy, affect, self-regulation, persistence, and choice. For example, mastery approach goals may be positively related to a host of adaptive outcomes, but some adaptive outcomes may be linked to approach performance goals. At this point in the development of goal theory, it seems important to examine how and when these differential relations with an array of outcomes emerge under different types of goal orientations.

Of course, the cell that reflects the mastery avoidance goal is somewhat undefined theoretically, as well as operationally, at this point in the research program on achievement goals. In terms of maintaining parallelism in syntax with the other three cells, the mastery avoidance cell in Table 1 is couched in terms of avoiding ''not mastering'' the task or avoiding ''not learning or not understanding'' the task. The standards to be used reflect a concern with not ''being wrong,'' but it is not relative to others, it is only in reference to the self or the task. It is not easy to conceptualize a mastery avoidance goal but a few examples might point the way for future work. For example, some students may be ''perfectionists'' and never want to be wrong or incorrect, which leads them to approach the task in a certain manner. One of my nieces was in a whole-language reading class in early elementary school and she never wanted to write her spelling words incorrectly and got quite frustrated with the teacher's constant encouragement of invented spellings and ''spell it anyway you think is correct'' style. In my own futile attempts at household repairs, I'm very much oriented to ''not getting it wrong'' and it is relative

to the task since there are not others present, although this orientation often leads me to avoid the task or to call for help rather than persist at the repair.

Related to this avoidance of the task, there has been empirical work within normative goal theory that found a third type of goal that was labeled ''work avoidant'' or ''academic alienation'' and was negatively correlated with a mastery orientation (Meece, Blumenfeld, & Hoyle, 1988; Nicholls, Cheung, Lauer, & Patashnick, 1989). In this case, it may be that an avoidance of mastery reflects an avoidance of work and effort, just as an approach to mastering the task will involve higher levels of effort and involvement in the work of the task. In any event, future theoretical and empirical work is needed to clarify the relations between mastery and performance goals and their potential approach and avoidance states, but it seems clear that at this point in our understanding of goals, simple dichotomies are less useful for the development of theory and research.

Related to the more multidimensional nature of motivation, Murphy and Alexander also suggest that there is not true independence among many of the motivational constructs, given the positive relations among goals, attributions, efficacy beliefs, interest, and intrinsic motivation. At the level of positive empirical correlations among different adaptive motivational constructs, this seems like a reasonable conclusion. However, it would be a major conceptual step backward to take these positive empirical relations as a warrant for grouping or clustering diverse motivational constructs into one general ''g'' factor called ''motivation'' in future theory and research. The field of motivational research has progressed to the point where there are clear and distinct constructs that have differential relations with one another and with achievement outcomes like choice, persistence, and behavior. These different constructs like goals, efficacy, attributions, and interest can and should be used as distinct ''independent'' or moderator variables as well as distinct mediator and dependent variables in our research. The fact that they might show consistent relations to each other does not preclude us from understanding how they might operate additively or multiplicatively in achievement dynamics. This perspective is not only important for theoretical reasons, but also for practical pedagogical ones, as we have come to understand that students are not just ''motivated'' or ''unmotivated'' in terms of some general quantity, but that in fact there are important qualitative differences in how students are motivated and these different qualities have a dramatic influence on learning and achievement.

TRAIT VERSUS STATE-LIKE NATURE OF MOTIVATIONAL CONSTRUCTS

The final issue that Murphy and Alexander raise concerns the trait vs state-like nature of motivational constructs. In particular, they note that goal theory seems to suggest that ''one's stance towards academic tasks constitutes a

stable, enduring characteristic of his or her personality'' (this issue). They then go on to state that this seems rather paradoxical if goals can also be sensitive to classroom contextual factors or to experimental manipulations of goals. This state of affairs is paradoxical if one conceives of all stable characteristics of an individual as a function of some deep-seated trait-like personality characteristics. In contrast, as noted previously, goals are assumed to be cognitive representations or knowledge structures which are sensitive to both contextual and internal personal factors.

As such, goals are just like any other knowledge structure, they can be activated a priori by the individual as he or she enters a situation and they can be influenced by the information available to them in the context. A student may activate a performance goal orientation in a highly competitive classroom situation such as an organic chemistry course used as a filter for medical school admission. In contrast, the same student may activate a mastery goal orientation when they are learning chemistry individually in a different, less competitive context. Also, as noted above, the term ''goal orientation'' has been used to signify that an organized system of beliefs about competence, success, errors, ability, and effort may be activated in a situation, but this does not imply that individuals don't have access to other systems of beliefs. The key issue is that individuals can access different goal orientations in different situations, just as individual can access different content knowledge structures in different situations (e.g., access the scientifically correct explanation of heat and temperature in a science classroom, but use a naive misconception of heat and temperature in everyday life).

Finally, the access to different goal orientations in different situations does not necessarily imply that there can't be some intraindividual stability over time and domains. Some individuals may be more mastery oriented in general (the student who is always focused on learning) and others may be more performance oriented across contexts and domains (e.g., the classic competitive, grade-conscious undergraduate) . In terms of schemalike cognitive representations, this would be explained by the idea that these individuals have these different schemas chronically accessible or easily primed or activated. A connectionist or PDP model would suggest that these different patterns of activation are more frequently activated or evoked. At the same time, these cognitive models allow for contextual information to ''overwhelm'' the primed schema or network and for different goals to be generated as a function of the overriding information in the context. Accordingly, ''strong'' classroom contexts or experimental manipulations (where the context defines the situation and appropriate behavior in many ways) can influence individuals to activate different goals than the ones they would normally or chronically access. This explanation parallels the general principle in personality and social psychology that strong contexts can overwhelm chronically accessible traits, but in the absence of strong cues in the environment, then traits may influence behavior more.

SUMMARY AND CONCLUSIONS

Murphy and Alexander have highlighted four general issues that are important for all motivation theories, not just goal theory. In terms of their implications for goal theory, first, goal theory does need to develop more consistent terms and labels for its constructs, but it is important to maintain distinctive terms when they reflect important theoretical and empirical differences. Second, in contrast to some motivational theories, goal theory does assume that goals are cognitive representations and that they are potentially accessible and conscious. There is a clear need for more theory and research on the formal representations of goals, as the nature of these representations have important implications for how goals are activated and influence various outcomes. Third, mastery and performance goals have traditionally been conceptualized as oppositional, but more recent work on approach and avoidance variants suggest that a more nuanced and multidimensional perspective is needed. Finally, goals are not traits in the classic personality sense. They are cognitive representations and may show both intraindividual stability as well as contextual sensitivity. All four of these issues will be important themes in future research on goal theory and Murphy and Alexander are to be complimented on highlighting these important themes for all motivational research.

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