

DOCUMENT RESUME

ED 275 741

TM 860 656

AUTHOR Nelson-Le Gall, Sharon
TITLE Help-Seeking Behavior in Learning.
INSTITUTION Pittsburgh Univ., Pa. Learning Research and Development Center.
SPONS AGENCY National Inst. of Education (ED), Washington, DC.
REPORT NO LRDC-1986/3
PUB DATE Mar 86
NOTE 39p.
PUB TYPE Information Analyses (070)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Behavior Patterns; *Cognitive Style; Decision Making; Educational Environment; Educational Research; Elementary Education; Helping Relationship; Heuristics; *Inquiry; Interpersonal Relationship; *Learning Processes; *Learning Strategies; Metacognition; Personality Traits; Problem Solving; Self Esteem; Social Environment; *State of the Art Reviews

IDENTIFIERS *Help Seeking

ABSTRACT

Help-seeking has become a topic of growing interest in the past 5 years for educators and psychologists concerned with the development and enhancement of children's active learning skills. This paper explains the instrumental role of help-seeking in learning. Major conceptualizations of help-seeking are examined and evaluated for their utility in understanding help-seeking in school-aged learners. Cognitive, developmental, and motivational characteristics of the help-seeker are discussed, as well as situational and contextual characteristics of the helping interaction. A reconceptualization of help-seeking that emphasizes its adaptive and instrumental functions in achievement activities is outlined. The role of instrumental help-seeking across the developmental span from infancy to adulthood is illustrated in the context of parent-child and peer relations, and in formal and informal learning situations. Prior research on the development of skills relative to help-seeking is reviewed. The impact of situational variations in the learning and achievement setting of the classroom is discussed, and ideas for future research are suggested. A six-page list of references concludes the document. (JAZ)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

HELP-SEEKING BEHAVIOR IN LEARNING

Sharon Nelson-Le Gall

**Learning Research and Development Center
University of Pittsburgh**

1985

Reprinted with permission from E. W. Gordon (Ed.), Review of research in education (Vol. 12, pp. 55-90). Copyright 1985, American Educational Research Association, Washington, DC.

Preparation of this manuscript was supported by the Learning Research and Development Center, funded in part by the National Institute of Education (NIE), U. S. Department of Education. The opinions expressed do not necessarily reflect the position or policy of NIE, and no official endorsement should be inferred.

Chapter 2

Help-Seeking Behavior in Learning

SHARON NELSON-LE GALL
University of Pittsburgh

Learning is rarely a completely asocial enterprise. Learners are influenced directly and indirectly by their social and cultural environment, so that the why, what, when, where, and how of learning are not always decided by the individual alone. Because learning involves effecting changes in the individual's knowledge state and skill repertoire, it is not surprising that learners may seek help from others in order to effect such changes. Help-seeking has become a topic of growing interest for educators and psychologists concerned with the development and enhancement of children's active learning skills. Indeed, many scholars consider that the ability to utilize adults and peers appropriately as resources to cope with difficulties encountered in learning situations is one of the most important skills children can cultivate (Anderson & Messick, 1974; Nelson-Le Gall, 1981; Nelson-Le Gall, Gumerman, & Scott-Jones, 1983; White & Watts, 1973).

The aim of this chapter is to explicate the instrumental role of help-seeking in learning. Major conceptualizations of help-seeking that are currently influential in guiding psychological and educational research will be examined and evaluated for their utility in understanding help-seeking in school-aged learners. Cognitive, developmental, and motivational characteristics of the help-seeker as well as situational/contextual characteristics of the helping interaction have been the focus of much research and will therefore be examined in this chapter. This review will concentrate on help-seeking in learning contexts and give consideration to the role that school environments play in teaching this important achievement strategy.

Preparation of this paper was supported in part by an institutional grant from the National Institute of Education, United States Department of Education, to the Learning Research and Development Center, University of Pittsburgh.

THEORETICAL CONCEPTIONS OF HELP-SEEKING

Most investigators have based their analyses of help-seeking on the values of Western individualistic cultures. Such analyses typically point out the inconsistency of help-seeking with the values of competitiveness, self-reliance, and independence that are characteristically emphasized in such cultures. Indeed, help-seeking was often viewed as an index of dependence in the early studies of socialization and personality development (e.g., Beller, 1955; Murphy, 1962; Sears, Maccoby, & Levin, 1957). Early theorists characterized the process of socialization as producing movement from an inherent dependence and reliance on others toward increasing self-sufficiency. Help-seeking and other behaviors regarded as indicators of dependency were seen as the result of deficient development and faulty socialization if they were displayed beyond very early childhood. Thus, help-seeking has taken on connotations of immaturity, passivity, and even incompetence.

Although help is sometimes recognized to be beneficial and necessary, seeking help has been characterized, until very recently, as a degrading activity to be avoided. Not surprisingly, the bulk of the literature derived from these conceptions focuses on the psychological risks and burdens of asking for help. For example, theoretical and empirical analyses of the role of perceived personal inadequacy (e.g., Rosen, 1983), embarrassment (e.g., Shapiro, 1978, 1983), loss of self-esteem (e.g., Fisher, Nadler, & Witcher-Alagna, 1982), and the individual's concern with the presence of onlookers (e.g., Williams & Williams, 1983) have all been undertaken in order to explain and predict help-seeking. These perspectives on help-seeking have been advanced by social psychologists and sociologists, and are primarily concerned with understanding the attitudes and behaviors of adults regarding help-seeking in medical and social welfare contexts.

Although there is no one theoretical perspective on help-seeking that is widely accepted, several conceptions are currently guiding research. Two of the more influential approaches to conceptualizing help-seeking and help-seekers are based in the social psychological and sociological literatures and are concerned with help-seeking in adult populations. These approaches are known as social-normative models and self-esteem models. They focus on personal and sociocultural characteristics that are believed to moderate the perception of the costs of seeking help. Because these approaches are central to the bulk of the empirical literature on help-seeking, each will be described and evaluated briefly in the following sections.

Social Norms and Help-Seeking

Social-normative perspectives use the extent to which cultural values and social roles emphasize norms related to dependence or independence as the

citing more help-seeking in females than in males are concerned with help-seeking in medical or health-related settings. Sex differences, and the direction of differences, are not as consistent with respect to help-seeking in non-health-related settings. In health-related settings, the "sick role" may be seen as clearly more compatible with the context of the traditional female sex role stereotype. Help-seeking in nonmedical settings may not be as clearly aligned with one or the other sex role. For example, although there is evidence that classroom experiences during the elementary school years are more consistent with female sex roles than with male sex roles (e.g., Etaugh & Hughes, 1975; Kagan, 1964; Serbin, O'Leary, Kent, & Tonick, 1973), it is not clear that the student role continues to be clearly more compatible with one sex role to the exclusion of the other throughout the school years. At later ages, male students may seek help as much as, or more than, females (e.g., Ames & Lau, 1982; Greenberg & Shapiro, 1971).

Contributions and Limitations

The social-normative approach has been useful in highlighting an individual's sociocultural values and beliefs that shape the help-seeking process. Help-seeking is seen as a social behavior grounded in the prevailing values and role structures of a given social group or culture. This approach has tended to focus on the norms and roles operating in groups defined along demographic dimensions at the level of the general society. An equally important level of analysis is at the level of social norms and roles that structure the individual's behavior in schools and classrooms.

Evaluations of the perceived normativeness of help-seeking for occupants of the student role in learning settings are virtually nonexistent. An interesting paradox arises, however, in considering the normativeness of help-seeking for students. On the one hand, students are subordinate in status to teachers in the classroom, so dependence on the teacher is consistent with the student role. Giving help is a behavior consistent with the teacher role, whereas receiving and seeking help are behaviors consistent with the reciprocal role of student. Therefore, students would be expected to seek out teachers for help. Research indicates that help-seekers tend to prefer helpers who are perceived as being older, competent, and obligated to comply with their requests for help (e.g., Barnett, Darcie, Holland, & Kobasigawa, 1982; Druian & De Paulo, 1977; Nelson-Le Gall & Gumerman, 1984). The classroom teacher typically presents these same characteristics. On the other hand, role expectations for students involve performances as evidence that they are learning what teachers are attempting to teach. Thus, although help-seeking is normative for the student, individuals in the student role may perceive the psychological costs of seeking help to be too great to incur because the very act of seeking help

may be perceived by the teacher and other students as a failure to benefit from the teacher's instructional efforts.

Although there may be psychological costs of help-seeking inherent to the student role, these perceived risks may be mediated by the classroom norms regarding help-seeking that the teacher establishes and enforces. The presence of norms discouraging learning in the context of activities other than individual achievement and competition may account for students' failure to seek help from their teachers and even from peers. Support for this idea comes from the substantial literature on peer tutoring (Allen, 1976, 1983). When help-seeking from peers becomes institutionalized—that is, it takes place in formal school-based peer tutoring programs where a same-age or older student assumes the teacher role vis-à-vis another student—psychological costs of help-seeking may be perceived to increase for the tutee (e.g., Allen, 1983; Rosen, Powell, & Schubot, 1978). These psychological costs become particularly salient when a tutee has a younger or same-age child as tutor. In such arrangements, the achieved role of tutor is perceived by the tutee to be incongruent with the age identity of tutor and to violate social-normative expectations about teaching-learning relationships. If, however, classroom norms support and encourage informal helping exchanges among peers, the perceived costs of help-seeking may be lessened.

Given the impact of social and cultural norms on help-seeking, researchers must begin to give more attention to the study of help-seeking behavior from a cross-cultural perspective. Cross-cultural investigations could highlight variables that are relevant for understanding help-seeking as a universal phenomenon. Research must also begin to focus more on the relationships between help-seeking and social norms that operate in specific social institutions within a society. Also, we know relatively little about the social norms related to help-seeking in educational settings. Researchers need to give more attention to classroom-level norms and values in attempts to understand help-seeking as it occurs among students in the classroom.

Studies of social-normative variables provide some useful information, but are of limited value without an assessment of the processes underlying normative differences. Limits to the value of studies of normative and social variables are that (a) variability may exist within a given group so that generalizations are not possible and (b) measures of specific aspects of individuals' personality and motivational orientations of the environment appear to have greater predictive and explanatory power than do normative variables (Ames, 1983; Fisher, Nadler, & Whitcher-Alagna, 1982).

Self-Esteem and Help-Seeking

The self-esteem approach to understanding the phenomenon of help-seeking is similar to the social-normative approach in that it focuses on

the role of norms and beliefs in moderating the decision to seek or not to seek help. The beliefs in question, however, are deeply instilled personal beliefs and conceptions about the self as an individual. Self-esteem-related conceptions have used self-esteem-related constructs to predict and explain help-seeking. To date, self-esteem-related factors have received the lion's share of attention as personal determinants of help-seeking behavior. Research tends to focus on individual differences in levels of chronic, or persistent, self-esteem (see Nadler, 1983) and has shown this variable to be an important influence on the willingness or unwillingness to seek help (e.g., Fisher & Nadler, 1976; Rosen, 1983; Shapiro, 1978; Tessler & Schwartz, 1972).

Level of self-esteem is viewed as a personality characteristic that moderates the individual's sensitivity to the self-threatening situation of admitting inadequacy to self and others. By making a request for help, individuals acknowledge their inability to cope with a failure and lower their sense of self-esteem. Self-esteem explanations differ, however, in predicting the effect of level of self-esteem on the individual's decision to seek help as a response to failure. Two opposing predictions can be derived from the various models of the effect of level of self-esteem on help-seeking (Nadler, 1983). The first prediction is based on notions of vulnerability, the second on notions of consistency. In explanations relying on notions of vulnerability, low self-esteem individuals would be expected to seek help less than would high self-esteem individuals. That is, because low self-esteem individuals have few positive self-cognitions, they are more vulnerable to self-threatening information and avoid the self-threatening situation of seeking help more than high self-esteem individuals do. In explanations relying on notions of consistency, high self-esteem is expected to be associated with less help-seeking. This prediction suggests that it is the inconsistency of incoming self-related information with existing self-cognitions that is threatening to the self. According to this hypothesis, high self-esteem individuals with many positive self-cognitions are predicted to perceive more self-threat than low self-esteem individuals and therefore to be less likely to seek help.

In general, the research literature (see Fisher, Nadler, & Whitcher-Alagna, 1982, for comprehensive review) tends to support the consistency hypothesis over the vulnerability hypothesis. For example, Tessler and Schwartz (1972), among the first to examine the role of chronic self-esteem in help-seeking, used college students identified as low or high in self-esteem as subjects. Subjects were presented with the task of identifying instances of neurotic behavior in tape-recorded dialogues and were given the opportunity to seek help with the task by consulting guidelines for judgments, if they so desired. To make this task potentially threatening to their self-conception, subjects were told that performance on this task

depended on the subject's own mental health and native intelligence. Tessler and Schwartz found that low self-esteem subjects sought help sooner and more frequently than did high self-esteem subjects. Other studies in the literature have shown that high self-esteem individuals are less likely than low self-esteem individuals to seek help if they feel that they will be unable to reciprocate (e.g., Greenberg, 1980), because inability to reciprocate is perceived by the individual to be inconsistent with self-conceptions of independence and self-reliance. These findings provide additional support for the consistency hypothesis.

Contributions and Limitations

The self-esteem approach has been most useful in highlighting the influence of affective reactions and personality differences on help-seeking behavior. The focus on psychological characteristics that may vary from individual to individual within the same social group or occupying similar roles is an important contribution. There are, however, several methodological and conceptual features of this literature that limit its generalizability and that leave the subject of the relationship between self-esteem and help-seeking in educational settings open to question. Some of the issues that arise when findings from self-esteem conceptions are employed as a framework for understanding students' help-seeking involve (a) the implicit assumption of globality in children's self-evaluations, (b) the stability of self-evaluations, (c) the nature of the tasks used to elicit failure, and (d) the direction of causal relations among self-esteem, achievement, and help-seeking.

Researchers have usually examined chronic self-esteem in adults by measuring it as a global construct. Harter's (1983) research suggests that young children (e.g., below the age of 8 years) do not have a sense of self in general. Children at this point in their development appear capable only of evaluating specific characteristics and competencies of the self. The generalizability of self-esteem models to help-seeking in school-age populations is limited, therefore, not only because the problems and contexts eliciting the possibility of seeking help in educational settings call for the individual to make specific assessments of him (her)self, but also because the individuals seeking help may not possess a concept of general self-worth if they are young learners. Future investigations of the relationship between help-seeking and self-esteem must certainly assess domain-specific self-evaluations, especially where elementary students are involved.

Furthermore, because the research samples are virtually all adult samples, the generalizability to child samples must be suspect. It appears that the applicability of this perspective to understanding of help-seeking behavior in elementary and junior high school students is not only

unproven, it is also virtually untried. For the most part, the self-esteem-related paradigms involve the examination of levels of chronic self-esteem in adults. Needless to say, adults will be more likely than young children to have stable concepts of self-worth in many more areas of performance. Thus, the issue of stability of self-evaluation becomes salient in considering the applicability of self-esteem-related models to children's help-seeking behavior in achievement settings. Measuring levels of chronic or persistent self-esteem as is done with adult subjects is also a more complex matter when children are involved. Children's self-conceptions can be expected to be less stable if one considers that changes in cognitive processing abilities occur with age, and also that changes in academic environments or interpersonal roles may bring about dramatic changes in level of self-esteem. For example, the transition from kindergarten to first grade brings about changes in self-evaluations (Harter, 1983). Several researchers have also found decreases in level of self-esteem at the onset of adolescence and the transition to junior high school (e.g., Harter, 1983; Harter & Connell, 1982; Simmons, Rosenberg, & Rosenberg, 1973).

Another limitation is that much of the research on self-esteem and help-seeking has taken place in settings that bear little resemblance to the learning contexts encountered by students in educational systems. The bulk of the research has taken place in controlled laboratory settings with college student populations. Performance is often assessed by a relative stranger, after little or no training, and usually in the presence of few, if any, other persons. Typical tasks on which subjects' help-seeking behavior has been assessed include stock market investment simulations (e.g., Fisher and Nadler, 1976) and social judgment tasks such as making judgments of symptoms of mental disorder displayed by others (e.g. Tessler & Schwartz, 1972). These tasks may be seen as novel, atypical, and generally isolated from the individual's usual domains of performance. Thus, extreme caution must be exercised in drawing inferences from such studies about the relationship between level of self-esteem and help-seeking in educational settings.

Finally, a major conceptual limitation involves assumptions proposed by current self-esteem models about the relationship between self-esteem and achievement. The self-esteem formulations of help-seeking focus on the potential negative effects of help-seeking for the individual's self-concept of ability, which in turn is apparently assumed to detract from task performance. Help-seeking is assumed to lower self-esteem because it implies the individual cannot succeed without help, and perhaps not even with help. These perceptions are thought to further decrease expectations for successful task performance, increase concern over evaluation, and further distract the individual from the task causing lower achievement. This formulation, however, overlooks data from an alternative causal model

advocated by educational researchers (e.g., Calsyn & Kenny, 1977; Harter & Connell, 1982). These recent data indicate that achievement is causally predominant over self-concept of ability and perceived evaluation of others. This finding indicates that increases in achievement should lead to increases in self-concept of ability. If seeking help can enhance learning and achievement, self-esteem specific to one's sense of competence should increase. Thus, high self-esteem can be construed as a consequent of help-seeking. Current self-esteem formulations are lacking in explanatory power since help-seeking may be both determined by and a determinant of self-esteem; yet this bidirectionality of effects is usually not taken into account.

Summary

Social-normative conceptions and self-esteem conceptions emphasize the role of personal characteristics that influence the perception of the costs of seeking help. When the underlying assumptions about personal values and beliefs are examined for each of these models of help-seeking behavior, the integrating theme of consistency between the act of seeking help and internalized beliefs about self-reliance and individual achievement emerges. Because the focus of these explanations has traditionally been on adults' help-seeking behaviors in noneducational settings, the applicability of these frameworks to the help-seeking of children and youth in educational settings is limited. Whether self-esteem, social-normative, or other conceptions will prove to be adequate frameworks for understanding the role of help-seeking in learning will ultimately depend upon their ability to incorporate the influences of developmental and situational factors as determinants of help-seeking.

HELP-SEEKING RECONCEPTUALIZED

As was illustrated by the preceding discussion of social-normative and self-esteem conceptions of help-seeking, researchers in the area of help-seeking have usually focused on the psychological risks and burdens of asking for help. Viewing help-seeking as incompatible with self-reliance and achievement, researchers have tended to consider only the costs of seeking help for the individual's sense of competence rather than the costs of not seeking help for the acquisition and mastery of skills. Consideration of the adaptive functions of help-seeking is particularly important to a fuller understanding of learning as it occurs during childhood.

Treating help-seeking as incompatible with achievement can lead to overlooking maladaptive performance patterns that actually interfere with learning. For example, in the achievement motivation literature, individuals who tend to persist at tasks of intermediate difficulty for long periods of time are considered to be highly achievement-oriented (e.g., Andrews & Debus,

1978; Feather, 1961, 1962). Persistence, usually measured as length of time worked before disengagement, may not always lead to task mastery. Some researchers (e.g., Diener & Dweck, 1978) have suggested that persistence may sometimes be maladaptive. Children may continue to work at a task without help despite prolonged lack of success and the availability of more productive alternative strategies in order to forestall judgments of failure. In these cases, children may be regarded as highly achievement-oriented because they have spent a long time working on the task. Yet length of time on task may not be as sensitive an indicator of achievement as some measure of whether the time was spent in active pursuit of a solution.

Nelson-Le Gall (1981) argued for a reconceptualization of help-seeking that shifts the focus away from a view of help-seeking as stigmatizing, self-threatening behavior to a view of help-seeking as an effective alternative for coping with current difficulties. This adaptive role of help-seeking in learning has generally been overlooked not only by researchers interested in help-seeking, but also by those interested in learning. The lack of attention to help-seeking by researchers studying learning has occurred in part because researchers usually study learning in laboratory settings where learning is more often than not a solitary enterprise. Nelson-Le Gall's conceptions, and more recently elaborated formulations (e.g., Ames, 1983), can be classified as achievement-related conceptions. The achievement-related view of help-seeking is unique in its focus on the costs of not seeking help, and importantly, in its treatment of help-seeking as a part of an ongoing process rather than as a dichotomous (i.e., help-seeking—no help-seeking) decision. In the context of achievement-related explanations, personal characteristics of the individual, such as perceived control and mastery orientation (e.g., Ames & Lau, 1982; Ames, 1983), and situational characteristics of the achievement setting (Nicholls, 1979) are used to predict and explain help-seeking.

Two formulations of the adaptive relationship between help-seeking and learning have been developed recently (Ames, 1983; Nelson-Le Gall, 1981). Ames's (1983) analysis focused on the cognitive-motivational conditions that lead individuals to seek help from others. In addition, Ames attempted an integration of the extant social-psychological theories in order to provide a basis for comparing the conditions leading to the decision to seek or not to seek others' assistance. Nelson-Le Gall (1981) focused on the cognitive-developmental and social-cognitive factors that influence help-seeking in learning contexts. Each of these perspectives will be discussed in the following sections.

Performance Attributions, Achievement Goals, and Help-Seeking

Ames (1983) suggested that individuals process information about their own actions and performance in the context of value priorities that assign a

level of importance to various goals related to achievement. Goals will be selected and pursued to the extent that their attainment implies something desirable to individuals about themselves, such as that the individual is independent or competent. These values, then, are closely tied to the individual's sense of self-worth. In Ames's formulation, personal and situational factors determine the salience for a particular value in specific achievement settings. This perspective focuses on the relationship between self-worth beliefs, attributions for perceived achievement outcomes, and help-seeking.

In attributional formulations of achievement (e.g., Weiner, 1979), there are various specific causes such as ability, effort, task difficulty, and luck to which achievement outcomes may be attributed. Seeking help can be classified as an act of effort in that the help-seeker is actively using available resources to increase the likelihood of future success. Failing after trying again, however, can lead to the inference of low ability and consequently to lowered perceptions of self-worth. The attributions students make serve to maintain a self-concept of ability, but the pattern of attributions may or may not logically entail the alternative of seeking help. To the extent that a student perceives seeking help to be relevant, that is, to be instrumental to future success, the student is expected to be willing to seek help. In Ames's analysis, help is seen as relevant when the student's attributional beliefs about achievement outcomes include internal or external controllable factors. Thus, help-seeking would be perceived as most relevant to achievement when students believe that they are generally capable of successful performance, that they failed to master certain skills or concepts, that they need to work or study more, and that biased teachers, bad luck, and unfair, tricky, or impossibly difficult tasks were not among the factors contributing to their performance (Ames & Lau, 1982).

Ames (1983) has noted that help-seeking is perceived differentially by the student depending not only on the pattern of attributions made about task performance, but also depending on the achievement goal being pursued. Ames drew upon Nicholls's (1979) and Dweck & Elliott's (1983) reanalyses of achievement motivation. Nicholls (1979) and Dweck & Elliott (1983) have argued that the specific actions individuals undertake to preserve a self-concept of ability depend on the particular conceptions of ability and achievement goals held. Individuals may conceive of ability as a global, stable quality that can be judged to be adequate or inadequate. This quality or entity is believed to be displayed in the individual's performance. Judgments of the performance outcome in comparison to the outcomes of members of a normative reference group are seen as indicating whether or not one is competent. Comparisons of performance outcomes, however, require the assumption of equal and optimal effort across individuals. This assumption, of course, is not always warranted. In contrast to the entity

conception of ability, other individuals may view ability as a repertoire of skills that can be endlessly expanded through efforts to learn what is presently not known. This view has been labeled the instrumental or incremental view of ability (Dweck & Elliott, 1983). Level of ability is judged in relation to the individual's own perceived knowledge mastery, or understanding. These alternate views of ability orient the individual toward different achievement goals. Entity conceptions of ability lead to the espousal of performance goals in achievement situations; that is, seeking to obtain favorable judgments of competence and seeking to avoid unfavorable judgments of competence. Incremental conceptions of ability lead to the espousal of learning goals in achievement situations; that is, seeking to acquire knowledge or skills, to master and understand something new.

According to Ames (1983), help-seeking is more likely to occur when students are pursuing learning goals. Help-seeking is seen as task-relevant effort and as such is an investment that increases competence. When performance goals are operative, help-seeking is less likely to occur because it is viewed as drawing attention to one's lack of ability and, thus, as in conflict with the goals of demonstrating ability and avoiding demonstrations of a lack of ability.

Instrumentality of Help-Seeking

Nelson-Le Gall's (1981; Nelson-Le Gall et al., 1983) formulation of help-seeking as an adaptive alternative to individual problem solving is based on analyses of achievement activity in everyday learning and problem-solving situations. In everyday problem-solving situations, learners may be afforded opportunities to call upon problem-solving resources external to themselves (Cole & Traupmann, 1981). Under such conditions, the ability to solicit, obtain, and use help becomes an important learning skill (e.g., Anderson & Messick, 1974; Murphy & Moriarty, 1976).

Individuals' use of others to acquire and master skills plays a central role in currently influential theories of mental development and learning (Brown, 1982; Vygotsky, 1978). In Vygotsky's view, knowledge and understanding have their roots in social interactions with more mature problem solvers who plan, direct, monitor, and evaluate the child's task activity. Mental functions first develop on a social level as children interact with adults who serve as supportive, knowledgeable others. After interacting with others in learning situations, children gradually internalize the supportive other role and begin to perform these regulatory behaviors for themselves.

It has been suggested (Murphy, 1962; Nelson-Le Gall, 1981) that help-seeking may serve multiple purposes. The student's goal in seeking help may be merely task completion, without comprehension or mastery as an objective. Alternatively, the student's purpose in seeking help may be to

avoid criticism from an agent of evaluation, or to avoid the task altogether. Help may be sought, however, for a far more constructive purpose, such as enhancing the student's own competence. Thus it is important to consider the appropriateness of help-seeking for a person having an assumed or known capacity for coping with the difficulty encountered. Help-seeking behavior from a person whose goals can be obtained readily and economically without the mediation of others should thus be judged differently than such behavior from a child whose goals could not be achieved without help. In other words, the necessity of seeking help for goal attainment in the task setting should be considered in characterizing help-seeking as constructive for mastery or not.

The distinction between "executive" or dependency-oriented help seeking and "instrumental" or mastery-oriented help seeking, then, is an important one to make (Nelson-Le Gall, 1981). Executive help-seeking refers to those instances in which the student's intention is to have someone else solve a problem or attain a goal on his or her behalf. Learners seeking executive help with problems beyond their current level of competence appear to be more interested in the product or successful outcome than in the processes or means of achieving the outcome. Thus, direct help and ready-made solutions would be of interest to those seeking executive help. Some problems encountered by learners undoubtedly call for executive help-seeking, but continued reliance on others to provide more than is needed would be detrimental to the development of independent mastery and might even induce dependency. Instrumental help-seeking, in contrast, is mastery oriented and refers to those instances in which the help requested appears to be focused on acquiring successful processes of problem solution and is limited to the amount and type needed to allow learners to solve problems or attain goals for themselves. Accordingly, indirect help, hints, and explanations would be of interest to those seeking instrumental help. Learners with effective instrumental help-seeking skills are able to refuse help when they can perform a task by themselves, yet they can obtain help when it is needed. Instrumental help-seeking, then, may serve as a mechanism of transition from other-regulation in problem solving to self-regulation in problem solving.

Mastery-oriented behavior has been characterized by various researchers (e.g., Diener & Dweck, 1978; Harter, 1975) as behavior directed toward the attainment of a solution to difficult or challenging problems, and thus as continued task involvement. Some researchers (e.g., Ames, 1983; Murphy, 1962; Nelson-Le Gall, 1981; Nelson-Le Gall et al., 1983) have argued that mastery-oriented help-seeking should be considered an achievement behavior. It is suggested, therefore, that help-seeking may act to keep mastery-oriented learners involved in difficult tasks, creating the opportunities for constructive other-regulation and at the same time enhancing

the development of self-regulatory skills. This point of view is in contrast to that underlying studies of achievement motivation in which help-seeking is considered to be the antithesis of achievement behavior (e.g., Winterbottom, 1958).

Developmental Role of Help-Seeking in Learning

In contrast to the earlier views of developmentalists, it is now acknowledged that the adaptive role of help-seeking is evident in learning contexts occurring across the lifespan. Instrumental help-seeking behaviors develop in the context of the child's early learning experiences. According to Sears (1972), infants not only elicit help with satisfying bodily needs such as hunger, they also seek help with other domains of development such as mastery of the immediate physical environment.

To cope in the school environment children must adapt to the classroom context help-seeking skills developed in the context of early social relations with parents. Students must learn to monitor their own task performance and attempt to deal with difficulties or problems because the teacher in a large classroom cannot always perform this function for them. Children must learn to utilize their peers, as well as teachers, as potential instructors. Naturalistic observations of peer interactions in classrooms suggest that help-seeking is a frequent occurrence (e.g., Cooper, Marquis, & Ayers-Lopez, 1982). Cooper et al. (1982) found that in a random sampling of peer instructional interactions in the classroom, the majority were learner-initiated (i.e., a student requested help from a peer). In addition, the requested help was more likely to be for academic or problem-relevant information than for social attention.

Individual school assignments often represent steps in an ordered learning sequence. This means that not only must school tasks be completed, but they must be completed before the next task in the sequence is undertaken. In addition, there are often time constraints imposed on task performance. Under such conditions, seeking out a competent person for aid or advice may represent a more adaptive strategy for coping with a difficult task that must be mastered than giving up or persisting unsuccessfully at the task without help. Indeed, teachers of elementary school children tend to believe that children who seek help are more task-oriented and more involved in the learning process than children who give up easily or wait for others to offer them help (Nelson-Le Gall & Scott-Jones, in press).

The importance of instrumental help-seeking for learning and skill acquisition does not diminish across the school years. If seeking help were provoked merely because of general inexperience it might be expected to decrease steadily with increasing experience in the problem area because the need for help would lessen as a function of the accumulation of

knowledge and skill. The relationship between increasing knowledge and experience, however, is not quite so linear. To the contrary, the relationship between help-seeking and knowledge appears to be somewhat curvilinear (Miyake & Norman, 1979). The more knowledge and experience learners have, the more likely they are to recognize when seeking information can be useful. In fact, cognitive psychologists have demonstrated that question-asking is basic to knowledge acquisition (e.g., Flammer, 1981) and is dependent on the individual's current knowledge base (e.g., Flammer, Kaiser, & Mueller-Bouquet, 1981; Miyake & Norman, 1979). In order for help-seeking to be both effective and instrumental, the individual must know enough to know what is not known, to know what could be known, and to have some reasonable ideas about where and how such knowledge might be gained. Too little or too much knowledge in a problem area will lessen the probability of using help-seeking as a strategy for solving problems that are encountered. So, to the extent that students acquire more knowledge and skill with increasing school experience, help-seeking may be more likely to occur (given supportive classroom environments) among students at higher, as opposed to lower, grade levels and among students at moderately high skill levels.

Research shows that children do differ developmentally in the tendency to seek help and in the ability to use the help available in formal learning situations. For example, Wood, Bruner, and Ross (1976) found that 4- and 5-year-olds were more willing than 3-year-olds to use an adult tutor in a problem-solving task. The youngest children, who most needed help with the problem, tended to ignore the tutor most frequently. In contrast, the older children used the tutor, but only when they experienced difficulty or wanted their solutions checked. Kreutzer, Leonard, and Flavell (1975) also found an increase with age in the reported usage of seeking help from other persons as a strategy for handling memory-tasks. Similarly, Myers and Paris (1978) found that sixth graders were more likely than second graders to report seeking help as a strategy for handling reading difficulties. Age-related increases in help-seeking were also reported by Nelson-Le Gall and Glor-Scheib (in press) in an observational study of first-, third-, and fifth-grade math classrooms. These researchers found a higher incidence of help-seeking at the fifth-grade level than at the lower grade levels.

Instrumental help-seeking continues to be adaptive as a problem-solving skill in formal and informal learning situations into adolescence and adulthood. Analyzing the verbal interaction of high school students working in small groups to solve a difficult mathematics problem, Webb (1980) found that achievement of individual group members, measured in terms of successful solution of similar post-test problems, was greatest for those students who were active explainers and for those who were active solicitors of explanations.

The phenomenon of help-seeking occurs in learning situations in adulthood when an individual on a new job seeks out more experienced colleagues for help "learning the ropes" or when workers or managers trade experiences on how they have coped with difficult work-related tasks. In the more structured apprentice-mentor relationships, the adult in the role of apprentice requests and receives assistance with problem solving in the task situation from a mentor who is an expert in the task domain. In these one-to-one instructional exchanges, the more expert member of the dyad assists in planning, monitoring, and correcting the novice's task performance in a manner responsive to the novice's own internal resources (Scribner & Cole, 1973). When help is requested and needed for task solution, the expert renders more assistance than when help is not actually needed. Thus, it is clear that instrumental help-seeking remains important in learning situations in and beyond adulthood.

Summary

Achievement-related frameworks conceptualize help-seeking as an activity that permits the learner to create an environment that is sufficiently supportive to allow progress, yet sufficiently challenging to remain interesting. By seeking instrumental help from others when necessary, the learner can undertake more challenging tasks than he or she could otherwise. Help-seeking thus allows the learner to acquire and master increasingly complex skills.

The achievement-related perspectives are more recent than the social normative and self-esteem perspectives discussed in the preceding sections; accordingly, research and theory on achievement-related factors and help-seeking are less well developed. Nevertheless, this perspective appears to hold great promise. The reconceptualization presented underscores the fact that help-seeking is often instrumental to the acquisition of competence, and encourages attention to help-seeking as a system of behavior in itself, rather than merely as a measure of dependency. In the context of achievement perspectives, help-seeking ceases to be a dichotomous social behavior (i.e., seek help—not seek help) and is better characterized as an ongoing, multidimensional interpersonal process. Thus, the reconceptualization is also timely in that it addresses what are now recognized as glaring gaps in our knowledge about the interface of social development in childhood with intellectual competence in childhood.

DEVELOPMENT OF HELP-SEEKING SKILLS

The deliberate use of help-seeking as a problem-solving activity requires a fair amount of cognitive sophistication. In order to initiate help-seeking, individuals must become aware of obstacles to goal attainment, must learn to view other people as resources valuable for goal achievement, and must

learn means of enlisting others to help attain these goals. The following sections present a selective review of research relevant to the development of important skills involved in acts of interpersonal help-seeking. The available literature concerned explicitly with the adaptive functions of children's help-seeking skills is somewhat limited. Therefore, this review brings together studies from diverse areas of inquiry in psychology, education, and other social science disciplines.

The skills that are discussed in this section were derived from a task analysis of the help-seeking process and include both cognitive and behavioral activities in which the help-seeker may be thought to engage prior to, during, and after seeking help. Children's ability to engage in each of these component processes depends in part on their metacognitive knowledge (cf. Flavell, 1977) concerning (a) the characteristics of the help-seeker (PERSON variables), (b) the characteristics of the target helper and nature of the problem (TASK variables), and (c) the suitability of the means employed to gain assistance (STRATEGY variables). Discussion of these skills will proceed with reference to their developmental status during the preschool and elementary school years.

Awareness of Need for Help

Seeking help is an intentional act and therefore is contingent on the individual's becoming aware of the need for help (i.e., realizing that his or her own available resources are not sufficient to reach a goal). Individuals' knowledge about the compatibility between themselves as learners and the learning situation plays an important role in effective problem solving (Baker & Brown, in press). If individuals are not aware of their own limitations or the complexity of the task at hand, then they are not likely to anticipate difficulties and take preventive action or to recover easily from difficulties encountered. If individuals have some awareness of the complexity of the task and can monitor their progress on the task well enough to detect a problem, they are in a relatively good position to utilize help-seeking as a strategy to enable them to cope with the problem.

Age differences have been found in children's ability to assess their need for help. Nelson-Le Gall (1984b) studied third- and fifth-grade task-related help-seeking using a procedure that allowed for an objective assessment of the need for help. Children gave tentative solutions to a task, were subsequently allowed to seek help if they desired, and were then required to give their final solution to the task. Children were found to engage in both necessary and unnecessary help-seeking. Interesting grade differences occurred in the appropriateness of help-seeking. Fifth graders' help-seeking was appropriate more often than was that of the third graders. Fifth graders sought more necessary help than did third graders, the net result of this behavior being fewer wrong final answers on the task. This age-related

increase in the adaptive use of help-seeking as a problem-solving strategy is suggested also by data on children's tentative answers. It should be noted that third and fifth graders had approximately equal numbers of correct tentative responses (disregarding whether or not help was subsequently sought). These findings suggest that younger children had difficulty assessing the need for help. One possible explanation for this age difference lies in differential metacognitive skills. The younger children may have made a less complete or less accurate survey of what they did and did not know prior to taking advantage of the available help. Also, the younger children may have been simply less experienced with evaluating their own performances in academic settings and therefore may have been reluctant to rely on their own impressions of their performances.

The developmental literature on metacomprehension (e.g., Markman, 1977, 1979) provides additional support for the notion that the ability to assess one's need for help is a requisite skill for effective help-seeking. The literature indicates that the ability to evaluate the need for help is a skill influenced by both maturation and experience. When task demands are simple or familiar, children as young as 3 years of age appear to employ metacognitive skills such as attempting to execute mentally the instructions for performing a task before actually beginning it. When tasks are unfamiliar or difficult, younger children, compared to older children, may fail to execute the appropriate mental processing and may become aware of their lack of understanding only through active attempts to perform the task or through feedback from others. On very difficult tasks, even adults may appear to lack these skills (Brown, 1978).

The implication of metacomprehension for seeking help in learning is that children often do not ask for help because they are not aware of the incompatibility between their own resources and the task at hand. The failure to detect a problem may be due to insufficient sensitivity to internally generated signs that a problem exists. Another possibility is that younger children may set a higher criterion than older and more experienced learners for when they will attend to possible problems. Young children who are in general less knowledgeable and less skilled than others may as a consequence be more often confused. Young children may have a higher threshold for confusion or ambiguity, or it may be that they ignore contradictions and difficulties so as to avoid having to ask for additional information or help (Markman, 1980). When young children do seek help, however, their requests are less likely to be specific because they are less likely to have surmised the exact nature of the problem. In contrast, adults or experts who are able to make complex inferences are able to function without help in more situations than the child or novice. When mature learners request help from others, the request is likely to be for help that is very specific and limited in scope.

Decision to Seek Help

Once perceived, a problem must be resolved in an appropriate way. Young and inexperienced students may receive more unsolicited offers of help than older and more experienced children, but there are no guarantees that others will automatically anticipate the child's need for help and always spontaneously intervene. Because children are frequently novices at many of the tasks with which they are confronted and may not benefit as much as more skilled learners from their own continued individual efforts, it is important for them to consider the possibility of seeking help from a more expert learner. It might be assumed that awareness of the inadequacy of one's knowledge and skill would be sufficiently motivating to cause a person to seek help (e.g., Markman, 1979; Nash & Torrance, 1974). Help-seeking may not occur, however, if the learner does not also take responsibility for alleviation of the problem and for task completion. Gumerman (1982) found that kindergarteners and first graders often did not seek help when confronted with problems because they did not assume responsibility for completing the task. These children perceived the adult as responsible for alleviating any problems encountered and for accomplishing the assigned task.

Even when the help-seeker assumes responsibility for the task, the decision to seek help may be affected by the assessment of the relative costs and benefits associated with seeking help, such as becoming indebted to the helper and admitting current skill inadequacies (e.g., DePaulo & Fisher, 1980; Greenberg & Shapiro, 1971). Although analyses of costs and benefits may be of concern to older children and adolescents who, like adults, have a more stable concept of their own competence and who may be more likely to engage in social comparison (Ruble, Boggiano, Feldman, & Loebl, 1980), it is doubtful that such analyses have the same importance to young children.

It has been reported that children at a "pre-operational" level of cognitive functioning attended primarily to the outcomes of actions in their verbal and non-verbal reconstructions of series of events (Brown, 1976; Piaget, 1932, 1976). Thus, it may be that some of the psychological costs of asking for help that affect adults' help-seeking (e.g., loss of perceived competence) do not influence young children's decisions to seek help, since children would be more attentive to the successful outcome than to the manner in which it was achieved. Whether and to what extent perceived costs of asking for and receiving help influence the decision of children of different ages and in different problem contexts to seek help requires more empirical study.

Type of Help Sought

The ability to make and convey distinctions among types of help is important for effective use of help-seeking in learning situations, and research needs to examine the acquisition and development of this skill.

Unfortunately, the studies reported in the literature do not consistently distinguish between the types of help sought or even differentiate between solicited and unsolicited help received. When no distinction is made, generally no relationship is found between receiving help and achievement (e.g., Peterson & Janicki, 1979; Peterson, Janicki, & Swing, 1981). When distinctions are made, receiving help has been shown to be effective only when the help is in response to expressed student need (Webb, 1982). In these cases the type of help sought has been shown to be related to achievement outcomes (e.g., Nelson-Le Gall, 1984b; Webb, 1983).

Webb (1982) studied junior high and high school students in small learning groups and reported that receiving help from group members in response to questions was significantly related to students' achievement. Webb also reported that the type of response received was significantly related to achievement. The relationship between receiving explanations and learning the task was found to be positive, whereas the relationship between achievement and receiving no response from group members or receiving restated solutions without explanations was found to be negative. It is not clear from Webb's studies whether students' requests differentiated between answers without explanations and elaborated explanations as the type of help desired from group members. Yet the distinction is an important one to be made by students, and it appears from findings of recent research (e.g., Peterson et al., 1983; Nelson-Le Gall, 1984b) that such a distinction is evident in students' requests.

For example, Peterson et al. (1983) studied the requests of second and third graders in small learning groups and found that most of children's requests were not for explanations. Like Webb, Peterson et al. found a negative relationship between the frequency of a child's receiving answers only to questions and subsequent achievement. No relationship was found, however, between receiving explanations and achievement. Apparently, the relationship between higher-order responses received and achievement depends on the participants' age and skill level. Younger students may simply not provide as effective explanations to their peers as do older students.

Other studies (e.g., Nelson-Le Gall, 1984b; Swing & Peterson, 1982) also report variations in the type of help sought by students of differing grade and ability levels. In one such study, Nelson-Le Gall (1984b) investigated the help-seeking bids of third- and fifth-grade students of high and low ability in order to determine children's preference for instrumental (e.g., explanations, elaborated examples, hints) versus executive (e.g., answers only) help. The findings indicated that fifth graders preferred instrumental help over executive help significantly more than did the third graders. Low-ability children, boys in particular, did not show a preference for instrumental help, as did high-ability children and girls. Taken together with

Peterson et al.'s (1983) finding that low-ability children interacting in work groups tend to get only answers, the findings of Nelson-Le Gall's study suggest that the reason that young and low-ability children are not effective help-seekers is not solely that they may lack skills to recognize their need or to elicit help; it may also be because they fail to seek the type of help that is most conducive to learning and mastery.

Identification and Selection of Potential Helper(s)

Having made the decision to seek help, the learner must identify potential helpers. One aspect of the social knowledge important for help-seeking is the knowledge that all persons do not bring equal credentials to the role of helper. Characteristics of the potential helper, of the help-seeker, and of the helping context may singly or jointly affect helper choice.

Developmental differences in children's helper preferences have been noted in the literature. Generally, preschoolers tended to prefer adults and older children as helpers (e.g., Edwards & Lewis, 1979). Several studies of older children's helper preferences suggest that peers are often preferred helpers (Boehm, 1957; Nelson-Le Gall & Gumerman, 1984; Northman, 1978). Bachman (1975) and Nelson-Le Gall and Gumerman (1984), allowing children to make spontaneous nominations, found that family, teachers, and friends were the helpers nominated most frequently among first- through fifth-grade children. Whereas Bachman found mother to be the first choice in all grades, Nelson-Le Gall and Gumerman found that the choice of preferred helper shifted from parent to teacher to peer with increasing age. Boehm (1957), using a forced-choice format, also found that with increasing age elementary school children tended to prefer advice on a problem from a talented peer rather than from an adult. Naturalistic observations of children in their classrooms indicate that children seek out their classmates for help even when such behavior is discouraged by teachers (Nelson-Le Gall, 1984a; Nelson-Le Gall and Glor-Scheib, in press).

Children must learn to distinguish between various others in terms of their competence and willingness to help. Two studies, Barnett et al. (1982) and Nelson-Le Gall and Gumerman (1984), examined children's perceptions of helpers using an interview format. Barnett et al. interviewed kindergarteners and first-, third-, and sixth-grade children to determine their perceptions of characteristics associated with good helpers. Kindergarteners spontaneously reported positive behaviors and global descriptive qualities, such as kindness, as characteristics of good helpers. Thus, a good helper was perceived by young children as someone who played with them or someone who was nice. Third and sixth graders also mentioned these characteristics, but they increasingly generated specific characteristics such as willingness and competence as required qualifications of good helpers. In contrast to the older children, the kindergarteners could recognize these

characteristics as important for effective helping but could not spontaneously generate them.

Nelson-Le Gall and Gumerman (1984) investigated perceptions of helpers among preschool and first-, third-, and fifth-grade students. Nelson-Le Gall and Gumerman obtained rationales from children for their spontaneous choices of helpers. Similar to the Barnett et al. findings, children in Nelson-Le Gall and Gumerman's study perceived global prosocial qualities, competence, and willingness as important characteristics of preferred helpers. The criteria employed for choosing helpers were also found to vary with the age of the child, but in a manner different from that described by Barnett et al. For example, unlike the kindergarteners in the Barnett et al. study, the kindergarteners and first-graders in the Nelson-Le Gall and Gumerman study frequently reported helper competence as a reason for choice. However, with increasing age children mentioned helper competence less as a criterion for helper choice. That a helper should be competent to deal with the problem became a given. At later ages children tended to consider more the likelihood that the helper would also be motivated or obligated to comply with a request for help. Thus, helper willingness and role obligations were more frequently reported by older than by younger children. In addition, helper criteria were found to vary with the specific helper chosen. Global helper characteristics tended to be cited as criteria by children when the helper was not among those generally preferred by their age group. Thus, kindergarteners and first graders often cited global characteristics as important for the selection of peer helpers, whereas third and fifth graders frequently mentioned global characteristics as criteria for choosing parent helpers.

Exactly what develops with respect to children's knowledge about helpers is not clear. We still know little about the criteria children use in selecting peers and adults as helpers. More research is needed to determine which attributes of the helper and of the helping tasks are most salient for children of different sexes and different ages. Furthermore, research must examine children's knowledge about and employment of helpers who are actually available in the natural contexts of the school, the family, and other learning settings.

Strategies for Enlisting Helpers

Once a potential helper has been identified, the help-seeker must obtain that person's assistance. Eliciting assistance from a specific person becomes a matter of social problem solving; therefore, the extent and nature of the child's social strategy repertoire is important (Spivack & Shure, 1974). Both nonverbal and verbal strategies are available to the help-seeker. Nonverbal strategies might include establishing proximity to the helper, attempting to establish eye contact, watching the behavior of others for a guide to

performance, and using physical expressions of confusion or exasperation. Verbal strategies might include directly asking for help, soliciting information about the problem at hand or about the helper's abilities vis-à-vis the problem, making statements about one's competence, and reminding the helper of some obligation to help (e.g., Cooper et al., 1982; Wilkinson & Calculator, 1982).

The effectiveness of nonverbal strategies may vary with the help-seeker's age. For very young children, nonverbal behaviors (e.g., crying, expressing confusion, establishing proximity and eye contact with caretakers) may be effective strategies for obtaining assistance from parents and other familiar adults. Many of these same strategies, however, might be counterproductive when used by older children.

Studies of the development of persuasive appeals have identified verbal tactics used by children in convincing others to accede to their requests (e.g., Bearison & Gass, 1979; Bragg, Ostrowski, & Finley, 1973; Clark & Delia, 1976; Piché, Rubin, & Michlin, 1978). Naturalistic studies of children's discourse have found age differences in the means employed to seek information from children of different ages and adults (Ervin-Tripp, 1977; Merritt, 1980). For example, threats and demands may not be the most effective strategies for obtaining help from adults, but they may be quite effective with peers (Ladd, & Oden, 1979). This literature, as well as the social problem-solving literature and the sociolinguistic literature on communicating in classrooms (e.g., Green & Smith, 1983), suggests that the important questions for research concern the flexibility of strategies used to obtain help; i.e., whether the strategies employed vary with the age and sex of the help-seeker and the potential helper, and whether the strategies are sensitive to the demands of the problem.

Evaluative Responses

Finally, help-seekers need to monitor the help-seeking effort while it is ongoing and to evaluate the outcomes. Help-seekers may evaluate the success or failure of the help-seeking attempt in terms of the responses of the helper approached, the adequacy of the help obtained as an aid to problem solving, the effectiveness of their own help-seeking strategies, and the reactions of others toward help-seeking. These judgments may influence future help-seeking behavior. In assuming that help-seeking is a goal-directed activity, the most important outcome variable is whether or not the help-seeker is successful in obtaining the required help. If children are unsuccessful in engaging a potential helper or if the help received does not facilitate goal attainment, then they must reevaluate their strategies for obtaining help and/or their choice of helper. The selection of helpers and attempts to engage their help may be repeated until the needed help is obtained; if the help-seeking activity is ultimately unsuccessful, the children

may desist from active attempts to resolve the problem or pursue the goal. Successful help-seeking may have positive social and cognitive consequences (e.g., Webb, 1983), such that children can (a) further their acquisition and mastery of skills, (b) maintain or enhance their perceptions of themselves as learners and goal-achievers, and (c) increase their skills in using appropriate and effective help-seeking strategies.

Recipient reactions to aid among both adults and children have been studied (see Eisenberg, 1983; Fisher, DePaulo, & Nadler, 1981, for comprehensive reviews of this literature). The literature on recipient reactions to aid, however, does not always focus explicitly on the active, spontaneous acquisition of aid by the person helped. We can nevertheless speculate that many of the determinants and correlates of recipient reactions (e.g., age, sex, ability, and need state of the person helped; characteristics of the helper and of the helping context) may also be relevant to the study of reactions to help-seeking. At the present time, however, there are no data that would allow us even to describe the form, frequency, and quality of children's reactions to help-seeking.

CHARACTERISTICS OF ACHIEVEMENT SETTINGS

In preceding sections the influences of personal characteristics were highlighted. In academic settings, however, it becomes clear that we are dealing with person \times situation interactions rather than with person main effects. Help-seeking may vary as much with the learning setting as it does with personal characteristics such as gender (e.g., Nelson-Le Gall & Glor-Scheib, in press). A study by Nelson-Le Gall and Glor-Scheib (in press) provides a good illustration of these influences. Nelson-Le Gall and Glor-Scheib observed first-, third-, and fifth-grade students of low, average, and high ability during their reading and math lessons. Help-seeking was found to vary with characteristics of both the learning context and the learner. For example, although students spent most of their time engaged in individual seatwork, help-seeking occurred with the greatest frequency during small group learning activities. In addition, Nelson-Le Gall and Glor-Scheib found that girls, more than boys, engaged in mastery-oriented help-seeking in math classes, whereas boys, more than girls, engaged in mastery-oriented help-seeking in reading classes.

A situational variable of importance to help-seeking in achievement settings concerns the goal of the achievement activity (e.g., Dweck & Elliott, 1983; Nicholls, 1979). When the focus of the activity is to acquire new skills and to master current skills, or to effectively complete and also master tasks (i.e., to be able to complete specific tasks now and on one's own in the future), individuals focus on the task and on the processing of task-relevant information. Such situations are characterized by task-involvement. When students are task-involved, learning is a demonstration of

ability and thus an end in itself. Accomplishment through effort, including instrumental (mastery-oriented) help-seeking (Ames & Ames, 1978; Ames, 1983) is valued. Feelings of competence are produced from the perception of learning, so students act in ways to maximize the chance of learning and to minimize behavior that will not produce gains in mastery. In contrast, when the focus of the activity is to obtain immediate satisfaction and success in demonstrating skills or avoiding the demonstration of lack of skill, individuals tend to focus on themselves and on their performance in comparison to others. These situations are characterized by ego-involvement (Dweck & Elliott, 1983; Nicholls, 1979).

Achievement goals may be defined by the individual undertaking a given task, or they may be imposed from without by the task or some aspect of the task environment. Developmental achievement motivation research suggests that all children start out in life espousing and pursuing learning and mastery as goals of their activity (e.g., White, 1959). It is through socialization experiences in the family context (see Scott-Jones, 1984, for a comprehensive review of family influences on children's achievement) and the school context that children orient themselves increasingly to performance goals.

It appears that aspects of the instructional organization and procedures of classrooms may encourage task- as opposed to ego-involvement in students. Several characteristics of classroom organization have been identified (e.g., Rosenholtz & Simpson, 1984; Rosenholtz & Wilson, 1980) that may contribute to task-involved learning orientations by acting as deterrents to social comparison of performance. One such characteristic, a differentiated academic structure (i.e., qualitatively different instructional methods and materials) is thought to inhibit global comparison among students' performances. A second characteristic is the degree of autonomy granted students to make choices about what work to do and when and how to do it. Students who are allowed to schedule their own work assignments have the possibility of increasing their performance options (e.g., Wang, 1983). If students are performing different activities at the same time, or even similar activities but at different times, or in different ways and in different places, comparisons of ability become more difficult. A third characteristic of classroom organization that may help to promote task-involvement is the extent to which grouping of students by ability for instructional purposes is practiced. When students work as individuals or in varying groups whose membership is not defined by ability, it is more difficult for others to observe and interpret patterns of task performance. A related feature, the structures for evaluation of academic outcomes that operate in the classroom, may also influence students' task-involvement. For example, research (e.g., Ames & Ames, 1978; Crockenberg & Bryant, 1978) has consistently shown that children in competitive learning environments tend to focus on obtaining

favorable and avoiding unfavorable comparison of their ability to that of their classmates more than do children in cooperative learning environments.

All of these classroom organizational features work to reduce students' orientation toward making judgments of their ability that are based primarily on social comparison. Students with high self-concepts of ability can remain sufficiently confident about their ability in the face of task difficulty and thus can remain oriented to the task. This basis for task orientation would not be available to all students when classrooms emphasize social comparison of performance. When classroom learning procedures emphasize mastering tasks and increasing skills and knowledge over one's current levels, as opposed to demonstrating that one knows more than other students, there is a greater chance that more students will be optimally task-oriented.

It is somewhat ironic that children find themselves increasingly in competitive settings and under greater exposure to social comparison in school at a time when their cognitive and metacognitive capacities provide them with the tools for effectively utilizing help-seeking in service of competence-increasing activities. The distinction between ego- and task-involvement is crucial for educational thinking, because it is appropriate to promote help-seeking under task-involved conditions in the classroom. However, we probably want to avoid promoting help-seeking under conditions of ego-involvement because such help-seeking would probably be maladaptive in the long run and encourage cheating or other undesirable performance tactics. It is important, then, to identify for educators those instructional practices occurring in school, and other learning settings to which children are exposed, that may foster task-involvement and adaptive help-seeking skills.

DIRECTIONS FOR FUTURE RESEARCH

Although the role of help-seeking has been relatively neglected in accounts of learning, it is in fact a pervasive feature of everyday problem solving, learning, and skill acquisition across the lifespan. The need for research on the effects of help-seeking for children's learning is great. In remedying the lack of positive attention given to children's help-seeking skills, we will need studies to investigate possible antecedents of individual differences in help-seeking. Further research should also attend closely to contemporaneous variables associated with individual differences, such as current achievement level, motivational orientations, and communicative and social interactional skills.

To this end, a variety of research methodologies will have to be employed. These include (a) the collection of naturalistic observational data on the frequency, form, and function of help-seeking activities; (b) the collection

of open-ended and semistructured interview data on children's knowledge of what is involved in seeking help and their perception of the opportunities for help-seeking in specific situations; and (c) the use of structured interviews and experimental procedures to highlight the role of development in the various help-seeking skills. In the following sections a few of the areas ripe for further research are discussed.

Socialization of Adaptive Help-Seeking

Several existing lines of research on cognitive socialization in parent-child relationships, teacher-student interactions, and peer collaboration in dyads or small groups can complement one another in addressing basic questions about the child's orientation toward help-seeking and its appropriate use in achievement settings. For example, parent-child, teacher-child, and peer-child relations all allow for reciprocal relations among partners. Yet in the various types of adult-child exchanges, child behavior and characteristics have traditionally been neglected. When the child's contributions are acknowledged, researchers have tended to focus on the passive or static means of influence that children bring to bear upon the interaction, such as age, gender, current ability, etc. Recently, however, researchers investigating the origins of learning skills in mediated learning situations (e.g., Griffin & Cole, 1984; Rogoff, Malkin, & Gilbride, 1984), have come to acknowledge children's active influence upon the individual in the "teaching" role. Revival of theories of learning and development that place emphasis on mediated learning experiences provides a framework for studying the socialization of help-seeking behavior in its adaptive mode. Within this framework help-seeking becomes a potential mechanism of transition from necessary reliance on more expert thinkers and problem solvers to independent achievement (e.g. Brown, 1982; Feuerstein, 1980; Wertsch, 1979). Successful experiences in collaborative dyads with more capable partners may provide the context for the development of attitudes and expectancies about learning that promote task mastery. Adoption of this framework should be useful not only for clarifying the continuities and discontinuities in children's experiences with help-seeking across various settings, but also for highlighting the possibilities for improving instructional practice.

Effective teachers, whether they are parents (e.g., Wertsch, 1979; Wertsch, McNamee, McLane, & Budwig, 1980), professionals (e.g., Feuerstein, 1980; Palincsar & Brown, 1984; Wood, Wood, & Middleton, 1978), or more competent peers (e.g., Griffin & Cole, 1984), will attempt to operate within the child's zone of proximal development in order to induce changes in skill level and affect learning. The notion of the zone of proximal development was introduced by Vygotsky (1978) and refers to the distance between the level of performance that a child can reach without assistance

and the level of performance attained under guidance by or in collaboration with another more knowledgeable individual. When operating in the zone of proximal development students are presented with tasks that are beyond their current levels of successful performance but are attainable with guided effort and aid.

It is interesting to observe the similarity between the child's attitudes and behaviors when engaged in learning activities within the zone of proximal development and his or her task-involved achievement behaviors. Description of achievement behaviors under conditions of task-involvement (Nicholls, 1984a, 1984b) indicate that students show a preference for tasks that make neither success nor failure certain. The learning tasks are those beyond the child's current state of competence (thus ruling out certain success) but not so far beyond the child's reach that (s)he could not accomplish them even with moderate guidance from the more capable partner (thus ruling out certain failure). The merging of the two research traditions would help to create a more coherent picture of the learner's activities.

An equally important issue, namely, how the help-seeker develops self-reliance in the context of the helping reaction, needs to receive research attention. With the assistance of a helping other, the help-seeker accomplishes problems too difficult for him or her. Yet, this success at problem solving may be attributed to the helper or to the helping dyad itself. Thus, the development of self-reliance and perceived competence is not merely a question of the development of the skills necessary for competence in the task domain, but it also involves developing the self-perception that this competence rests within the self apart from the helping relationship. Researchers studying parental socialization of achievement (e.g. Chandler, Wolf, Cook, & Dugovics, 1980; Rosen & D'Andrade, 1959) suggest that mastery may be more salient than independence as a factor in the early development of perceived competence and control, because mastery provides its own feedback and rewards. Independence, in contrast, may or may not involve mastery. Parents who encourage mastery of tasks by providing support, helpful suggestions, and praise during task activity, tend to have children who develop early self-reliance and a sense of perceived control. Classroom teachers may also vary in the emphasis they place on independence versus mastery in classroom activities. The match or mismatch of the teacher's socialization emphasis with that experienced by students in the family context deserves further study.

Motivation and Learning

The motivational components of help-seeking also require further empirical support. Studies are needed to examine the role of help-seeking in the development of task competence. There is the need for data to answer

questions about (a) the relationship between children's perceptions of their own competence and their solicitation and the use of the help in problem solving, (b) the differential use of executive versus instrumental help-seeking as problem-solving strategies, (c) the relationship between mastery motivation, preference for instrumental help, and microdevelopmental changes in problem solving.

Microdevelopment refers to changes in behavior during a work session. Such investigations will require a procedure that allows for controlled observation of children's more natural or spontaneous help-seeking behaviors in a problem-solving setting. If help-seeking leads to dependence on external sources of help, then it would be expected that over the course of interaction with a helper, children would ask increasingly for adult input and feedback on the correct performance of a task. In other words, one would expect to see the child relinquishing control of the solution process to the helper. If help-seeking is functioning as a mediator of independence and competence as hypothesized, then children's behavior in the task setting should manifest continued (and even increased) involvement in the task. There should be more requests for help with conceptualizing the problem and strategies for solving it, rather than for direct help with individual problem elements. Strategies for problem solution should also become increasingly independent of external assistance over time, and children should initiate successively more task behaviors without input from the adults.

Recent developmental and cognitive psychological studies of learning have provided us with the conceptual framework and methodological tools for undertaking investigations on this subject. Studies by Anzai and Simon (1979) and Karmiloff-Smith (1979) provide excellent examples of the microanalysis of learning. Application of these methodologies to studying learning in task-involved situations and the functions of instrumental help-seeking in such settings are recommended.

Instructional Grouping

An immediate line of inquiry to pursue is the relationship between student ability, potential instructional resources in the lesson context, and help-seeking. Findings from a classroom observational study of help-seeking among high-, average-, and low-achieving students (Nelson-Le Gall & Glor-Scheib, in press) indicated that average-ability students sought help less than low-ability students but more than high-ability students. Interestingly, however, the help-seeking bids of average-ability students were ignored and rejected more frequently than those initiated by low and high achievers. Furthermore, average-ability students received fewer unsolicited offers of help from peers and teachers than their low- and high-ability counterparts. These findings are compatible with those of Webb

(1980) and Peterson, Janicki, and Swing (1981), yet at present no clear interpretation of the effects of classroom structure on learning outcomes for these students can be offered.

In observational studies of help-seeking in the classroom (e.g., Nelson-Le Gall & Glor-Scheib, in press) it has been noted that on many occasions, high-ability students engaged in little help-seeking in those situations where help-seeking would have been an appropriate problem-solving strategy. The low frequency of help-seeking among these students may be taken to mean that they understood the material and, therefore, did not need help. Alternatively it may be that because the high-ability students received instruction in the same classrooms with lower-achieving students, they perceived the pool of potential helpers to be substantially limited. High-ability students may not have engaged in help-seeking when they needed help because they perceived help to be unavailable. In classrooms with more homogeneous ability grouping, such as honors programs or enrichment programs, such high-ability students may show appropriate and sophisticated help-seeking behaviors because there will be more students perceived as potentially competent to help. Because there are so few studies investigating academic help-seeking among students of various skill levels, no firm conclusions or recommendations about optimal classroom organization can be made. The effectiveness of different classroom organizations and instructional groupings in fostering task-involved learning conditions for students of varying ability levels warrants further attention.

SUMMARY AND CONCLUSION

Ten years ago the research literature focused specifically on help-seeking could probably best be described as a scattered set of apparently unrelated studies. In just the past five years or so, however, there has been an exponential increase of theoretical and empirical activity in the area. In this paper, current conceptions of help-seeking were discussed and their appropriateness as frameworks for understanding the role of help-seeking in children's learning and skill acquisition was examined. A reconceptualization of help-seeking that emphasized its adaptive and instrumental functions in achievement activities was outlined. The role of instrumental help-seeking across the developmental span from infancy to adulthood was illustrated in the context of parent-child and peer relations, and in formal and informal learning situations. Prior research on the development of skills relevant to help-seeking was reviewed. Finally, the impact of situational variations in the learning and achievement setting of the classroom was discussed, and ideas for future research on help-seeking in children were suggested.

In conclusion, it is hoped that this chapter has clearly established the importance of help-seeking activity for children's learning and mastery. The

domain of inquiry as outlined in this chapter is in its earliest stages of development and, thus, many more issues and questions have been identified than can currently be answered definitively. It appears, however, that an examination of the role of help-seeking in learning will provide an important lead in understanding why some children are able to overcome obstacles to learning that serve to defeat other children. Who seeks help, what type of help is sought, and at what point in the learning activity help is sought are central questions for theories of skill acquisition and mastery. Our continued systematic study of these and related questions holds promise for the enhancement of children's learning and the effective structuring of learning environments.

REFERENCES

- Allen, V. (1976). The helping relationship and socialization of children: Some perspectives on tutoring. In V. Allen (Ed.), *Children as teachers*. New York: Academic Press.
- Allen, V. (1983). Reactions to help in peer tutoring: Roles and social identities. In A. Nadler, J. Fisher, & B. DePaulo (Eds.), *New directions in helping: Vol. 3. Applied research in help-seeking and reactions to aid* (pp. 213-232). New York: Academic Press.
- Ames, C., & Ames, R. (1978). The thrill of victory and the agony of defeat: Children's self and interpersonal evaluations in competitive and noncompetitive learning environments. *Journal of Research and Development in Education*, 12, 79-87.
- Ames, R. (1983). Help-seeking and achievement orientation, perspectives from attribution theory. In B. DePaulo, A. Nadler, & J. Fisher (Eds.), *New directions in helping: Vol. 2. Help-seeking* (pp. 165-186). New York: Academic Press.
- Ames, R., & Lau, S. (1982). An attributional analysis of help-seeking in academic settings. *Journal of Educational Psychology*, 74, 414-423.
- Anderson, S., & Messick, S. (1974). Social competency in young children. *Developmental Psychology*, 10, 282-293.
- Andrews, G., & Debus, R. (1978). Persistence and the causal perception of failure: Modifying cognitive attributions. *Journal of Personality and Social Psychology*, 70, 154-166.
- Anzai, Y., & Simon, H. (1979). The theory of learning by doing. *Psychological Review*, 86, 124-140.
- Bachman, R. (1975, December). Elementary school children's perceptions of helpers and their characteristics. *Elementary School Guidance and Counseling*, pp. 103-109.
- Baker, L., & Brown, A. (in press). Metacognitive skills of reading. In D. Pearson (Ed.), *Handbook of reading research*. New York: Longmans.
- Barnett, K., Darcie, G., Holland, C., & Kobasigawa, A. (1982). Children's cognitions about effective helping. *Developmental Psychology*, 18, 267-277.
- Bearison, D., & Gass, S. (1979). Hypothetical and practical reasoning: Children's persuasive appeals in different social contexts. *Child Development*, 50, 901-903.
- Beller, E. (1955). Dependency and independence in young children. *Journal of Genetic Psychology*, 87, 25-35.
- Boehm, L. (1957). The development of independence: A comparative study. *Child Development*, 28, 85-92.

- Bragg, B., Ostrowski, M., & Finley, G. (1973). The effects of birth order and age of target on use of persuasive techniques. *Child Development, 44*, 351-354.
- Brown, A. (1976). Semantic integration in children's reconstruction of logical narrative sequences. *Cognitive Psychology, 8*, 247-262.
- Brown, A. (1978). Knowing when, where, and how to remember: A problem of metacognition. In R. Glaser (Ed.), *Advances in instructional psychology* (pp. 77-165). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Brown, A. (1982). Learning and development: The problems of compatibility, access and induction. *Human Development, 25*, 89-115.
- Calsyn, R., & Kenny, D. (1977). Self-concept of ability and perceived evaluation of others: Cause or effect of academic achievement. *Journal of Educational Psychology, 69*, 136-145.
- Chandler, T., Wolf, F., Cook, B., & Dugovics, D. (1980). Parental correlates of locus of control in fifth graders: An attempt at experimentation in the home. *Merrill-Palmer Quarterly, 26*, 179-195.
- Cole, M., & Traupmann, K. (1981). Comparative cognitive research: Learning from a learning disabled child. In A. Collins (Ed.), *Minnesota symposium on child psychology: Vol. 14. Aspects of the development of competence* (pp. 125-144). Hillsdale, NJ: Erlbaum.
- Clark, R., & Delia, J. (1976). The development of functional persuasive skills in childhood and early adolescence. *Child Development, 47*, 1008-1014.
- Cooper, D., Marquis, A., & Ayers-Lopez, S. (1982). Peer learning in the classroom: Tracing developmental patterns and consequences of children's spontaneous interactions. In L. Wilkinson (Ed.), *Communicating in the classroom* (pp. 69-84). New York: Academic Press.
- Crockenberg, S., & Bryant, B. (1978). Socialization: The "implicit curriculum" of learning environments. *Journal of Research and Development in Education, 12*, 69-78.
- Deaux, K. (1976). *The behavior of men and women*. New York: Brooks-Cole.
- DePaulo, B., & Fisher, J. (1980). The costs of asking for help. *Basic and Applied Social Psychology, 7*, 23-35.
- Diener, C., & Dweck, C. (1978). An analysis of learned helplessness: Continuous changes in performance, strategy, and achievement cognitions following failure. *Journal of Personality and Social Psychology, 39*, 940-952.
- Druian, P., & DePaulo, B. (1977). Asking a child for help. *Social Behavior and Personality, 5*, 33-39.
- Dweck, C., & Elliott, E. (1983). *Achievement motivation*. In P. Mussen (Ed.), *Handbook of child psychology: Vol. IV. Socialization, personality, and social development*. New York: Wiley.
- Edwards, C., & Lewis, M. (1979). Young children's concepts of social relations: Social functions and social objects. In M. Lewis & L. Rosenblum (Eds.), *The child and its family*. New York: Plenum.
- Eisenberg, N. (1983). Developmental aspects of recipients' reactions to aid. In J. Fisher, A. Nadler, & B. DePaulo (Eds.), *New directions in helping: Vol. 1. Recipient reactions to aid*. New York: Academic Press.
- Ervin-Tripp, S. (1977). Wait for me, roller skate! In S. Ervin-Tripp & C. Mitchell-Kernan (Eds.), *Child discourse*. New York: Academic Press.
- Etaugh, C., & Hughes, V. (1975). Teachers' evaluations of sex-typed behaviors in children: The role of teacher sex and school setting. *Developmental Psychology, 11*, 163-170.
- Feather, N. (1961). The relationship of persistence at a task to the expectation of success and achievement related motives. *Journal of Abnormal and Social*

- Psychology*, 63, 552-561.
- Feather, N. (1962). The study of persistence. *Psychological Bulletin*, 59, 94-114.
- Feuerstein, R. (1980). *Instrumental enrichment*. Baltimore: University Park Press.
- Fisher, J., DePaulo, B., & Nadler, A. (1981). Extending altruism beyond the altruistic act: The mixed effects of aid on the help recipient. In J. Rushton & R. Sorrentino (Eds.), *Altruism and helping behavior*. Hillsdale, NJ: Erlbaum.
- Fisher, J., & Nadler, A. (1976). Effect of donor resources on recipient self-esteem and self-help. *Journal of Experimental Social Psychology*, 12, 139-150.
- Fisher, J., Nadler, A., & Whitcher-Alagna, S. (1982). Recipient reactions to aid. *Psychology Bulletin*, 91, 27-54.
- Flammer, A. (1981). Towards a theory of question asking. *Psychological Research*, 43, 407-420.
- Flammer, A., Kaiser, H., & Mueller-Bouquet, P. (1981). Predicting what questions people ask. *Psychological Research*, 43, 421-429.
- Flavell, J. (1977). *Cognitive development*. Englewood Cliffs, NJ: Prentice-Hall.
- Graf, R., Freer, S., & Plaizier, P. (1979). Interpersonal perception as a function of help-seeking: A U.S.-Netherlands contrast. *Journal of Cross-Cultural Psychology*, 10, 101-110.
- Green, J., & Smith, D. (1983). Teaching and learning as linguistic processes: The emerging picture. *Advances in Reading/Language Research*, 2, 273-349.
- Greenberg, M. (1980). A theory of indebtedness. In K. Gergen, M. Greenberg, & R. Willis (Eds.), *Social exchanges: Advances in theory and research*. New York: Plenum.
- Greenberg, M., & Shapiro, S. (1971). Indebtedness: An adverse aspect of asking for and receiving help. *Sociometry*, 34, 290-301.
- Griffin, P., & Cole, M. (1984). Current activity for the future: The zo-ped. *New Directions for Child Development*, 23, 45-64.
- Gumerman, R. (1982). *Young children's help-seeking and its implications for the training of professionals in early education*. Unpublished dissertation, University of Pittsburgh.
- Harter, S. (1975). Developmental differences in the manifestation of mastery motivation on problem-solving tasks. *Developmental Psychology*, 46, 370-378.
- Harter, S. (1983). Developmental perspectives on the self-system. In P. Mussen (Ed.), *Handbook of child psychology: Vol. IV. Socialization, personality, and social development* (pp. 275-385). New York: Wiley.
- Harter, S., & Connell, J. (1982). A comparison of the alternative models of the relationships between academic achievement and children's perceptions of competence, control and motivational orientation. In J. Nicholls (Ed.), *The development of achievement-related cognitions and behaviors*. Greenwich, CN: J.A.I. Press.
- Kagan, J. (1964). The child's sex-role classification of school objects. *Child Development*, 35, 1051-1056.
- Karmiloff-Smith, A. (1979). Micro- and macrodevelopmental changes in language acquisition and other representational systems. *Cognitive Science*, 3, 91-118.
- Kruetzer, M., Leonard, C., & Flavell, J. (1975). An interview study of children's knowledge about memory. *Monographs of the Society for Research in Child Development*, 40 (1, Serial No. 159).
- Ladd, G., & Oden, S. (1979). The relationship between peer acceptance and children's ideas about helpfulness. *Child Development*, 50, 402-408.
- Markman, E. (1977). Realizing that you don't understand: A preliminary investigation. *Child Development*, 48, 986-992.

- Markman, E. (1979). Realizing that you don't understand: Elementary school children's awareness of inconsistencies. *Child Development, 50*, 643-655.
- Markman, E. (1980, October). *Comprehension monitoring: Developmental and educational issues*. Paper presented at the NIE-LRDC Conference on Thinking and Learning Skills, University of Pittsburgh.
- McMullen, P., & Gross, A. (1983). Sex differences, sex roles, and health-related help-seeking. In B. DePaulo, A. Nadler, & J. Fisher (Eds.), *New directions in helping: Vol. 2. Help-seeking* (pp. 233-256). New York: Academic Press.
- Merritt, M. (1980). *Service-like events during individual work time and their contribution to the nature of communication in primary classrooms*. (Final report for Grant No. NIE G-78-0081 of the National Institute of Education). Arlington, VA: Center for Applied Linguistics.
- Miyake, N., & Norman, D. (1979). To ask a question, one must know enough to know what is not known. *Journal of Verbal Learning and Verbal Behavior, 18*, 357-364.
- Murphy, L. (1962). *The widening world of childhood*. New York: Basic Books.
- Murphy, L., & Moriarty, A. (1976). *Vulnerability, coping and growth*. New Haven: Yale University Press.
- Myers, M., & Paris, S. (1978). Children's metacognitive knowledge about reading. *Journal of Educational Psychology, 70*, 680-690.
- Nadler, A. (1983). Personal characteristics and help-seeking. In B. DePaulo, A. Nadler, & J. Fisher (Eds.), *New directions in helping: Vol. 2. Help-seeking* (pp. 303-336). New York: Academic Press.
- Nash, W., & Torrance, E. (1974). Creative reading and the questioning abilities of young children. *Journal of Creative Behavior, 8*, 15-19.
- Nelson-Le Gall, S. (1981). Help-seeking: An understudied problem-solving skill in children. *Developmental Review, 1*, 224-246.
- Nelson-Le Gall, S. (1984a). *Help-seeking, helper preference, and peer acceptance in children*. Manuscript submitted for publication.
- Nelson-Le Gall, S. (1984b). *Necessary and unnecessary help-seeking in children*. Manuscript submitted for publication.
- Nelson-Le Gall, S., & Glor-Scheib, S. (in press). Help-seeking in elementary classrooms: An observational study. *Contemporary Educational Psychology*.
- Nelson-Le Gall, S., & Gumerman, R. (1984). Children's perceptions of helpers and helper motivation. *Journal of Applied Developmental Psychology, 5*, 1-12.
- Nelson-Le Gall, S., Gumerman, R., & Scott-Jones, D. (1983). Instrumental help-seeking and everyday problem-solving: A developmental perspective. In B. DePaulo, A. Nadler, & J. Fisher (Eds.), *New directions in helping: Vol. 2. Help-seeking* (pp. 265-283). New York: Academic Press.
- Nelson-Le Gall, S., & Scott-Jones, D. (in press). Teachers' and young children's perceptions of appropriate work strategies. *Child Study Journal*.
- Nicholls, J. (1979). Quality and equality in intellectual development: The role of motivation in education. *American Psychologist, 34*, 1071-1084.
- Nicholls, J. (1984a). Achievement motivation: Conceptions of ability, subjective experience, task choice and performance. *Psychological Review, 91*, 328-346.
- Nicholls, J. (1984b). Conceptions of ability and achievement motivation. In R. Ames & C. Ames (Eds.), *Research on motivation in education: Vol. 1. Student motivation* (pp. 39-73). New York: Academic Press.
- Northman, J. (1978, Summer). Developmental changes in preferences for help. *Journal of Clinical Child Psychology, pp.* 129-132.
- Palincsar, A., & Brown, A. (1984). Reciprocal teaching of comprehension-fostering and comprehension-monitoring activities. *Cognition and Instruction, 1*, 117-175.

- Peterson, P., Janicki, T., & Swing, S. (1981). Ability \times treatment interaction effects on children's learning in large-group and small-group approaches. *American Educational Research Journal*, 18, 453-473.
- Peterson, P., Wilkinson, L., Spinelli, F., & Swing, S. (1983). Merging the process-product and the sociolinguistic paradigms: Research on small group processes. In P. Peterson, L. Wilkinson, & M. Hallinan (Eds.), *Instructional groups in the classroom: Organization and processes*. New York: Academic Press.
- Piaget, J. (1932). *The moral judgment of the child*. London: Kegan Paul.
- Piaget, J. (1976). *The grasp of consciousness*. Cambridge, MA: Harvard University Press.
- Piché, G., Rubin, D., & Michlin, M. (1978). Age and social class in children's use of persuasive communicative appeals. *Child Development*, 49, 773-780.
- Rogoff, B., Malkin, C., & Gilbride, K. (1984). Interaction with babies as guidance in development. *New Directions in Child Development*, 23, 31-44.
- Rosen, B., & D'Andrade, R. (1959). The psychological origins of achievement motivation. *Sociometry*, 22, 185-218.
- Rosen, S. (1983). Perceived inadequacy and help-seeking. In B. DePaulo, A. Nadler, & J. Fisher (Eds.), *New directions in helping: Vol. 2. Help-seeking* (pp. 73-107). New York: Academic Press.
- Rosen, S., Powell, E., & Schubot, D. (1978). Competence and tutorial role as status variables affecting peer-tutoring outcomes in public school settings. *Journal of Educational Psychology*, 20, 602-612.
- Rosenholtz, S., & Simpson, C. (1984). The formation of ability conceptions: Developmental trend or social construction? *Review of Educational Research*, 54, 31-64.
- Rosenholtz, S., & Wilson, B. (1980). The effect of classroom structure on shared perception of ability. *American Educational Research Journal*, 17, 75-82.
- Ruble, D., Boggiano, A., Feldman, N., & Loebl, J. (1980). Developmental analysis of the role of social comparison in self-evaluation. *Developmental Psychology*, 16, 105-115.
- Scott-Jones, D. (1984). Family influences on cognitive development and school achievement. *Review of Research in Education*, 11, 259-304.
- Scribner, S., & Cole, M. (1973). Cognitive consequences of formal and informal education. *Science*, 182, 553-559.
- Sears, R. (1972). Attachment, dependency, and frustration. In J. Gewirtz (Ed.), *Attachment and dependency*. New York: Wiley.
- Sears, R., Maccoby, E., & Levin, H. (1957). *Patterns of child rearing*. Evanston, IL: Row and Peterson.
- Serbin, L., O'Leary, K., Kent, R., & Tonick, I. (1973). A comparison of teacher response to the preacademic and problem behavior of boys and girls. *Child Development*, 44, 796-804.
- Shapiro, G. (1978). Help-seeking: Effects of visibility of task performance and seeking help. *Journal of Applied Social Psychology*, 8, 163-173.
- Shapiro, G. (1983). Embarrassment and help-seeking. In B. DePaulo, A. Nadler, & J. Fisher (Eds.), *New directions in helping: Vol. 2. Help-seeking* (pp. 143-161). New York: Academic Press.
- Simmons, R., Rosenberg, F., & Rosenberg, M. (1973). Disturbance in the self-image at adolescence. *American Sociological Review*, 38, 553-568.
- Spivack, G., & Shure, M. (1974). *Social adjustment of young children*. San Francisco: Jossey-Bass.
- Swing, S., & Peterson, P. (1982). The relationship of student ability and small-group

- interaction to student achievement. *American Educational Research Journal, 19*, 259-274.
- Tessler, R., & Schwartz, S. (1972). Help-seeking, self-esteem, and achievement motivation: an attributional analysis. *Journal of Personality and Social Psychology, 21*, 318-326.
- Vygotsky, L. (1978). In M. Cole, V. John-Steiner, S. Scribner, & E. Souberman (Eds.), *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Wallston, B. (1976). The effects of sex-role ideology, self-esteem and expected future interactions with an audience on male help-seeking. *Sex Roles, 2*, 353-365.
- Wang, M. (1983). Time use and the provision of adaptive instruction. In L. Anderson (Ed.), *Time and school learning*. Berkeley, CA: McCutchan.
- Webb, N. (1980). Group process and learning in an interacting group. *Quarterly Newsletter of the Laboratory of Comparative Human Cognition, 2*, 10-15.
- Webb, N. (1982). Student interaction and learning in small groups. *Review of Educational Research, 52*, 421-445.
- Webb, N. (1983). Predicting learning from student interaction: Defining the interaction variables. *Educational Psychologist, 18*(1), 33-41.
- Weiner, B. (1979). A theory of motivation for some classroom experiences. *Journal of Educational Psychology, 71*, 3-25.
- Wertsch, J. (1979). From social interaction to higher psychological processes. A clarification and application of Vygotsky's theory. *Human Development, 22*, 1-22.
- Wertsch, J., McNamee, G., McLane, J., & Budwig, N. (1980). The adult-child dyad as a problem-solving system. *Child Development, 51*, 1215-1221.
- White, R. (1959). Motivation reconsidered: The concept of competence. *Psychological Review, 66*, 297-333.
- White, B., & Watts, J. (1973). *Experience and environment* (Vol. I). Englewood Cliffs, NJ: Prentice-Hall.
- Wilkinson, L., & Calculator, S. (1982). Effective speakers: Students' use of language to request and obtain information and action in the classroom. In L. Wilkinson (Ed.), *Communicating in the classroom*. New York: Academic Press.
- Williams, K. B., & Williams, K. D. (1983). Social inhibition and asking for help: the effects of number, strength, and immediacy of potential help-givers. *Journal of Personality and Social Psychology, 44*, 67-77.
- Winterbottom, M. (1958). The relationship of need for achievement to learning experiences in independence and mastery. In J. Atkinson (Ed.), *Motives in fantasy, action, and society*. Princeton, NJ: Van Nostrand.
- Wood, D., Bruner, J., & Ross, G. (1976). The role of tutoring in problem solving. *Journal of Child Psychology and Psychiatry, 17*, 89-100.
- Wood, D., Wood, H., & Middleton, D. (1978). An experimental evaluation of four face-to-face teaching strategies. *International Journal of Behavioural Development, 1*, 131-147.