Journal of Educational Psychology
2004, Vol. 96, No. 3, 569–581

0022-0663/04/$12.00 DOI: 10.1037/0022-0663.96.3.569

Perceived Achievement Goal Structure and College Student Help Seeking

Stuart A. Karabenick
Eastern Michigan University

Two studies examined associations between college students' help seeking and perceptions of their classes' achievement goal structure. Study 1 established that students' help seeking (N = 883 in 6 chemistry classes) could be parsimoniously described by distinct approach (intentions to seek autonomous help from teachers) and avoidance patterns (threat, avoidance intentions, seeking expedient help). In Study 2, after controlling for students' personal achievement goal orientations (N = 852 in 13 psychology classes), within-class differences in perceived class emphasis on mastery positively predicted help-seeking approach and negatively predicted help-seeking avoidance patterns, whereas perceived class emphasis on performance-avoid goals positively predicted help-seeking avoidance. Students in classes with greater perceived emphasis on performance-avoid goals had higher levels of help-seeking avoidance patterns. Results complement previous research on help seeking and achievement goals with younger learners and provide support for the role of classroom achievement goal structure in student motivation and performance.

Following the distinction between instrumental and executive help-seeking goals proposed by Nelson-Le Gall (1981, 1985), research over the past 2 decades has examined the person and situation determinants of whether, for what reasons, and from whom students seek help when they encounter academic difficulties (Butler, 1998; Karabenick, 1998, 2001, 2003; Karabenick & Knapp, 1991; Karabenick & Sharma, 1994; Newman, 1990, 1991, 1994, 1998, 2000; Newman & Goldin, 1990; Newman & Schwager, 1993; Ryan, Gheen, & Midgley, 1998). An instrumental goal refers to help seeking designed to decrease students' subsequent need for assistance (e.g., by asking for explanations), whereas executive help seeking involves others in an attempt to avoid work (e.g., by asking for answers to problems). These have also been referred to as adaptive (also autonomous) and expedient help-seeking goals, respectively (Butler, 1998; Newman, 2000).

Accumulated evidence indicates that help seeking is generally subject to the same influences as other learning strategies (Karabenick, 1998; Karabenick & Knapp, 1991; Newman, 2000). Because the process of seeking help is inherently social, however, social features of the learning context are more relevant than they would be for students' use of such cognitive or metacognitive strategies as rehearsal or effort regulation. The most direct social influence in classrooms is undoubtedly the perceived receptivity of teachers and peers to requests for assistance (Karabenick & Sharma, 1994; Le Mare & Sohbat, 2002; Newman & Goldin, 1990). How teachers and peers respond is an essential determinant of whether students seek help. However, receptivity must also be viewed more broadly as one element of a classroom's general facilitative or nonfacilitative climate and structure (e.g., Ames, 1992). Research reported here examined such influences from the perspective of achievement goal theory, specifically, how students perceived the relative emphasis placed on mastery and performance goals (Midgley, 2002; Pintrich & Schunk, 2002).

Most research on achievement goal theory and help seeking has examined students' personal goals or goal orientations. In general, studies have shown that students who adopt mastery goals (a focus on learning and self-improvement) are more likely to engage in instrumental/autonomous help seeking, whereas those who adopt performance goals (concerns about ability and social comparisons) either avoid seeking help or seek expedient help (Karabenick, 1998, 2003). Much less is known about the influence of achievement goal structure (Midgley, 2002), which has been assessed primarily with student ratings of teachers' intentional or inadvertent communications and how teachers structure classes (Ryan, 1998; Ryan et al., 1998; Turner et al., 2002).

Arbreton (1993), for example, found that perceived teacher emphasis on student performance is related both to the avoidance of help seeking and to expedient help seeking (but not to seeking instrumental help). Perceived mastery focus is positively related to instrumental but not to expedient help seeking and is inversely related to the avoidance of help seeking. There was no evidence in that study, however, that differences between classes' emphasis on mastery or performance goals (estimated by aggregating students' perceptions within classes) influence help-seeking attitudes or intentions. Recent studies with younger learners have detected between-class differences. Analyses of the perceived classroom environment using hierarchical linear modeling (HLM; Raudenbush & Bryk, 2002; Snijders & Bosker, 1999) have indicated that

Stuart A. Karabenick, Department of Psychology, Eastern Michigan University.

Numerous colleagues associated with the Combined Program in Education and Psychology and the College Research Group at the University of Michigan contributed to various phases of the research reported here. Included are Yi-Guang Lin, Bill McKeachie, Christina Rhee, Brian Sims, and Akane Zusho. Thanks are also extended to Richard Newman for his insightful conceptual comments and to Kai Schnabel Cortina for his assistance with the hierarchical linear modeling analysis. Most of all, this research is presented with profound gratitude to Paul Pintrich for his many years of intellectual challenge and stimulation.

Correspondence concerning this article should be addressed to Stuart A. Karabenick, who is now at the Combined Program in Education and Psychology, 1400C School of Education, University of Michigan, Ann Arbor, MI 48109. E-mail: skaraben@umich.edu

elementary school classes perceived by students as more mastery or less performance focused are less likely to avoid seeking needed help (Ryan, 1998; Ryan et al., 1998). Most recently, Turner et al. (2002) also found evidence that avoidance of help seeking (among other avoidance behaviors) by elementary school children is inversely related to perceived emphasis on mastery but not to the degree that classes are perceived as performance focused.

Although there is supportive evidence for the association between help seeking and perceived classroom achievement goals, several questions remain. First, research to date has typically examined either personal goal orientations or perceived class goals, but not both. An important question, therefore, concerns the independent predictive contributions of personal and perceived classroom achievement goals. Put another way, to what extent does the perceived classroom achievement goal structure account for variance in help seeking above that accounted for by students' personal goal orientations? Second, with some exceptions (e.g., Arbreton, 1993), studies have focused only on the avoidance of help seeking. Although avoidance is critical (indeed, the primary focus of early research; e.g., Good, Slavings, Harel, & Emerson, 1987), more evidence is needed regarding the type of help students would seek having made the decision to do so. Thus, a more complete understanding of the influences of achievement goals requires the assessment of help-seeking approach as well as help-seeking avoidance.

An additional question concerns how personal goal orientations and perceived classroom goal structure are related to different manifestations of help seeking, in particular, whether help seeking can be described not only according to intentions to seek or to avoid seeking help (e.g., Ryan, 1998; Ryan et al., 1998), or by help-seeking goals (instrumental vs. expedient), but also by more elaborate patterns that encompass several components of the help-seeking process. Building on previous research that has examined associations between components of the process (e.g., Gross & McMullen, 1983; Newman, 1990), the present studies tested whether such patterns could be identified and whether they could provide a more parsimonious description of student help seeking.

Finally, most research on contextual influences has been based on younger students in relatively small elementary or middle school classes; however, there have been no systematic studies of college students, especially those in large classes that provide pivotal gateway experiences that have an important influence on students' persistence and vocational choices. In addition to the focus on performance that pervades the college experience in general, ubiquitous large classes that students confront when entering college are very different in several respects. Important for help seeking, they are relatively impersonal and lack the support, sustained contact, and intimacy that elementary, middle, and even most high school classes provide. Furthermore, large classes pose both psychological and logistical barriers to students who need help. Because instructors are less available, students are left with alternatives such as tutors, help centers, and other support personnel or reliance on peers despite their relative lack of expertise (Knapp & Karabenick, 1988).

To summarize, the present studies addressed the following three questions: (a) To what extent is help seeking predicted by students' perceptions of the classes' achievement goal structure above that accounted for by their personal achievement goal orientations? (b) Can student help seeking be parsimoniously described by general help-seeking patterns that include several components of the help-seeking process? (c) Are findings based on younger students in small elementary and middle school classes generalizable to older (college) students in larger classes? Study 1 was designed to identify both the number and the characteristics of help-seeking patterns that could effectively describe student help seeking in large college classes and their associations with students' personal achievement goal orientations. Study 2 then examined the influences of both personal achievement goal orientations and perceived achievement goal structure on help-seeking patterns.

Study 1: Help-Seeking Patterns

Associations Between Help-Seeking Components

Previous help-seeking studies have tended to include some but not all components of the help-seeking process, namely, attitudes, intentions, goals, or preferred sources of help. The most well-established association between these components is the inverse relationship between threat to self-esteem and help seeking (Arbreton, 1993; Karabenick & Knapp, 1991; Newman, 1990; Newman & Goldin, 1990; Newman & Schwager, 1993; Ryan et al., 1998; Ryan & Pintrich, 1997; Shapiro, 1983). However, as alluded to previously, that relationship depends on the type of help students seek: Threat is inversely related to instrumental help seeking among adolescents (Arbreton, 1993; Ryan & Pintrich, 1997) and college students (Karabenick & Knapp, 1991) and is positively related to expedient help seeking among middle school students (Arbreton, 1993; Newman & Schwager, 1993).

Furthermore, the threat–help-seeking relationship also depends on the source of help. In the study by Ryan and Pintrich (1997), for example, more-threatened students were less likely to approach their teachers for help (a formal source of assistance), but threat was not related to whether students would seek help from peers (an informal source). For college students, however, threat appears not to be related to college students' reported help seeking from formal sources but to be inversely related to seeking help from informal sources (Karabenick & Knapp, 1991). Thus, more-threatened students are less likely to seek help. However, the relationship is complex, and there are differences between younger and older learners once the type and source of help are taken into consideration.

Less is known about associations between students' help-seeking goals and preferred sources of help, specifically, whether those with instrumental or expedient goals are more or less likely to seek help from teachers or other students. It would be expected that because teachers have more expertise, which even younger students understand (Newman & Goldin, 1990; Newman & Schwager, 1993; van der Meij, 1988, 1998), those seeking instrumental help should prefer formal sources rather than informal sources that generally have less expertise. Conversely, because expedient help seeking is designed to minimize effort (e.g., by obtaining the answer to a problem rather than more time-consuming explanations), students seeking expedient help should prefer informal sources that are often more readily available (e.g., other students; Knapp & Karabenick, 1988).

In sum, available evidence suggests an avoidance-related set of help-seeking variables that is relatively coherent. More-threatened students are less likely to seek help that is instrumental and

increases their subsequent autonomy but more likely to seek help for expedient reasons. There is less certainty, however, about how threat, intentions to avoid help seeking, and help-seeking goals are related to preferred sources of help. Intentions to seek instrumental help tend to be associated with seeking help from teachers (a formal source), but there is less evidence concerning help-seeking goals and seeking help from informal sources (e.g., other students). Thus, the importance of assessing multiple components of the help-seeking process—threat, intentions to seek and to avoid help, help-seeking goals, and sources of help.

An important issue is whether variables associated with threat and avoidance, as well as those related to intentions to seek adaptive help (see Newman, 2000), form one coherent underlying pattern or whether more than one combination of components are needed to adequately describe if, why, and from whom college students seek help. A single pattern would mean that students are positioned to approach or avoid seeking help, with other components associated with each end of a single continuum. Alternatively, students could have both approach and avoidance tendencies, each linked to their respective help-seeking goals and sources of help, that in combination determine their intention to seek or avoid seeking help in college classes. In addition to evidence from previous studies of help seeking, recent analyses of approach and avoidance dimensions in motivation have suggested that two dimensions, rather than one, may emerge (Elliot & Covington, 2001; Elliot & Thrash, 2002).

Help-Seeking Patterns and Personal Achievement Goal Orientations

In addition to determining whether help-seeking patterns can parsimoniously describe multiple components of the help-seeking process, Study 1 also examined their associations with students' personal achievement goals. A multiple-goals perspective was adopted here that, in addition to mastery and performance, differentiates between performance-approach and performance-avoid goals (Church, Elliot, & Gable, 2001; Elliot & Harackiewicz, 1996; Harackiewicz, Barron, & Elliot, 1998; Kaplan & Middleton, 2002; Midgley, Kaplan, & Middleton, 2001; Pintrich, 2000a, 2000b; Skaalvik, 1997). Furthermore, mastery-avoid was included as a fourth goal orientation. Mastery-avoid is defined as an individual's concern with the failure to learn, such as not being able to comprehend text material. As with mastery-approach goals, the focus is on the self rather than social comparison. This goal orientation completes the proposed two-dimensional framework that includes mastery-approach, performance-approach, mastery-avoid, and performance-avoid goals (Elliot & McGregor, 2001; Pintrich 2000a, 2000b).

Evidence from studies that differentiated students' help-seeking goals (Arbreton, 1993, 1998; Butler & Neuman, 1995; Newman, 1991, 1994; Ryan, Hicks, & Midgley, 1997; Ryan & Pintrich, 1997, 1998) indicates that mastery-approach orientation is positively related to instrumental help seeking and inversely related to help-seeking threat, help-seeking avoidance, and expedient help seeking. Higher levels of performance goal orientation, as well as extrinsic goals, are positively related to help-seeking threat, help-seeking avoidance, and expedient help seeking. However, performance goal orientation and instrumental help seeking tend to be unrelated (Arbreton, 1993; Ryan & Pintrich, 1997).

With respect to the multiple-goals perspective, it is important to note that measures of relative-ability goal orientation in these studies did not differentiate between performance-approach and performance-avoid goals. However, scale content suggests they were more likely to have assessed performance-approach than performance-avoid goals. Newman (1998) did find relationships between performance-approach goal orientation and instrumental help seeking, but the direction depended on whether learners performed under conditions that stressed learning (direct) or performance (inverse).

On the basis of the available evidence, therefore, mastery-approach goal orientation should be related to instrumental help seeking, and performance goal orientation should be related to the avoidance of help seeking and expedient help seeking. Inclusion of the revised taxonomy of achievement goals in the present study provides additional information about college students with different help-seeking patterns, as well as evidence that bears on achievement goal theory, especially the distinction between mastery-approach and mastery-avoid and performance-approach and performance-avoid goals (Linnenbrink & Pintrich, 2001). Associations between help-seeking patterns and mastery-avoid goals would be especially interesting because of uncertainty about whether the mastery or avoidant facets would be more relevant in the help-seeking context.

Independent Assessment of Help-Seeking Components

An important feature of the present study is the measurement of components of help seeking, subsequently referred to as indictors of help seeking, in ways that are conceptually independent. For example, just as it is necessary to control for the need for assistance when measuring students' intentions to seek help (Karabenick & Knapp, 1991; Newman, 1990), measures of preferences for sources of help controlled for students' intentions to seek help by framing statements in conditional form. Furthermore, students' intentions to avoid seeking help were assessed independent of the type of help (goals and sources) that students would seek if they were to do so. Instrumental and expedient help-seeking goals, as well as preferred source (formal vs. informal), were also assessed in a way that maintained their conceptual independence, that is, by asking students to rate why they would seek help (if they did) and from whom.

Method

Participants and assessment procedure. Participants were students in six large undergraduate chemistry classes at a large midwestern research university. Three were introductory chemistry classes with enrollments of 450, 404, and 229 students; the other three were organic chemistry classes with enrollments of 358, 343, and 255. In addition to lectures, students participated in smaller recitation sections. Participation was voluntary, with students granting researchers access to their test performance. Data were collected in three waves: Weeks 2, 6, and 12. The present study used data from the second wave ($N = 883$; 51% female, mean age = 20.4 years), which occurred at midterm, just prior to the second of three exams. The assessment session was conducted in class by graduate assistants and required approximately 20 min. Participants were relatively high in academic ability and achievement, with mean SAT math scores of 677 and mean SAT verbal scores of 634 (total of 1311) or mean ACT math and verbal scores of 30 and 29, respectively. Students also had mean high school GPAs of 3.87 and mean college GPAs of 3.34.

Questionnaire and scales. Measures of help seeking and achievement goals were part of a 107-item instrument, which included items from the Motivated Strategies for Learning Questionnaire (Pintrich, Smith, Garcia, & McKeachie, 1993) and used a 5-point (1 to 5) response scale that was anchored with the statements *not at all true* and *completely true.* Multiple achievement goal orientation scales were embedded in the motivation portion of the survey: mastery-approach, mastery-avoid, performance-approach, and performance-avoid (Pintrich, 2000a, 2000b). Five help-seeking scales were embedded in the learning strategies portion of the survey. These were instrumental help-seeking goal, expedient help-seeking goal, formal versus informal help-seeking source, help-seeking threat, and intentions to avoid seeking help. As indicated earlier, items were constructed as conditional statements. For example, intentions to avoid began with "If I didn't understand something. . . ." Help-seeking goal statements began with "If I got help in this class. . . ." Likewise, preferred source statements began with "If I were to seek help in this class. . . ." Examples of items used to assess achievement goal orientations and help-seeking scales are provided in the Appendix. Descriptive statistics for all scales are shown in Table 1, including the number of items and Cronbach's alpha internal consistency reliability estimates, which were all in the acceptable range.

Results and Discussion

Relationships between help-seeking indicators. Table 2, which presents correlations between the help-seeking indicators, shows the expected direct relation between help-seeking threat and help-seeking avoidance. However, there are clear differences that depend on the type of help sought as a function of threat. For these college students, threat was positively related to expedient help seeking and inversely related to instrumental help seeking. In other words, more-threatened students were less likely to report they would seek needed help. However, if they did seek help, more-threatened students indicated that it would be more for expedient purposes and less to understand the course material. Another clear pattern emerged with respect to the sources of help: Help-seeking threat, avoidance, and expedient help seeking were not related to whether students preferred to seek help from their teachers rather than from other students. Help-seeking source preference was, however, related to instrumental help seeking. Specifically, the more that students indicated they would seek help to understand the material, the more likely it would be from their teachers rather than from other students.

Help-seeking patterns. The high correlations between threat, avoidance, and expedient help seeking; their relative independence from preferred source of help; and the association between instrumental help seeking and formal source preference suggested there was more than one coherent pattern of help-seeking indicators, even though the threat–avoidance–expedient grouping was somewhat inversely related to instrumental help seeking. Exploratory factor analysis of the five help-seeking scales derived from the original items was conducted using principal components with a root-one extraction criterion and subsequent varimax rotation. Resulting factor loadings greater than .5 are shown in Table 3.

Two factors with eigenvalues greater than 1.0 were extracted, which accounted for 69% of the variance. Factor loadings show a clear differentiation between the two factors. What is designated the *help-seeking approach pattern* combines instrumental help-seeking goals with help obtained from formal sources (instructors) rather than informal sources (other students). The *help-seeking avoidance pattern* combines the threat posed by help seeking, intentions to avoid seeking help, and seeking expedient help to reduce one's workload. Approach and avoidance help-seeking pattern scores were then constructed by computing the means of the scales that comprised each pattern. Unit weighting in this fashion is justified given their approximately equal variances, shown in Table 1.

Achievement goal orientation correlates of help-seeking patterns. Table 4 presents the zero-order correlations between achievement goal orientations and the derived help-seeking pattern scores. The profiles of relationships are decidedly distinct. Students with help-seeking approach patterns were more mastery goal oriented, but there were no significant associations with the remaining achievement goals. Conversely, students' help-seeking avoidance pattern scores were unrelated to mastery-approach but positively related to mastery-avoid, performance-approach, and performance-avoid achievement goal orientations. In addition, course performance was positively related to help-seeking ap-

Table 1
Scale Descriptive Statistics—Study 1

Scale	No. items	*M*	*SD*	α
Achievement goal orientation				
Mastery-approach	6	3.3	.8	.84
Mastery-avoid	7	2.9	.9	.82
Performance-approach	10	2.9	.9	.94
Performance-avoid	5	2.1	.9	.89
Help seeking				
Instrumental goal	2	3.5	.9	.62
Source (formal)	3	2.8	.9	.66
Threat	3	1.8	.9	.81
Avoidance	3	1.7	.8	.77
Expedient goal	2	1.8	.9	.78

Table 2
Correlations Between Help-Seeking Indicators

Indicator	Threat	Avoidance	Expedient goal	Instrumental goal
Avoidance	.69***			
Expedient goal	.52***	.54***		
Instrumental goal	−.26***	−.39***	−.16***	
Source (formal)	.05	.00	.01	.17***

*** $p < .001$.

Table 3
Results of Factor Analysis of Help-Seeking Indicators

	Help-seeking pattern	
Help-seeking indicator	Avoidance	Approach
Threat	.87	
Avoidance	.88	
Expedient goal	.76	
Instrumental goal		.60
Source (formal)		.87
Eigenvalue	2.4	1.1
% variance accounted for	47.2	21.8

Note. Loadings > 0.5 shown.

Table 4
Help Seeking and Achievement Goal Orientations

Variable	Help-seeking pattern	
	Approach	Avoidance
Achievement goal orientation		
Mastery-approach	.31***	−.05
Mastery-avoid	.03	.26***
Performance-approach	.08	.31***
Performance-avoid	−.04	.50***
Performance		
Exam %	.14***	−.17***

*** $p < .001$.

proach and inversely related to help-seeking avoidance pattern scores, respectively.

Thus, analyses identified two help-seeking patterns that are consistent with the results of previous studies (e.g., Arbreton, 1998; Karabenick & Knapp, 1991; Newman, 2000; Ryan & Pintrich, 1997). In general, students with higher help-seeking approach pattern scores were those more likely to seek instrumental help from formal (e.g., instructors) than from informal sources (e.g., other students). They were also more mastery goal oriented and performed better in the course. Students with higher help-seeking avoidance pattern scores were those more threatened by help seeking, more likely to avoid doing so, and if they did seek help, would do so to avoid work. However, this pattern did not include preferred source of help; that is, the same degree of threat and avoidance accompanied the prospect of seeking assistance from teachers as from other students. It should be noted that derived scales are inversely related ($r = -.21$, $p < .001$), but the correlation is low enough to suggest that the patterns are relatively independent. Thus, conceivably, students could be classified as high or low on either or both pattern dimensions.

Relationships between help-seeking pattern scores and students' achievement goals provide additional insight into the nature of help seeking in these classes. Associations between students' help-seeking avoidance pattern scores and performance goals indicate that students who were more concerned about their ability relative to their peers, whether the emphasis was on outperforming them (approach) or worried about being perceived as less able (avoid), were more threatened by and avoided seeking help and would seek help to minimize effort. They were also more concerned about not being able to master the course material. In this instance, therefore, an avoidance pattern was associated with any concern about performance, no matter whether the performance standard was in reference to others (performance-approach and performance-avoid) or the self (mastery-avoid). Furthermore, the clear difference between the way help-seeking pattern scores were related to mastery-approach versus mastery-avoid achievement goal orientations provides additional support for the distinction between these achievement goal orientations (Church et al., 2001; Pintrich, 2000a, 2000b): Only mastery-approach was associated with approach help-seeking pattern scores.

It is important to emphasize again how help-seeking indicators were assessed in the present study when interpreting the results. Rather than students being asked whether, for what purpose, and from whom they sought help, they were asked what they would do contingently. They were asked whether they would seek help given need, why they would seek help (instrumental or expedient) if they did, and to whom they would turn for assistance. This does not provide actual rates of help seeking from particular sources. However, it is argued that contingently stated information is more informative about the process and does not rely on statistical controls to arrive at the degree of help-seeking indicators' independent contributions to the help-seeking process.

Study 2: Help-Seeking Patterns and Perceived Achievement Goal Structure

I now turn to whether college students' help-seeking patterns are related to students' perceptions of their classes' achievement goal structure. This complements and extends research conducted with younger students in small classes (Kaplan, Middleton, Urdan, & Midgley, 2002; Midgley, 2002; Ryan et al., 1998; Turner et al., 2002; Wolters, 2004; Young, 1997) to college students in large classes. The analysis also isolates the effects of perceived goal structure from those attributable to students' personal goal orientations. Using HLM, effects of perceived goal structure were estimated both within and between classes. Within-class effects reflect variation among students who presumably have been exposed to similar conditions but perceive them differently and the way those differences relate to help-seeking patterns. Between-class effects suggest the influence of students' aggregate perceptions of goal structure on their help-seeking patterns.

In the process of testing for effects of goal structure, Study 2 also determined whether the help-seeking patterns identified in Study 1 would be replicated with the addition of two help-seeking indicators that were included to expand components of the patterns. One was students' generalized intentions to seek help (i.e., whether students would seek help if it was needed), to complement generalized intentions to avoid seeking needed help that have been used extensively in previous studies (e.g., Ryan et al., 1998; Turner et al., 2002). The second resulted from separately assessing students' preferences for formal (i.e., teachers) and informal sources of assistance (i.e., students). From the results of Study 1, it was expected that threat, avoidance, and expedient help seeking would constitute one pattern and that intentions to seek needed help, instrumental help seeking, and a preference for formal sources of assistance would constitute another pattern. It was not clear, however, with which pattern, if any, preference for assistance from informal sources would be associated. Study 2 also differed in terms of the course subject matter and student population. Specifically, students were enrolled in a less selective university and in psychology rather than chemistry courses.

Method

Participants were enrolled in one of 13 sections of Introductory Psychology at a large midwestern metropolitan comprehensive university. Classes were designed to accommodate 90 students. Results are based on the 852 students who completed the second of two waves of data collection (12th and 13th weeks), at which point it was assumed that perceptions of class goals had stabilized. An average of 65.5 ($SD = 8.90$) and a range of from 55 to 88 students per class completed the surveys. Most were female (60%), first-term freshmen (77%), and Caucasian (74%) or African American (20%). Their average standardized composite test scores were 1057

(SAT) and 21 (ACT), substantially lower than for students in Study 1 (1311 SAT and 30 ACT). Participation was voluntary in all classes, which was both made clear in writing in the informed consent statement and reinforced by instructors prior to the distribution of the questionnaires. Students in all classes received extra credit for their participation.

Graduate student assistants conducted the sessions with the instructor absent. Questionnaires were substantially the same as in Study 1 and included scales that measured students' achievement goal orientations and perceived class goals. Assessment of perceived class goal structure consisted of scales to measure mastery-approach, performance-approach, and performance-avoid goals. Mastery-avoid was not included because it does not translate as a contextual dimension. Items assessing goal structure paralleled those measuring students' goal orientations, with such phrases as "In this class, the teacher. . ." or "In this class, it is important to. . . ." Summary descriptive statistics for all scales are presented in Table 5, and sample items are provided in the Appendix. Internal consistency estimates of reliability are all in the acceptable range.

Results

Table 6 presents correlations between the seven help-seeking indicators assessed. As in Study 1, help-seeking threat, intentions to avoid seeking needed help, and expedient help seeking were strongly associated. Those indicators were also somewhat inversely related to students' intentions to seek needed help. However, the avoidance pattern indicators were substantially independent of students' intentions to seek instrumental/autonomous help and of preferences to seek help either from formal or informal sources. Also consistent with Study 1, instrumental/autonomous help seeking was positively related to intentions to seek help (approach) and a preference for formal sources of assistance (i.e., teachers) but not highly correlated with informal source preference. Finally, formal and informal source preferences were, as expected, inversely related. The approach-related help-seeking variables, in other words, were interrelated and relatively independent of indicators of help-seeking avoidance.

Help-seeking patterns. As in Study 1, a principal components analysis was conducted using a root-one extraction criterion. The results again suggested two dimensions, and the loadings ($> .5$) after varimax rotation are shown in Table 7. Consistent with results of Study 1, with a different student population and course content, a pattern that can be labeled help-seeking approach consisted of intentions to seek needed help, instrumental help-seeking goals, and a preference to seek help from formal sources (here, students' teachers). In other words, students with higher approach pattern scores indicated they would be more likely to seek needed help from their teachers for explanations rather than specific answers.

Also similar to the results of Study 1, an avoidance pattern consisted of help-seeking threat, intentions to avoid seeking help, and seeking help for reasons of expedience. Thus, students with higher avoidance pattern scores were more threatened by seeking help, would be less likely to seek needed help, and if they did seek help, would do so to reduce their workload. As might be expected from the low zero-order correlations, students' preferences for informal sources of help failed to saliently load on either factor and were, therefore, not included as a component of either approach or avoidance help-seeking patterns.

On the basis of results of the factor analysis, two help-seeking pattern scales were created by combining variables with salient loadings on each factor, that is, by averaging the scale scores of the variables that comprised each pattern. As in Study 1, the pattern scales scores are inversely related ($r = -.16$, $p < .001$), although relatively independent, and effectively summarize the two help-seeking patterns. In addition, because data were obtained at two points during the academic term, it was also possible to estimate the patterns' stability. Correlations of .50 and .52 for approach and avoidance patterns, respectively, suggest reasonably high levels of stability over a 2-month interval and provide indirect, suggestive evidence of the patterns' reliabilities.

Achievement goal orientations and perceived class goal structure. Zero-order correlations between students' personal achievement goal orientations and perceived goal structure at the individual, within-class level are shown in Table 8. These values controlled for effects of class differences by subtracting students' scores from their respective class means. The correlations show the expected degrees of association. Thus, correlations were larger when both personal orientations and perceived class goal structure referred to the same goal (e.g., mastery-approach orientation and mastery-approach perceived goal emphasis) than when referring to different goals (e.g., mastery orientation and perceived performance-avoid class emphasis). In addition, there were closer associations between performance goal orientations and perceived emphasis on performance goals (rs = .71 and .61) than between mastery goal orientation and perceived class emphasis on mastery ($r = .44$). Thus, within-class perceived performance goals and personal goal orientations were somewhat more redundant than were mastery goal orientation and perceived class emphasis on mastery. Perceived mastery-approach goals were also not as highly related to mastery-avoid or performance goal orientations. Shown in Table 9 are correlations between students' collective perceptions of their classes, computed by aggregating (i.e., averaging) students' responses within each class. Most notably, perceived performance-approach and performance-avoid goal structure are highly correlated. Second, at the class level, perceived mastery was negatively related (although not significantly, presumably because of the small number of classes) to both perceived performance-approach and performance-avoid goals, at about the same levels as reported previously (Ryan et al., 1998).

Table 5
Scale Descriptive Statistics—Study 2

Scale	No. items	*M*	*SD*	α
Achievement goal orientation				
Mastery-approach	5	3.2	.8	.78
Mastery-avoid	4	2.6	.9	.79
Performance-approach	4	2.5	1.1	.87
Performance-avoid	5	1.9	.8	.86
Perceived class goal				
Mastery-approach	4	3.7	.7	.71
Performance-approach	3	2.1	1.0	.84
Performance-avoid	3	1.9	.9	.73
Help seeking				
Threat	4	1.6	.8	.85
Avoidance	3	1.7	.8	.70
Expedient goal	3	2.0	.9	.65
Approach	3	3.4	.9	.77
Instrumental goal	4	3.3	.8	.60
Formal source	2	2.9	1.1	.87
Informal source	2	3.1	1.1	.88

Table 6
Correlations Between Help-Seeking Indicators

Indicator	1	2	3	4	5	6	7
1. Threat	—						
2. Avoidance	.64***	—					
3. Expedient goal	.57***	.53***	—				
4. Approach	−.24***	−.37***	−.13***	—			
5. Instrumental goal	−.06	−.09**	−.03	.47***	—		
6. Formal source	.02	−.07*	.02	.33***	.34***	—	
7. Informal source	.05	.12***	.12***	.11**	.12***	−.27***	—

* $p < .05$. ** $p < .01$. *** $p < .001$.

Perceived goal structure and help-seeking patterns. Three HLM models were compared, with separate analyses conducted for each help-seeking pattern (approach and avoidance) as outcome variables. The first model included only personal achievement goal orientations, the second added within-class variation in students' perceived goal structure, and the third added variation in perceived goal structure between classes. Achievement goal orientations and within-class variation in perceived goal structure were used as Level 1 predictors of help-seeking patterns in Models 1 and 2. Model 3 added between-class perceived goal structure as Level 2 predictors. Level 2 predictors were grand mean centered. Because the express purpose was to differentiate between-class from within-class variation in perceived goal structure, there was a clear reason to use class-centered Level 1 predictors. As noted subsequently, however, the constant slope models used rendered Level 1 centering options (class vs. grand mean) equivalent (see Snijders & Bosker, 1999, p. 81).

Analogous to hierarchical regression, Model 2 compared with Model 1 estimated effects of differences in perceived goal structure within classes above that predicted by students' personal goal orientations. Comparisons between Models 2 and 3 tested the increased predictability of differences in perceived goal structure between classes. Finally, Model 3, compared with Model 1, provided an overall estimate of whether perceived achievement goal structure in these classes accounted for variance in help-seeking pattern scores when controlling for individuals' achievement goal orientations. The associated statistical tests were based on differences in model deviance (chi-square with degrees of freedom equal to the difference between compared models in the number of estimated parameters). Also reported is the proportion of Level 1 variance accounted for by successive models based on the increase in modeled variance accounted for (see Snijders & Bosker, 1994; 1999).

Table 7
Results of Factor Analysis of Help-Seeking Indicators

	Help-seeking pattern	
Help-seeking indicator	Avoidance	Approach
Threat	.82	
Avoidance	.84	
Expedient goal	.81	
Approach		.77
Instrumental goal		.81
Formal source		.70
Informal source		
Eigenvalue	2.1	1.8
% variance accounted for	30.7	25.8

Note. Loadings > 0.5 shown.

Fully unconditional models (equivalent to a one-way analysis of variance with classes as a random factor) indicated there were significant between-class differences for both help-seeking patterns: help-seeking approach, $\chi^2(12, N = 852) = 22.03$, $p < .05$; help-seeking avoidance, $\chi^2(12, N = 852) = 90.97$, $p < .001$. The respective intraclass correlation coefficients (ICC) were 1% and 7%, which indicates considerably more between-class variability in students' help-seeking avoidance than help-seeking approach orientations. Notably, the between-class variability in avoidance is similar to that found in previous studies of help seeking and other avoidance variables with younger students and many more classes (Anderman & Young, 1994; Turner et al., 2002), although considerably lower than the 20% found by Ryan et al. (1998). Both approach and avoidance help-seeking models were computed, although, of course, it was unlikely that between-class approach effects would be found because of the restricted between-class variance in approach help-seeking pattern scores.

Similar unconditional analyses found that perceived goal structure varied between classes: mastery-approach, $\chi^2(12, N = 852) = 56.42$, $p < .001$; performance-approach, $\chi^2(12, N = 852) = 58.26$, $p < .001$; and performance-avoid, $\chi^2(12, N = 852) = 106.75$, $p < .001$. ICCs for perceived goal structure were 5%, 5%, and 9%, respectively. Thus, there was greater between-class variance in perceived performance-avoid goals than either performance-approach or mastery, although the magnitudes of between-class variance are smaller than found previously between sixth-grade math classes (Turner et al., 2002).

HLM specifications for Level 1 in Model 1 predicted each help-seeking orientation as a function of class-centered goal orientations: $\beta 0 + \beta 1$ (mastery-approach goal orientation) $+ \beta 2$ (mastery-avoid goal orientation) $+ \beta 3$ (performance-approach goal orientation) $+ \beta 4$ (performance-avoid goal orientation) $+ r$. Level 1 for Models 2 and 3 added class-centered perceived goal structure (within classes): $\beta 5$ (perceived mastery) $+ \beta 6$ (perceived performance-approach) $+ \beta 7$ (perceived performance-avoid). Because preliminary analyses found no significant effects involving slopes for goal orientations or perceived class goals, they were not included in the model. This constant slope model made estimation more efficient and the models more parsimonious. Thus, Level 2 in Model 1 was specified as follows: $\beta 0 = \gamma 00 + U0$, $\beta 1 = \gamma 10$,

Table 8
Zero-Order Correlations Between Personal Goal Orientations, Perceived Class Goals, and Help-Seeking Patterns (n = 852)

Goal	1	2	3	4	5	6	7	8	9
Individual level correlations—Class centered									
1. Mastery-approach	—								
2. Mastery-avoid	.12***	—							
3. Performance-approach	.05	.26***	—						
4. Performance-avoid	−.14***	.29***	.68***	—					
5. Perceived mastery-approach	.44***	.09**	.09**	.03	—				
6. Perceived performance-approach	.15***	.27***	.71***	.42***	.16***	—			
7. Perceived performance-avoid	.03	.42***	.53***	.61***	−.08*	.52***	—		
8. Help-seeking approach pattern	.45***	.05	.00	−.12***	.40***	.10**	−.04	—	
9. Help-seeking avoidance pattern	−.20***	.31***	.49***	.62***	−.01	.37***	.53***	−.16***	—

* $p < .05$. ** $p < .01$. *** $p < .001$.

$\beta 2 = \gamma 20$, $\beta 3 = \gamma 30$, and $\beta 4 = \gamma 40$. Level 2 in Model 2 added $\beta 5 = \gamma 50$, $\beta 6 = \gamma 60$, and $\beta 7 = \gamma 70$. Level 2 in Model 3 added between-class differences, which consisted of adding grand mean centered class-aggregated perceived goal structure: $\beta 0 = \gamma 00 + \gamma 01$ (perceived mastery) + $\gamma 02$ (perceived performance-approach) + $\gamma 03$ (perceived performance-avoid) + $U0$. To test for differences in nested models, HLM analyses used a full maximum-likelihood procedure.

Coefficients from the HLM analyses of approach help-seeking patterns are summarized in Table 10. Model 1 shows mastery goal orientation as the strongest predictor of help-seeking approach pattern scores. Performance-approach goal orientation was also a positive predictor, although to a much lesser extent, and performance-avoid orientation was a significant negative predictor. The addition of students' perceived goal structure in Model 2 resulted in a statistically significant decrease of 8.2% in residual variance, $\chi^2(3, N = 852) = 89.93$, $p < .001$. This is clearly a function of within-class variation in students' perceptions of their classes' emphasis on mastery. The decrease in predictability of students' mastery goal orientation (from $\beta = .281$ to $\beta = .185$) also suggests that a portion of the approach help-seeking pattern variance predicted by mastery goal orientation was attributable to perceived emphasis on mastery. There was no indication in Model 3, however, that between-class differences in perceived mastery goal emphasis had any influence on help-seeking approach patterns scores, which, as noted previously, may be a function of the limited between-class variation in perceived emphasis on mastery. By comparing Model 3 with Model 1, one can also conclude that perceived class goal structure accounted for additional variance in students' help-seeking approach pattern scores above that attributable to their goal orientations (8.2%), $\chi^2(6, N = 852) = 94.14$, $p < .001$, and that the increase can be statistically accounted for by within-class differences in students' perceived emphasis on mastery goals.

Table 9
Zero-Order Correlations Between Perceived Class Goals (n = 852)

Goal	1	2	3
Class-aggregated student perceptions of classroom goals ($n = 13$)			
1. Perceived mastery-approach	—		
2. Perceived performance-approach	−.43	—	
3. Perceived performance-avoid	−.52	.91**	—

** $p < .01$.

Coefficients from the HLM analysis of help-seeking avoidance pattern scores shown in Table 11 present a very different picture. In Model 1, only avoid goal orientations (mastery and performance) are positive predictors of help-seeking avoidance patterns. The addition of perceived goal structure in Model 2 resulted in a significant 17.2% decrease in residual variance, $\chi^2(3, N = 852) = 210.53$, $p < .001$. In contrast to help-seeking approach, all perceived class goal structure predictors are significant, with mastery a negative predictor and performance-approach and performance-avoid positive predictors of help-seeking avoidance pattern scores, after controlling for students' goal orientations. Most important, as shown in Model 3, between-class differences in perceived goal structure did account for additional variance, given the significant, albeit small, decrease in model deviance, $\chi^2(3, N = 852) = 33.64$, $p < .001$. The effect is clearly attributable to between-class variation in perceived emphasis on performance-avoid goals. In all, there was a significant decrease in model deviance of 18.2%; this was due to perceived goal structure, $\chi^2(6, N = 852) = 244.17$, $p < .001$. Thus, perceived goal structure was related to students' help-seeking avoidance pattern scores. As with approach help seeking, there were no significant coefficients that indicated differential effects of Level 1 slopes between classes.

Although there was no reason to expect systematic differences between classes in students' achievement goal orientations (other than due to chance variation), it is still possible that some of the differences attributed to perceived class goal structure could have resulted from between-class difference in students' personal goal orientations, which indirectly influenced their help-seeking patterns. This possibility was tested by controlling for between-class personal goal orientation differences, which was necessary only for help-seeking avoidance orientation, given that no between-class effects were found for help-seeking approach patterns. To test for this possibility, I computed an additional model that added class-aggregated personal goal orientations as Level 2 predictors (grand mean centered). As expected, none of the between-class goal orientations were significant predictors. Furthermore, their addition had little impact on the coefficients of perceived class goals, shown in parentheses in Table 11. This confirms that the

Table 10
Hierarchical Linear Modeling Analysis of Help-Seeking Approach Pattern

Variable	Achievement goal	Model 1	Model 2	Model 3
Personal goal orientations (Level 1)	Mastery-approach	.281***	.185***	.185***
	Mastery-avoid	.025	.007	.007
	Performance-approach	.054**	.048*	.049*
	Performance-avoid	−.090***	−.036*	−.036*
Context				
Within-classes (Level 1)	Mastery-approach		.221***	.221***
	Performance-approach		−.009	−.009
	Performance-avoid		−.057	−.057
Between-classes (Level 2)	Mastery-approach			.267
	Performance-approach			−.318
	Performance-avoid			.292
Increased within variance accounted for: successive models		13.6%	8.2%	0.0%
Increased variance accounted for by perceived goal structure			8.2%	
Decreased model deviance: successive models		161.20***	89.93***	4.31
Decreased model deviance attributable to perceived goal structure			94.14***	

Note. Coefficients are in their original metric. Model 1 changes represent comparisons with a fully unconditional model.
* $p < .05$. ** $p < .01$. *** $p < .001$.

between-class differences in perceived goal structure remain, even when controlling for any differences in personal achievement goals that may have been present initially or related to students' perceptions of their class goals.

Yet another possibility involves possible suppression effects that were a function of between-class differences in performance-approach goal structure, which was not a significant predictor of help-seeking avoidance but was highly related to perceived performance-avoid goal emphasis. To check for suppression, I tested Model 3 without between-class differences in perceived performance-approach goals. Suppression is not suggested given that there was little change in the resulting performance-avoid coefficient (.773 to .708). It should be noted that similar analyses were not conducted for help-seeking approach patterns given the absence of between-class effects of perceived goal structure.

Help-Seeking Intentions, Reported Help Seeking, and Level of Need

It is important to reiterate that inferences in the present study are based on students' reports of what they would do under several specific conditions. That is because observations of help seeking in the college context are impractical given that the behavior typically occurs outside of the classroom and that even if observations were possible, they would lack critical information, such as students' state of need and help-seeking goals. There is reason to believe, however, that help-seeking-related intentions are sufficiently reliable indicators based on moderately high correlations between self-reports and behavior when conditions are well specified (Fishbein & Ajzen, 1980). One approach used previously (Karabenick & Knapp, 1991) was to test whether need-contingent

Table 11
Hierarchical Linear Modeling Analysis of Help-Seeking Avoidance Pattern

Variable	Achievement goal	Model 1	Model 2	Model 3
Personal goal orientations (Level 1)	Mastery-approach	−.018	−.019	−.019
	Mastery-avoid	.067***	.067***	.067***
	Performance-approach	−.022	−.022	−.022
	Performance-avoid	.136***	.136***	.136***
Context				
Within-classes (Level 1)	Mastery-approach		−.129***	−.129***
	Performance-approach		.078***	.078***
	Performance-avoid		.230***	.230***
Between-classes (Level 2)	Mastery-approach			−.036 (.015)[a]
	Performance-approach			−.118 (.120)[a]
	Performance-avoid			.773*** (.702)**[a]
Increased within variance accounted for: successive models		24.5%	17.2%	1%
Increased variance accounted for by perceived goal structure				18.2%
Decreased model deviance: successive models		302.48***	210.53***	33.64***
Decreased model deviance attributable to perceived goal structure				244.17***

Note. Coefficients are in their original metric. Model 1 changes represent comparisons with a fully unconditional model.
[a] Values in parentheses represent coefficients after controlling for between-classes personal goal orientations.
** $p < .01$. *** $p < .001$.

intentions to seek help and reported help seeking during the academic term, controlling for students' need for help, similarly predicted students' use of cognitive learning strategies. This approach was adopted in the present study with help-seeking patterns, taking into consideration that they are more complex than intentions to seek or not seek help.

At the end of the term, students were asked to report their need for help during the term and how often they had sought help from a variety of sources, which were aggregated to provide an overall index of help seeking. Students also reported their use of cognitive strategies of which elaboration is used for illustration, with the prediction that more engaged and successful students would be more likely to seek needed help (Karabenick & Knapp, 1991). That prediction is supported by the association between elaboration and approach pattern scores ($r = .36$). That is, students more likely to seek needed help from their teachers were also more likely to use elaboration as they studied. A different conclusion would have resulted based on students' actual help seeking (here, reported help seeking), which was not related to their use of elaboration ($r = .02$). That is because students who made greater use of elaboration also reported less need for help ($r = -.21$) and, one can presume, were therefore less likely to seek it (the correlation between need and help seeking was .53). As expected, by statistically controlling for need, the correlation between use of elaboration and help seeking increased from .02 to .17 ($p < .001$), which is consistent with the association using help-seeking approach pattern scores.

In addition, differences between intentions and reported help seeking are indicated by their relationship with and without taking need into consideration. Help-seeking approach pattern scores were related to reported help obtained ($r = .21$, $p < .001$), which suggests that intentions predict students' behavior. The relationship remains even when controlling for (i.e., partialing) their need for help ($r = .20$). Thus, independent of students' need for help, stronger tendencies to seek explanations from teachers when needed are adaptive because they translate into more help sought. Help-seeking avoidance pattern scores were also related to reported help seeking but, counterintuitively, in the positive direction ($r = .26$, $p < .001$). This is because avoidance pattern was positively related to need for help ($r = .26$, $p < .001$). With the level of need controlled, the association between pattern scores and reported behavior is no longer statistically significant ($r = .06$). Thus, higher levels of avoidant help-seeking patterns are increasingly less adaptive because students with higher scores are less likely to seek help despite having a greater need for help.

General Discussion

Two general patterns summarize college students' help seeking in large chemistry classes at a research university and in psychology courses at a less selective comprehensive university. The approach pattern combines students' intentions to seek autonomous help when necessary from teachers (a formal source), which is adaptive from a normative, self-regulated learning perspective (Butler, 1998; Newman, 1994, 1998). Students exhibiting this pattern would be more likely to seek help when confronting difficulties they consider insurmountable and to do so in a way that increases their subsequent autonomy, such as asking for higher order explanations rather than answers to problems. This pattern is positively related to the amount of help students actually sought during the term but unrelated to their reported level of need. The statistically independent avoidance pattern consists of perceived threat to self-esteem, generalized intentions to avoid seeking help, and a preference for expedient help (i.e., work avoidance). However, unlike the approach pattern, it does not include a relative preference to seek help either from teachers or other students. This combination of help-seeking components combines two of Butler's (1998) proposed categories of reasons (orientations) that younger students give for seeking (and not seeking) help: performance and expedience. The pattern is decidedly maladaptive from a self-regulatory perspective, and consistently, students higher on this dimension were more concerned about not mastering the course material and how they would perform relative to other students (i.e., mastery-avoid, performance-approach, and performance-avoid achievement goals). They were also lower achievers who would resist obtaining the help they needed, thereby decreasing their chances of success.

Results indicate that perceived achievement goal structure predicted students' help-seeking patterns, and it is important to note that the effects were shown when controlling for differences in their personal achievement goal orientations (see also Lemos, 2001). Within classes, differences in students' perceived mastery goal structure (a focus on learning and improvement) were positively related to help-seeking approach pattern scores. Differences in help-seeking avoidance patterns were related to all perceived goal structure dimensions—inversely related to perceived mastery emphasis and positively related both to perceived emphasis on performance-approach and performance-avoid goals.

Furthermore, students in classes perceived (in the aggregate) as more focused on performance-avoid goals were more help-seeking avoidant, which was not due to class differences in students' goal orientations. This is consistent with the Ryan et al. (1998) study, in which students' ratings of classroom performance goals directly predicted help-seeking avoidance, but not with Turner et al. (2002), which found effects for perceived mastery but not performance goal structures. Differences in perceived achievement goal structure between classes, however, did not predict students' help-seeking approach patterns. Although smaller than found within classes, the effect of perceived performance-avoid goals is notable given the relatively small number of classes involved in the present study compared with the more than 60 elementary school classes used previously. Differences in subject matter (psychology vs. math) should also be taken into consideration when comparing the present study with those involving younger learners.

Also notable is that despite being highly correlated, stronger effects were found for perceived class emphasis on performance-avoid goals than on performance-approach goals. This has implications for the distinction between these goals (Harackiewicz, Barron, Pintrich, Elliot, & Thrash, 2002; Kaplan & Middleton, 2002; Midgley et al., 2001). Clearly, because the help-seeking avoidance pattern involves negative affect (threat) and avoidance, the closer tie to performance-avoid goals would be expected—they are both about avoidance. Students more concerned about not performing well should be more sensitive to performance-related cues, which would be manifest both within and between classes. Another factor, however, may be the greater between-class variability in perceived performance-avoid than performance-approach goal structures. Whether performance-avoid

goals were more variable, whether students could discern the differences more readily, or whether their measurement was more sensitive, results suggest that perceived emphasis on performance-avoid goals was more closely associated with help-seeking patterns. For this typical group of large undergraduate classes, therefore, perceived differences in teachers' emphasis on avoiding poor performance were related to students' help-seeking intentions. To have detected differences with this relatively small number of classes suggests that even larger effects would be found with a larger sample of classes and teaching styles.

As with studies of younger learners, it would be important if self-reports as used in the present study were complemented with discourse analysis and other observational techniques that are appropriate in field studies (e.g., Turner, Meyer, Midgley, & Patrick, 2001). Class observations are especially suited to assess such features as the quality of instruction and the ways that teachers provide motivational and interpersonal support and control their classes. However, observations and teacher self-reports may not capture how those manifest characteristics are perceived (Ryan et al., 1998). For example, because help seeking in such classes, usually in the form of student questions, has such a low base rate, especially when compared with smaller K-12 classes, how teachers respond may not be a reliable or valid indicator of students' judgments of their receptivity to requests for help (Karabenick & Sharma, 1994; Ryan et al., 1998). Furthermore, as noted earlier, in a college context, much of the help seeking that does occur takes place outside of class. Thus, self-reports provide a wealth of information about events that are infrequent or not practicably observable, the ways in which college students interpret their class context, and their behavioral intentions under specified conditions.

Because of the conditional way that scales were constructed in the present studies, it was possible to independently determine associations between help-seeking intention, goals, and preferred sources of help and, in Study 2, to differentiate intentions to seek help from teachers and from other students. One consequence was definitely linking instrumental/autonomous help seeking with teachers as resources, which, as indicated earlier, is adaptive. Not as easily interpreted, neither pattern was related to whether students would seek help from their peers. Thus, students more or less likely to approach their teachers for explanations and more or less threatened, avoidant, or intending to seek expedient help were just as likely to seek help from other students. This was unexpected given that peers, who are presumably more available, should be preferred by students more inclined to seek help for expedient reasons (Karabenick & Knapp, 1988). The absence of relations with help-seeking patterns suggests that variables not measured in the present studies are operative, and it highlights the need to focus more on helper characteristics, an area of research that has been relatively neglected in recent studies of help seeking. Would the more motivationally and strategically engaged students, for example, be more aware of the more knowledgeable students in their classes? Or conversely, would those with expedient goals be more likely to scan the peer landscape for other students willing to share their knowledge and skills (Ryan & Pintrich, 1998)? The increasingly multicultural composition of college and K-12 classrooms also makes it imperative to study how culture affects the ways that students seek and, more importantly, avoid seeking help from peers (Volet & Järvelä, 2001). It would be especially interesting to determine the influences of intra- and intercultural help seeking, that is, students' beliefs about how receptive those of other cultures will be to requests for help compared with students from the same or similar cultural backgrounds.

Taken together, implications of the results for teaching and help seeking in large (or any other) classes are consistent with and reinforce research and theory on self-regulated learning and achievement goals, especially recommending greater emphasis on mastery goals and a reduced focus on interpersonal comparisons, which would facilitate the tendency to seek help that is adaptive (see, e.g., McKeachie, 1999). In addition to overall goals emphasis, relatively simple gestures can be important given evidence that merely stating on the course syllabus that an instructor will provide help outside of class can increase students' willingness to seek it (Perrine, Lisle, & Tucker, 1995). The rapidly increasing availability of help resources on campuses makes it more likely that students will obtain the help they need. However, more than availability is required before students make productive use of those resources (Alexitch, 1994). The help-seeking landscape is changing, but the increasing numbers of underprepared students being admitted make it increasingly important to systematically identify important facilitative contextual factors both inside and outside the classroom.

References

Alexitch, L. R. (1994). Students' educational orientation and preferences for advising from university professors. *Journal of College Student Development, 38,* 333–343.

Ames, C. (1992). Classrooms: Goals, structures, and student motivation. *Journal of Educational Psychology, 84,* 261–271.

Anderman, E. M., & Young, A. J. (1994). Motivation and strategy use in science: Individual differences and classroom effects. *Journal of Research in Science Teaching, 31,* 811–831.

Arbreton, A. (1993). *When getting help is helpful: Developmental, cognitive, and motivational influences on students' academic help seeking.* Unpublished doctoral dissertation, University of Michigan.

Arbreton, A. (1998). Student goal orientation and help-seeking strategy use. In S. A. Karabenick (Ed.), *Strategic help seeking: Implications for learning and teaching* (pp. 95–116). Mahwah, NJ: Erlbaum.

Butler, R. (1998). Determinants of help seeking: Relations between perceived reasons for classroom help-avoidance and help-seeking behaviors in an experimental context. *Journal of Educational Psychology, 90,* 630–643.

Butler, R., & Neuman, O. (1995) Effects of task and ego achievement goals on help-seeking behaviors and attitudes. *Journal of Educational Psychology, 87,* 261–271.

Church, M. A., Elliot, A. J., & Gable, S. L. (2001). Perceptions of classroom environment, achievement goals, and achievement outcomes. *Journal of Education Psychology, 93,* 43–54.

Elliot, A J., & Covington, M. V. (2001). Approach and avoidance motivation. *Educational Psychology Review, 13*(2), 73–92.

Elliot, A. J., & Harackiewicz, J. M. (1996). Approach and avoidance goals and intrinsic motivation: A mediational analysis. *Journal of Personality and Social Psychology, 70,* 461–475.

Elliot, A. J., & McGregor, H. A. (2001). A 2 × 2 achievement goal framework. *Journal of Personality and Social Psychology, 80,* 501–519.

Elliot, A. J., & Thrash, T. M. (2002). Approach–avoidance motivation in personality: Approach and avoidance temperaments and goals. *Journal of Personality and Social Psychology, 82,* 804–818.

Fishbein, M., & Ajzen, I. (1980). *Understanding attitudes and predicting social behavior*. Englewood Cliffs, NJ: Prentice-Hall.

Good, T., Slavings, R. L, Harel, K. H., & Emerson, H. (1987). Student passivity: A study of question-asking in K-12 classrooms. *Sociology of Education, 60,* 181–199.

Gross, A. A., & McMullen, P. A. (1983). Models of the help seeking process. In B. M. DePaulo, A. Nadler, & J. D. Fisher (Eds.), *New directions in helping: Vol. 2. Help seeking* (pp. 45–70). San Diego, CA: Academic Press.

Harackiewicz, J. M., Barron, K. E., & Elliot, A. J. (1998). Rethinking achievement goals: When are they adaptive for college students and why? *Educational Psychologist, 33*(1), 1–21.

Harackiewicz, J. M., Barron, K. E., Pintrich, P. R., Elliot, A. J., & Thrash, T. M. (2002). Revision of achievement goal theory: Necessary and illuminating. *Journal of Educational Psychology, 94,* 638–645.

Kaplan, A., & Middleton, M. J. (2002). Should childhood be a journey or a race? Response to Harackiewicz et al. (2002). *Journal of Educational Psychology, 94,* 646–648.

Kaplan, A., Middleton, M. J., Urdan, T., & Midgley, C. (2002). Achievement goals and goal structures. In C. Midgley (Ed.), *Goals, goal structures, and orientations of adaptive learning* (pp. 21–53). Mahwah, NJ: Erlbaum.

Karabenick, S. A. (Ed.). (1998). *Strategic help seeking: Implications for learning and teaching.* Mahwah, NJ: Erlbaum.

Karabenick, S. A. (2001, April). *Help seeking in large college classes: Who, why, and from whom.* Paper presented at the annual meeting of the American Educational Research Association, Seattle, WA.

Karabenick, S. A. (2003). Help seeking in large college classes: A person-centered approach. *Contemporary Educational Psychology, 28,* 37–58.

Karabenick, S. A., & Knapp, J. R. (1988). Help-seeking and the need for academic assistance. *Journal of Educational Psychology, 80,* 406–408.

Karabenick, S. A., & Knapp, J. R. (1991). Relationship of academic help seeking to the use of learning strategies and other instrumental achievement behavior in college students. *Journal of Educational Psychology, 83,* 221–230.

Karabenick, S. A., & Sharma, R. (1994). Seeking academic assistance as a strategic learning resource. In P. R. Pintrich, D. R. Brown, & C. E. Weinstein (Eds.), *Student motivation, cognition, and learning: Essays in honor of Wilbert J. McKeachie* (pp. 189–211). Hillsdale, NJ: Erlbaum.

Knapp, J. R., & Karabenick, S. A. (1988). Incidence of formal and informal help-seeking in higher education. *Journal of College Student Development, 29,* 223–227.

Le Mare, L., & Sohbat, E. (2002). Canadian students' perceptions of teacher characteristics that support or inhibit help seeking. *Elementary School Journal, 102,* 239–252.

Lemos, M. S. (2001). Context-bound research in the study of motivation in the classroom. In S. Volet & S. Järvelä (Eds.), *Motivation in learning contexts: Theoretical advances and methodological implications* (pp. 129–147). Amsterdam: Elsevier Science.

Linnenbrink, E. A., & Pintrich, P. R. (2001). Multiple goals, multiple contexts: The dynamic interplay between personal goals and contextual goal stresses. In S. Volet & S. Järvelä (Eds.), *Motivation in learning contexts: Theoretical advances and methodological implications* (pp. 251–269). Amsterdam: Elsevier Science.

McKeachie, W. J. (1999). *McKeachie's teaching tips: Strategies, research, and theory for college and university teachers* (10th ed.). Boston: Houghton Mifflin.

Midgley, C. (Ed.). (2002). *Goals, goal structures, and orientations of adaptive learning.* Mahwah, NJ: Erlbaum.

Midgley, C., Kaplan, A., & Middleton, M. (2001). Performance-approach goals: Good for what, for whom, under what circumstances, and at what cost? *Journal of Educational Psychology, 93,* 77–86.

Nelson-Le Gall, S. (1981). Help-seeking: An understudied problem-solving skill in children. *Developmental Review, 1,* 224–246.

Nelson-Le Gall, S. (1985). *Review of research in education: Vol. 12. Help-seeking behavior in learning* (pp. 55–90). Washington, DC: American Educational Research Association.

Newman, R. S. (1990). Children's help-seeking in the classroom: The role of motivational factors and attitudes. *Journal of Educational Psychology, 82,* 71–80.

Newman, R. S. (1991). Goals and self-regulated learning: What motivates children to seek academic help? In M. L. Maehr & P. R. Pintrich (Eds.), *Advances in motivation and achievement* (Vol. 7, pp. 151–183). Greenwich, CT: JAI Press.

Newman, R. S. (1994). Adaptive help seeking: A strategy of self-regulated learning. In D. H. Schunk & B. J. Zimmerman (Eds.), *Self-regulation of learning and performance: Issues and educational applications* (pp. 283–301). Mahwah, NJ: Erlbaum.

Newman, R. S. (1998). Adaptive help seeking: A role of social interaction in self-regulated learning. In S. A. Karabenick (Ed.), *Strategic help seeking: Implications for learning and teaching* (pp. 13–37). Mahwah, NJ: Erlbaum.

Newman, R. S. (2000). Social influences on the development of children's adaptive help seeking: The role of parents, teachers, and peers. *Developmental Review, 20,* 350–404.

Newman, R. S., & Goldin, L. (1990). Children's reluctance to seek help with schoolwork. *Journal of Educational Psychology, 82,* 92–100.

Newman, R. S., & Schwager, M. T. (1993). Students' perceptions of the teacher and classmates in relation to reported help seeking in math class. *Elementary School Journal, 94,* 3–17.

Perrine, R. M., Lisle, J., & Tucker, D. L. (1995). Effects of a syllabus offer of help, student age, and class size on college students' willingness to seek support from faculty. *Journal of Experimental Education, 64,* 41–52.

Pintrich, P. R. (2000a). Multiple goals, multiple pathways: The role of goal orientation in learning and achievement. *Journal of Educational Psychology, 92,* 544–555.

Pintrich, P. R. (2000b). The role of goal orientation in self-regulated learning. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 451–502). San Diego, CA: Academic Press.

Pintrich, P. R., & Schunk, D. H. (2002). *Motivation in education: Theory, research, and applications* (2nd ed.). Upper Saddle River, NJ: Merrill/Prentice Hall.

Pintrich, P. R., Smith, D. A. F., Garcia, T., & McKeachie, W. J. (1993). Reliability and predictive validity of the Motivated Strategies for Learning Questionnaire (MSLQ). *Educational and Psychological Measurement, 53,* 801–813.

Raudenbush, S. W., & Bryk, A. S. (2002). *Hierarchical linear models: Applications and data analysis methods* (2nd ed.). Thousand Oaks, CA: Sage.

Ryan, A. M. (1998). *The development of achievement beliefs and behaviors during early adolescence: The role of the peer group and classroom contexts.* Unpublished doctoral dissertation. University of Michigan.

Ryan, A. M., Gheen, M. H., & Midgley, C. (1998). Why do some students avoid asking for help? An examination of the interplay among students' academic efficacy, teachers' social-emotional role and classroom goal structure. *Journal of Educational Psychology, 90,* 528–535.

Ryan, A. M., Hicks, L., & Midgley, C. (1997). Social goals, academic goals, and avoiding help in the classroom. *Journal of Early Adolescence, 17,* 152–171.

Ryan, A. M., & Pintrich, P. R. (1997). "Should I ask for help?" The role of motivation and attitudes in adolescents' help seeking in math class. *Journal of Educational Psychology, 89,* 329–341.

Ryan, A. M., & Pintrich, P. R. (1998). Achievement and social motivational influences on help seeking in the classroom. In S. A. Karabenick (Ed.), *Strategic help seeking: Implications for learning and teaching* (pp. 117–139). Mahwah, NJ: Erlbaum.

Shapiro, E. G. (1983). Embarrassment and help-seeking. In B. M. DePaulo, A. Nadler, & J. D. Fisher (Eds.), *New directions in helping: Vol. 2. Help-seeking* (pp. 143–163). New York: Academic Press.

Skaalvik, E. M. (1997). Self-enhancing and self-defeating ego orientation:

Relations with task and avoidance orientation, achievement, self-perceptions, and anxiety. *Journal of Educational Psychology, 89,* 71–81.

Snijders, T. A. B., & Bosker, R. J. (1994). Modeled variance in two-level models. *Sociological Methods and Research, 22,* 342–363.

Snijders, T. A. B., & Bosker, R. J. (1999). *Multilevel analysis: An introduction to basic and advanced multilevel modeling.* Thousand Oaks, CA: Sage.

Turner, J. C., Meyer, D. K., Anderman, E. M., Midgley, C., Gheen, M., & Kang, Y. (2002). The classroom environment and students' reports of avoidance strategies in mathematics: A multimethod study. *Journal of Educational Psychology, 94,* 88–106.

Turner, J. C., Meyer, D. K., Midgley, C., & Patrick, H. (2001, April). *Teacher discourse and students' affect and achievement-related behaviors in two high mastery/high performance classrooms.* Paper presented at the annual meeting of the American Educational Research Association, Seattle, WA.

van der Meij, H. (1988). Constraints on question asking in the classroom. *Journal of Educational Psychology, 80,* 401–405.

van der Meij, H. (1998). The great divide between teacher and student questioning. In S. A. Karabenick (Ed.), *Strategic help seeking: Implications for learning and teaching* (pp. 195–218). Mahwah, NJ: Erlbaum.

Volet, S., & Järvelä, S. (2001). *Motivation in learning contexts: Theoretical advances and methodological implications.* Amsterdam: Elsevier Science.

Wolters, C. A. (2004). Advancing achievement goal theory: Using goal structures and goal orientations to predict students' motivation, cognition, and achievement. *Journal of Educational Psychology, 96,* 236–250.

Young, A. (1997). I think, therefore I'm motivated: The relations among cognitive strategy use, motivational orientation, and classroom perceptions over time. *Learning and Individual Differences, 9,* 249–283.

Appendix

Sample Scale Items

Achievement Goal Orientation

Mastery-Approach

I like school work that I'll learn from even if I make a lot of mistakes.

Mastery-Avoid

I'm concerned about the possibility of not completely mastering the material in this course.

Performance-Approach

It is important for me to do better than any other student in this class.

Performance-Avoid

It is important to me that I don't look stupid relative to the other students in this class.

Perceived Class Goals (Study 2)

Mastery-Approach

In this course, it's important to understand the work, not just memorize it.

Performance-Approach

In this course, it's important to get higher scores on tests than the other students.

Performance-Avoid

In this course, the instructor stresses not to do worse than other students.

Help Seeking

Instrumental Goal

If I were having trouble understanding the material in this class, I would ask someone who could help me understand the general ideas.

Expedient Goal

The purpose of asking somebody for help in this class would be to succeed without having to work as hard.

Help-Seeking Threat

I would feel like a failure if I needed help in this class.

Help-Seeking Avoidance

If I didn't understand something in this class, I would guess rather than ask someone for assistance.

Formal Versus Informal Source (Study 1)

If I were to seek help in this class, I would ask the teacher rather than another student.

Help Seeking Approach (Study 2)

If I needed help in this class, I would ask somebody for assistance.

Formal Source (Study 2)

If I were to seek help in this class, it would be from the teacher.

Informal Source (Study 2)

If I were to seek help in this class, I would ask another student.

Received February 5, 2003
Revision received August 26, 2003
Accepted November 12, 2003 ■