Correlates of Avoidance Help-seeking Behaviors among Malaysian Adolescents

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Abstract: The study examined correlates of avoidance help seeking behaviors among secondary school students in the state of Kedah, Malaysia. Particularly, the study examined the relationship between implicit beliefs about intelligence, academic goal orientations, perception of social and cognitive competence, classroom goal orientations, threat to self-worth, and avoidance help-seeking behavior in learning mathematics. Surveys were administered to 1849 secondary school students (1449 Malays and 400 non-Malays: 900 males and 949 females), aged between 13 and 17 years, who were studying mathematics. The instrument for the survey was adapted mainly from the Pattern of Adaptive Learning Scale (PALS). Descriptive statistics was used to examine patterns of avoidance help-seeking behavior. Pearson correlation was used to examine relationships among the variables. Findings indicated that students who perceived math ability as static and students who perceived peers and teachers as posing a threat to their self-worth were the least likely to ask for help. Students who learnt for mastery and who had a high perception of their math cognitive competence were least likely to avoid help seeking when needed. A stepwise regression analysis identified low task focused goals, high peer and teacher threats, low perception of cognitive competence, and a fixed belief about the nature of intelligence as the five main predictors of avoidance help-seeking behavior in learning mathematics. Discussion will center on these significant psychological factors that have implications for the teaching and learning of mathematics at the secondary school level.*

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INTRODUCTION

One important question in achievement motivation is why some individuals seek and persist at challenging learning experiences while others prefer routine unchallenging tasks with minimal effort. Are our students becoming more disengaged from school? Longitudinal studies in the States (Steinberg, Brown & Dornbusch, 1996) have indicated a pattern of students’ disengagement among high school students; students are becoming less interested in being educated. In a broader sense engaged students would attend classes, invest effort to do well in school, complete assigned classroom homework, and they are less likely to cheat. Disengaged students, on the other hand, tend to cut classes more often, do not try hard enough in the classroom, do not complete homework assigned to them, and tend to break school rules relating to cheating.

Help-seeking is one indicator of school engagement manifested in attempts to be with the flow, i.e., being able to understand classroom routine with effort and persistence. Many educational psychologists believe that engagement is a prerequisite to learning, and that effort to attend to student school performance must begin with a dimension of student engagement. This study will address one aspect of student engagement, i.e., help-seeking behavior. If we want to see our children interested in school learning, we must examine factors that promote or hinder student help-seeking behavior. Lack of help seeking may be interpreted as lack of school engagement. Disengagement from school is interpreted as a syndrome of problem behavior (Steinberg et al., 1996). Researchers and educators must, then, determine correlates of school disengagement to enable appropriate intervention strategies to be carried out in our classrooms.

In addition, help-seeking combines aspects of cognitive and social engagement, in that it is both a learning strategy and a social interaction with others (Ryan, Gheen & Midgley, 1998). The decision to seek help is influenced by both personal and environmental factors. Personal factors include students’ perceptions of their academic and social competencies, the nature of their achievement goals (i.e., mastery versus performance), and attitudes, i.e., perceived threats and benefits regarding help seeking. Environmental factors include teacher behaviors and classroom practices (Newman, 1998).

When students are focused on mastering the academic material at hand rather than on demonstrating academic ability relative to others, help-seeking is seen as an acceptable or even desirable behavior. Similarly, when students are focused on forming relationships, as opposed to maintaining a social reputation, help-seeking is not perceived as a threat to self-worth.
On the other hand, it has been proven that students who want to avoid looking unable will be reluctant to ask for help in the classroom if they see this as a low ability cue (Butler & Neuman, 1995).

Educators have found that classroom goals (i.e., mastery and performance) are associated with achievement related behaviors such as persistence, effort, and the use of more advanced learning strategies. Students with a mastery orientation are more likely to view help-seeking as a useful strategy that can help them learn more successfully (Denbo & Eaton, 2000). In contrast, students with a performance orientation, who are more concerned with achieving better than others, are more likely to believe that help-seeking may cause negative reactions in others. The important point to be considered here is that students’ attitudes about help-seeking are related to the achievement goals they pursue (Ryan & Pintrich, 1997). Finally, there is a need for teachers to be more creative and resourceful in handling classroom instructional strategies and in providing appropriate goal orientations so that their classroom practices may be the kind that facilitates students’ adaptive help-seeking behavior. According to Karabenick (1998), strategic or adaptive help seeking is deemed a critical school readiness skill that is facilitated by mastery-oriented classroom in which achievement and social goals are guided by teachers who invite questions rather than those who ask them.

CONCEPTUAL FRAMEWORK OF STUDY

The theoretical framework of the study was guided by Newman and Schwager’s (1992) cognitive-motivational approach (Figure 1). The theory proposed that students’ perceptions about themselves (i.e., thoughts, views, attitudes and beliefs) and the world are instrumental in defining their ‘reality’ and in guiding their actions. For instance, perceptions about the self and the classroom play a significant role in explaining adaptive help-seeking or avoidance behavior. These beliefs and cognitions are important mediators of instructional inputs and task characters (Garcia & Pintrich, 1995).

Researchers have often discussed motivational orientations in terms of goals. These goals, which concern the purpose and meaning each student ascribes to achievement behavior, affect motivation, achievement, and self-regulation (Bandura, 1997; Pintrich & Schunk, 1996; Schunk, 1991). Since help seeking is seen as one important component of self-regulation, it is hypothesized that goals have a significant bearing on students help-seeking behavior. It is hypothesized that students who adopt a task-focused goal will seek more help than those who adopt performance goals.
Students’ goal orientations may be influenced by classroom contextual factors and their beliefs about the conception of ability. For instance, a classroom that promotes mastery learning may facilitate task-focused goals among students. However, the classroom that focuses on competition may encourage performance goals. Students’ implicit beliefs about intelligence can also influence their learning goals. Students who believe intelligence is malleable are most likely to adopt a task-focused goal and seek more help when needed (Dweck, 1999).

Additionally, students’ perceptions about their cognitive and social competence may influence their help-seeking behaviors. This relationship may be mediated by classroom factors, such as teacher threat and peer threat. Threat is seen from a self-worth perspective (Covington, 1992). When students feel competent, they are not afraid of making mistakes or looking dumb. Based on previous literature, we would expect students with a task-focused goal coupled with high perception of cognitive and social competence to be most likely to elicit help during an impasse.

Figure 1
"Conceptual Framework: Cognitive-Motivational Approach"

OBJECTIVES OF STUDY
The study aimed to examine patterns of avoidance help-seeking behaviors and determine correlates of avoidance help-seeking behaviors among adolescents in secondary schools in the state of Kedah. In addition, the study
also looked into some demographic variables that may be related to avoidance help-seeking behaviors. Specifically, the study sought to answer the following research questions:

1. What is the extent of avoidance help-seeking among adolescents?
2. Is there any significant difference between gender, types of school (urban versus rural), and socioeconomic status in terms of avoidance help-seeking behaviors?
3. How are students’ perception of competence, academic goal orientations, classroom goal orientations, and beliefs about the nature of intelligence related to their endorsement of avoidance help-seeking behaviors?

**METHOD**

**Participants and Procedures**

Participants were 1849 secondary school students ranging from thirteen to seventeen years old. More than half (52.8%) of the respondents were in Form two (level two of a seven-year Secondary school structure). The majority (48.0%) of them fell under the fourteen-year-old category, followed by 41.3% under the sixteen-year-old group. There were more (51.3%) female respondents in this study. More than three-fourths (78.4%) were Malays, 12.5% Chinese, 8.4% Indians and a very small minority (0.7%) belonged to other ethnic groups.

Questionnaire was distributed by the researchers with the help of two trained research assistants during the months of February and March 2001. To ensure cooperation from participants, a briefing about the intent of study and the confidentiality of responses was held. Participants were also encouraged to ask questions should they find difficulty in understanding any of the questionnaire items. The items from the different scales were intermixed in the questionnaire, which took about 45 minutes to administer.

**The Survey Questionnaire**

Seven of the scales (task focused goal orientations, performance avoid goal orientations, performance approach goal orientations, perceived classroom task focused goal orientations, perceived classroom performance goal orientations, adaptive help-seeking behaviors, and avoidance help seeking behaviors) used in the present study were adapted from the Pattern of Adaptive Learning Survey (PALS). This scale was developed by Midgley and
her colleagues (1997) at the University of Michigan, USA. All scales were
translated into the Malay language, the national language and also the pri-
mary language of instruction in Malaysia, using the back-translation pro-
dures suggested by Brislin (1970, 1980). Scales in PALS were developed
during a 5-year period and tested with various respondents of young and
middle adolescents from various ethnic and socioeconomic backgrounds in
the United States (Midgley et al., 1998). The validity and reliability of each
scale was established separately by a different group of researchers from
the team. The classroom threat and the perception of competence scales
were adapted from Pintrich and Ryan’s study (1997). Permission to use the
instruments was granted by all the authors. All items focus on the domain
of mathematics. The original scales developed in the States use a 5-point
Likert-type scales of responses. However, to avoid the middle point re-
response, a 6-point forced choice Likert-type scale ranging from 1 = Strongly
disagree to 6 = Strongly agree was used. A score of 3 and below indicates a
tendency to disagree and a score of above 3 indicates an inclination to agree
with the statement.

Instruments and variables in the study

Achievement Goal Orientations. The questionnaire comprised three sub-
scales adapted from the Patterns of Adaptive Learning Survey - PALS
(Midgley et al., 1997): Task Goal Orientations, Performance-approach Goal
Orientations, and Performance-avoid Goal Orientations. All items were
adapted to make them specific to the subject mathematics. Task goal orien-
tation students are more concerned with developing their competence, and
seek to extend their mastery and understanding. A sample item is: “I like
Math work that I’ll learn from, even if I make a lot of mistakes.” Performance-approach goal orientations students are “...positively motivated to
outperform others and to demonstrate their competence and superiority...”
(Pintrich, 2000, p. 476). A sample item is: “I would feel successful if I did
better than most of the other students in my class.” Performance-avoid Goal
Orientations students are negatively “...motivated to try to avoid failure
and to avoid looking dumb, stupid, or incompetent...” (Pintrich, 2000, p.
476). A sample item is: “The reason I do my work is so others won’t think
I’m dumb.”

Perceived competence. The questionnaire comprised two sub-
scales: Perceived Cognitive Competence, and Perceived Social Competence
(Ryan & Pintrich, 1997). The Cognitive Competence Scale was adapted to
measure students’ perceptions of their cognitive ability in mathematics. A
sample item is: “I’m worried about whether I can do the mathematics work
assigned to me.” Perceived social competence measures students’ perceptions of their ability to interact with others. A sample item is: “I feel that most students like me.”

**Threat to Self-worth.** The questionnaire comprised two sub-scales adapted from Ryan and Pintrich’s (1997) study: Threat from Peers, and Threat from Teachers. Threat from Peers concerns whether students perceive their classmates as being threatening to their ego. A sample item from ‘threat from peers’ is: “I think other students might think that I am dumb when I ask questions in math class.” Threat from Teachers concerns whether students perceive their teachers as being threatening to their ego. A sample item from ‘threat from teachers’ is: “I think the teacher will get annoyed with me when I ask a question in math.”

**Help-seeking behaviors.** The questionnaire consisted of two scales adapted from Ryan and Pintrich’s (1997) study: Avoidance Help Seeking, and Adaptive Help-Seeking. A sample item from avoidance help seeking is: “If I need help to do problem in Math, I skip it.” A sample item from adaptive help seeking “If I have trouble doing a math problem, I ask someone to give me examples of similar problems we have done.”

**Epistemological Belief.** This scale comprised seven items adapted from Huang (1997) and also developed by the authors for this study. Epistemological belief refers to students’ beliefs about the conception of ability; whether ability is viewed as an incremental or a fixed entity. A sample item is: “Intelligence cannot be increased.” High scores indicate an inclination for a static or fixed belief about the nature of mathematical ability.

**RESULTS**
**Descriptive Analysis**
Table 1 summarizes the number of items, item means (M), standard deviations (SD), and the internal consistency estimates for each scale.

**Intercorrelations among the Variables**
Table 2 presents the zero order correlations among variables. With few exceptions, the patterns of the relationship between the motivational and perception variables were consistent with help seeking literature. Task focused goals (r=.62, p<.001), performance approach goals (r=.32, p<.001), cognitive competence (r=.44, p<.001), social competence (r=.34, p<.001), and classroom task focused goal structure (r=.50, p<.001) all had a significant positive relationship with adaptive help seeking behavior. These results suggest that endorsement of help seeking is more likeable for students who
Table 1
Summary Statistics for Each Scale for the Main Study

<table>
<thead>
<tr>
<th>Scale</th>
<th># of items</th>
<th>M</th>
<th>SD</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task focused</td>
<td>6</td>
<td>4.82</td>
<td>.74</td>
<td>.75</td>
</tr>
<tr>
<td>Performance-approach</td>
<td>6</td>
<td>4.48</td>
<td>.83</td>
<td>.72</td>
</tr>
<tr>
<td>Performance-Avoid</td>
<td>4</td>
<td>4.29</td>
<td>.97</td>
<td>.62</td>
</tr>
<tr>
<td>Peer threat</td>
<td>5</td>
<td>3.37</td>
<td>.89</td>
<td>.66</td>
</tr>
<tr>
<td>Teacher threat</td>
<td>3</td>
<td>2.22</td>
<td>.91</td>
<td>.64</td>
</tr>
<tr>
<td>Cognitive competence</td>
<td>7</td>
<td>3.77</td>
<td>.82</td>
<td>.80</td>
</tr>
<tr>
<td>Social competence</td>
<td>8</td>
<td>4.33</td>
<td>.72</td>
<td>.77</td>
</tr>
<tr>
<td>Avoidance help seeking</td>
<td>4</td>
<td>2.49</td>
<td>.79</td>
<td>.61</td>
</tr>
<tr>
<td>Adaptive help seeking</td>
<td>7</td>
<td>4.69</td>
<td>.65</td>
<td>.69</td>
</tr>
<tr>
<td>Classroom task goal</td>
<td>5</td>
<td>4.98</td>
<td>.64</td>
<td>.64</td>
</tr>
<tr>
<td>Classroom perform. Goal</td>
<td>4</td>
<td>4.37</td>
<td>.87</td>
<td>.62</td>
</tr>
<tr>
<td>Epistemological belief</td>
<td>8</td>
<td>2.55</td>
<td>.79</td>
<td>.71</td>
</tr>
</tbody>
</table>

(Incremental —→ Static)

Note: Total respondent = 1849; Analysis based on listwise deletion

learn for mastery and those who perceive their classroom math teachers as advocating mastery learning via classroom task goal structure. Those who perceived themselves as more cognitively and socially competent were also more likely to ask questions. It is interesting to note how performance avoidance ($r = .20, p < .001$) and classroom performance goal structure ($r = .21, p < .001$) also had positive association with adaptive help seeking although the variance explained is not that meaningful (R-squared = 4%) compared to the other variables in the model.

Epistemological belief ($r = -.22, p < .001$), peer threat ($r = -.24, p < .001$), and teacher threat ($r = -.29 p < .001$) all had a significant inverse relationship with adaptive help seeking. The findings suggest that those who believe math ability is incremental via effort, and those who perceive low threat from peers and teachers would also report asking for help more often when needed.
Epistemological belief (r=.33, p<.001), peer threat (r=.39, p<.001), and teacher threat (r=.39, p<.001) all had a significant positive relationship with avoidance help seeking. These results suggest that students who perceive math ability as static (which cannot be improved via effort), and students who perceive peers and teachers as posing a threat to their asking questions are the least likely to ask for help. Avoidance help seeking also had a significant inverse relationship with task focused goals (r=-.42, p<.001), cognitive competence (r=-.35, p<.001), and classroom task focused goal structure (r=-.29, p<.001). These findings suggest that students who learn for mastery and who have a high perception of their math cognitive competence are least likely to avoid help seeking when needed. This is further supported by the significant negative relationship between avoidance help seeking and their math achievement at the UPSR (r=-.26, p<.001) and PMR (r=-.25, p<.001) levels. Avoidance help seeking behavior is associated with low math achievement.

Table 2
Correlations among the Scales

<table>
<thead>
<tr>
<th></th>
<th>Task</th>
<th>Appr</th>
<th>Pavo</th>
<th>Cog</th>
<th>Soc</th>
<th>Adapt</th>
<th>Avoid</th>
<th>Peer</th>
<th>Teach</th>
<th>CTask</th>
<th>Cperf</th>
<th>Epist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appr</td>
<td>.28**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pavo</td>
<td>.13**</td>
<td>.46**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cog</td>
<td>.58**</td>
<td>.23**</td>
<td>.04</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soc</td>
<td>.28**</td>
<td>.22**</td>
<td>.13**</td>
<td>.31**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adapt</td>
<td>.62**</td>
<td>.32**</td>
<td>.19**</td>
<td>.44**</td>
<td>.34**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avoid</td>
<td>-.42**</td>
<td>-.06*</td>
<td>-.35**</td>
<td>-.27**</td>
<td>-.27**</td>
<td>-.46**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peer</td>
<td>-.23**</td>
<td>.09**</td>
<td>.14**</td>
<td>-.29**</td>
<td>-.29**</td>
<td>-.24**</td>
<td>.39**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teach</td>
<td>-.26**</td>
<td>.03</td>
<td>.04</td>
<td>-.21**</td>
<td>-.32**</td>
<td>-.29**</td>
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<td>.47**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CTask</td>
<td>.41**</td>
<td>.25**</td>
<td>.10**</td>
<td>.21**</td>
<td>.28**</td>
<td>.50**</td>
<td>-.29**</td>
<td>-.14**</td>
<td>-.35**</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cperf</td>
<td>.15**</td>
<td>.22**</td>
<td>.23**</td>
<td>.03</td>
<td>.07**</td>
<td>.21**</td>
<td>.01</td>
<td>.12**</td>
<td>.04</td>
<td>.27**</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Epist</td>
<td>-.19**</td>
<td>-.15**</td>
<td>-.04</td>
<td>-.14**</td>
<td>-.22**</td>
<td>-.22**</td>
<td>.34**</td>
<td>.26**</td>
<td>.30**</td>
<td>-.27**</td>
<td>.05*</td>
<td></td>
</tr>
</tbody>
</table>

*P<.05, **P<.001

Research question 1: What is the extent of avoidance help seeking among adolescents?

Five items comprised the avoidance help seeking scale. All these five items were negative in nature. The frequency distribution for each of the five avoidance help seeking can be seen in Table 3.

Table 3

<table>
<thead>
<tr>
<th>Item</th>
<th>Not true at all</th>
<th>Not true</th>
<th>Not Quite True</th>
<th>Quite True</th>
<th>True</th>
<th>Very True</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. If I need any help to do a math problem, I skip it</td>
<td>297 (16.12%)</td>
<td>533 (30.07%)</td>
<td>276 (14.98%)</td>
<td>333 (18.07%)</td>
<td>298 (16.17%)</td>
<td>85 (4.61%)</td>
</tr>
<tr>
<td>2. I don’t ask for help in math, even if the work is too hard on my own.</td>
<td>705 (38.12%)</td>
<td>732 (39.58%)</td>
<td>165 (8.92%)</td>
<td>83 (4.4%)</td>
<td>55 (2.97%)</td>
<td>23 (1.24%)</td>
</tr>
<tr>
<td>3. I would put down any answer in math rather than ask for help.</td>
<td>399 (21.62%)</td>
<td>668 (36.2%)</td>
<td>383 (20.75%)</td>
<td>215 (11.65%)</td>
<td>125 (6.77%)</td>
<td>55 (2.98%)</td>
</tr>
<tr>
<td>4. I feel it is too much of a bother to ask questions in math.</td>
<td>414 (22.43%)</td>
<td>590 (31.97%)</td>
<td>334 (18.1%)</td>
<td>156 (8.32%)</td>
<td>152 (8.32%)</td>
<td>63 (3.41%)</td>
</tr>
<tr>
<td>5. I refuse to ask any question in my math class, even if I cannot proceed with it.</td>
<td>459 (25.05%)</td>
<td>650 (35.48%)</td>
<td>361 (19.7%)</td>
<td>213 (11.62%)</td>
<td>132 (7.2%)</td>
<td>31 (1.69%)</td>
</tr>
</tbody>
</table>

Table 4 shows the ranking of items based on the mean score for each item. It can be seen that 39% (716) of the respondents would rather skip doing their math work, rather than ask for help. Secondly, about 27% (395) of the students found it difficult to ask questions in the math class. About 21% (271) indicated that they would give any answer to the math problems rather than ask for help. Less than 10 percent (85) reported they would not ask for help from anyone when faced with any math difficulty. The mean for the composite score for the avoidance help seeking was 2.49 and the standard deviation was 0.79, suggesting that the respondents belonged to the low-range of avoidance help seeking category (see Table 1).
Table 4

Descriptive Statistics of the Avoidance Help Seeking Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. If I need any help to do a math problem, I skip it.</td>
<td>3.02</td>
<td>1.47</td>
</tr>
<tr>
<td>2. I don't ask for help in math, even if the work is too hard on my own.</td>
<td>1.98</td>
<td>1.09</td>
</tr>
<tr>
<td>3. I would put down any answer in math rather than ask for help.</td>
<td>2.54</td>
<td>1.29</td>
</tr>
<tr>
<td>4. I feel it is too much of a bother to ask questions in math.</td>
<td>2.65</td>
<td>1.38</td>
</tr>
<tr>
<td>5. I refuse to ask any question in my math class, even if I cannot proceed with it.</td>
<td>2.46</td>
<td>1.27</td>
</tr>
</tbody>
</table>

Research question 2: Is there any significant difference between gender, types of school (urban versus rural), and socioeconomic status in terms of avoidance help-seeking behaviors?

The results were discussed according to gender, type of school, and socioeconomic status.

Table 5

T-Test Results by Gender

<table>
<thead>
<tr>
<th>Variable</th>
<th>Gender</th>
<th>Mean</th>
<th>S.D</th>
<th>Df</th>
<th>t</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adaptive help seeking</td>
<td>Male</td>
<td>4.60</td>
<td>.66</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Female</td>
<td>4.79</td>
<td>.63</td>
<td>1810</td>
<td>-6.13</td>
<td>.000**</td>
</tr>
<tr>
<td>Avoidance help seeking</td>
<td>Male</td>
<td>2.63</td>
<td>.83</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Female</td>
<td>2.44</td>
<td>.79</td>
<td>1829</td>
<td>5.03</td>
<td>.000**</td>
</tr>
</tbody>
</table>

**p<.01
T-test analyses indicated significant gender differences in both adaptive and avoidance help seeking behaviors. Females reported higher mean scores than males on adaptive help seeking (M = 4.60 vs 4.79, SD = .66 vs .63). Males reported higher scores for avoidance help seeking (M = 2.63, SD = .83) than did females (M = 2.44, SD = .79).

Table 6

<table>
<thead>
<tr>
<th>Variable</th>
<th>Location</th>
<th>Mean</th>
<th>S.D</th>
<th>df</th>
<th>t</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adaptive help seeking</td>
<td>Urban</td>
<td>4.73</td>
<td>.64</td>
<td>1810</td>
<td>2.125</td>
<td>.034*</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>4.66</td>
<td>.65</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avoidance help seeking</td>
<td>Urban</td>
<td>2.48</td>
<td>.84</td>
<td>1801.3</td>
<td>-2.695</td>
<td>.007**</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>2.58</td>
<td>.78</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<0.05, **p<0.01

T-test analyses indicated significant differences in both adaptive and avoidance help seeking behaviors between urban and rural schools. Rural respondents tend to avoid help seeking more than their urban counterparts (M = 2.58 vs M = 2.48), whereas urban respondents tend to ask questions more when faced with difficulties.

The socioeconomic levels were divided into three levels based on median split procedures. To maximize the validity of the socioeconomic level variable, we aggregated the following information: parent’s income, father’s educational level, and mother’s educational level. The top 75th percentile, the 50th percentile, i.e., the semi-interquartile range, and the lower 25th percentile represented high, middle, and low socioeconomic level respectively. This procedure resulted in the following categories: 626 (33.9%, low), 666 (36.8%, middle), and 520 (28.7%, high). An ANOVA was conducted to evaluate the relationship between each motivational variables and socioeconomic levels. However, no significant difference was observed (see Table 7), suggesting that help-seeking behaviors are not related to socioeconomic status.
Table 7
ANOVA Results by Socioeconomic Levels

<table>
<thead>
<tr>
<th>Variable</th>
<th>SES Level</th>
<th>Mean</th>
<th>S.D.</th>
<th>DF</th>
<th>F</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adaptive help seeking</td>
<td>Low</td>
<td>4.65</td>
<td>.65</td>
<td>2,1773</td>
<td>2.48</td>
<td>.083</td>
</tr>
<tr>
<td></td>
<td>Middle</td>
<td>4.73</td>
<td>.63</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>4.71</td>
<td>.67</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avoidance help seeking</td>
<td>Low</td>
<td>2.59</td>
<td>.78</td>
<td>2,1793</td>
<td>2.84</td>
<td>.058</td>
</tr>
<tr>
<td></td>
<td>Middle</td>
<td>2.50</td>
<td>.81</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>2.49</td>
<td>.85</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Research question 3:** How are students’ perceptions of competence, academic goal orientations, classroom goal orientations, and belief about the nature of intelligence related to their endorsement of avoidance help-seeking behaviors?

In order to determine whether or not motivational factors predicted avoidance help-seeking behavior, a stepwise multiple regression analysis was conducted. The predictors were all motivation and perception variables and the dependent variable was avoidance help seeking. The sample adjusted multiple correlation was .325, indicating that approximately 32.5% ($F_{(8,1704)} = 104.16, p < .001$) of the variance in the avoidance help seeking in the sample was accounted for by eight factors. Task-focused goals ($β = -.23, t = -8.75, p < .001$), peer threat ($β = .16, t = 6.85, p < .001$), epistemological belief ($β = .17, t = 7.54, p < .001$), teacher threat ($β = .12, t = 4.99, p < .001$), cognitive competence ($β = -.10, t = -3.98, p < .001$), performance approach ($β = .08, t = 3.81, p < .001$), classroom task focused goal ($β = -.07, t = -3.07, p < .002$), and social competence ($β = -.06, t = -2.54, p < .05$), were all significant influences on avoidance help-seeking behaviors. The first five predictors explained 31.6% at the variance in avoidance behavior. Consistent with the help seeking literature, students with the following criteria were more likely to avoid help seeking:

1. low task-focused value
2. high perception of peer threat
3. static belief about the nature of intelligence
4. high perception of teacher threat
5. low perception of cognitive competence
Table 8

Predictors of Avoidance Help Seeking

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b</td>
<td>SE</td>
</tr>
<tr>
<td>Task focused</td>
<td>-.25</td>
<td>.03</td>
</tr>
<tr>
<td>Peer threat</td>
<td>.15</td>
<td>.02</td>
</tr>
<tr>
<td>Epistemological belief</td>
<td>.17</td>
<td>.02</td>
</tr>
<tr>
<td>Teacher threat</td>
<td>.11</td>
<td>.02</td>
</tr>
<tr>
<td>Cognitive competence</td>
<td>-.10</td>
<td>.03</td>
</tr>
<tr>
<td>Performance-approach</td>
<td>.08</td>
<td>.02</td>
</tr>
<tr>
<td>Classroom task goal</td>
<td>-.09</td>
<td>.03</td>
</tr>
<tr>
<td>Social competence</td>
<td>-.06</td>
<td>.03</td>
</tr>
</tbody>
</table>

Adjusted R = 32.5

CONCLUSION AND DISCUSSION

The study examined the relationship between implicit beliefs about intelligence, academic goal orientations, perception of social and cognitive competence, classroom goal orientations, threat to self-worth, and avoidance help-seeking behavior in learning mathematics. The results of the study are consistent with that found in the help-seeking literature. Generally, respondents do not avoid help-seeking altogether; they moderately seek help when faced with academic difficulties. However, when faced with difficulties, girls seem to use more adaptive help-seeking strategies than boys. These findings were further supported by low avoidance help-seeking behaviors reported among girls. These findings suggest that girls are more engaged in their learning as compared to boys.

Consistent with previous studies (Le Mare, 1998; Ryan & Pintrich, 1997) that have indicated association between help seeking and students’ self-perceptions, the current study also indicated similar patterns. Low perceptions of social and cognitive competence contribute to avoidance help-seeking in the math classroom. Additionally, those who believe that math ability cannot be learned also show similar reluctance in seeking help. Low classroom task goal conditions and low task achievement goals coupled with high classroom (teacher and peer) threats - all contribute to avoidance help-seeking behavior.
The findings of the study also showed low social competence to be significantly related with avoidance help-seeking behavior. What is implied here is that there is a need to further develop social skills among students so that they feel confident to ask questions. When asked whom they preferred to ask for help, findings showed that students preferred asking their peers questions. One implication from this finding is the need to implement cooperative teaching methods in the math classroom where students learn in smaller groups that would allow for more interaction among students. It is in these small group interactions where students could develop certain cognitive and social skills, that learning could take place in a less threatening environment.

Since epistemological belief does influence students’ school engagement, teachers should help inculcate an incremental belief about math ability. For some students, math is a very difficult subject that creates fear and anxiety in learning. Therefore, teachers should help students overcome this mental block. That math is a difficult subject has been indoctrinated in the students’ mind thus, creating unnecessary anxiety and phobia in learning mathematics. Children need to be convinced that they can learn mathematics from early childhood. Schools should, therefore, provide successful experience in learning math from early childhood, as this initial positive experience is crucial to adolescents’ later life. Nicholls and colleagues (Nicholls, 1978; Mehran & Miller, 1984) found that the conceptualization of ability as capacity has begun by primary 1 or 2, and the belief will eventually become stable by primary five (11 years old). It is also public knowledge that society at large tends to view math and science as difficult subjects that require higher levels of ability than other domains. However, the cumulative effects of successive experience coupled with positive expectations from parents and teachers (via socialization processes) can make these children less vulnerable to math-related issues. Parents and teachers need to play a more significant role to convince children that mathematical ability can be increased via effort.

Theories about the nature of intelligence have also been linked to people’s achievement goal orientation. Dweck and her colleagues (Cain & Dweck, 1989; Dweck, 1998; Dweck & Leggett, 1988) claimed that if individuals believe that intelligence is acquirable, they are more likely to adopt a mastery goals orientation. Thus, a fixed belief about mathematical ability is more likely associated with performance goal orientation as evidenced in the present study.
Secondary school teachers should also be sensitive to the phase of adolescent development. Classroom threat (peer and teacher threat) could be a hindrance to school engagement. From a developmental perspective, adolescents at the secondary school are adapting to the multiple socio-psychological changes in their life, such as school transition, and physical and cognitive development (Steinberg et al., 1996). They are becoming more self-centered, perceiving themselves as having an ‘imaginary audience’ where they feel they are the center of attention. Seeking help such as asking questions in class may not be a way to direct attention away from their already self-conscious state. In this case task based learning activities organized as group work may serve to deflect attention from the self when students are intent on finishing the tasks as a group. Therefore, teachers should accommodate their teaching approach to encourage students’ school engagement.

Additionally, students who are unsure of their cognitive and social competence are more vulnerable to classroom threats, either from peers or teachers. Consistent with self-worth theory (Covington, 1992), students will adopt avoidance behavior in order to conceal their inability. Furthermore, the reasons why students engage in math learning (i.e., their achievement goals) could have some bearing on their attitudes toward help seeking. Also a classroom learning context that emphasizes performance relative to ability of students may highlight negative judgment for help-seeking, especially among those performance avoidance and low ability students. If espousing a task goal orientation is associated with positive learning outcomes for students, how then can schools foster such orientation? Among the suggestions forwarded by experts in this field (e.g., Midgley & Urday, 1992) are that teachers should consider moving away from competition among students, and contests with limited winners, but moving instead toward cooperative learning. Teachers should also move away from normative grading and public display of grades to grading for progress or improvement, which is more criterion referenced. By doing this, teachers can inculcate intrinsic values through mastery learning.

The objectives of the study were achieved as evidenced in the following results: As mentioned earlier, the study revealed that students in the math classes do not generally avoid seeking help when facing academic difficulties. Girls seem to use more adaptive strategies than boys and there were cases of low avoidance help-seeking behavior reported among girls, suggesting that girls are more engaged in their learning than boys. Results of the study pointed to several contributing factors: low percep-
tions of social and cognitive competence, low classroom task goal conditions and low task achievement goals and high peer and teacher threats and also the belief that math ability cannot be increased. In line with the objectives of the study, the findings provide support for the cognitive motivational model of learning in the classroom, which points out that: if we need our students to be actively engaged in school learning, we should consider how cognitive, motivational and social factors interact to make effective learning possible. Understanding socio-psychological correlates of avoidance help-seeking behaviors contributes to better learning management.

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