DO FILIPINO YOUTH REALLY VALUE EDUCATION? EXPLORING FILIPINO ADOLESCENTS' BELIEFS ABOUT THE ABSTRACT AND PRAGMATIC VALUE OF EDUCATION AND ITS RELATIONSHIP TO ACHIEVEMENT GOALS AND LEARNING STRATEGIES

ALLAN B. I. BERNARDO
De La Salle University-Manila

An exploratory study was conducted to investigate how Filipino young adult students perceive the abstract and pragmatic value of education, and how these perceptions or beliefs about the value of education relate to the students' academic goal orientation (mastery, performance and work avoidance) and learning strategies (rehearsal, elaboration, organization, critical thinking and metacognition). A questionnaire was administered to determine college students' self reported beliefs, goals, and learning strategies. The key results indicate (a) strong positive beliefs about the abstract value of education; (b) weaker positive beliefs about the pragmatic value of college education; (c) somewhat negative beliefs about the pragmatic value of academic achievement; (d) weaker associations between the abstract and pragmatic beliefs, compared to the stronger associations among the different pragmatic beliefs about the value of education. In addition, (e) abstract beliefs were correlated only with performance goals, whereas pragmatic instrumental beliefs were correlated with all the goal orientations; (f) abstract beliefs were correlated only with the lowest level learning strategies, whereas pragmatic beliefs were more strongly associated with other higher level strategies; and (g) multiple regression analysis linked pragmatic beliefs and mastery goal orientation with the higher level learning strategies of critical thinking and metacognition. The results are discussed in terms of the possible importance of looking at the Filipino youth's beliefs about the personal relevance and importance of education and how they shape students' academic aspirations, motivations, performance, and achievement.

It has always been said that Filipinos value education. There is also much evidence suggesting the Filipino youth also value education rather

PHILIPPINE JOURNAL OF PSYCHOLOGY (2003), Vol 36 No 1, pp. 49-67.

highly. For example, Sandoval, Mangahas, and Guerrero (1998) surveyed 2,700 Filipino youth and found that 98% rated "having a good education" as being "very/rather important." The same survey indicated that having a good education was perceived as important as "having a good marriage and family life" and "being able to find steady work"; it was perceived to be slightly more important than "being successful in work" and "finding meaning and purpose in life". The survey also found that Filipino youth expressed high net satisfaction with their educational experiences.

This supposed valuing for education, notwithstanding, Filipino students generally still do not fare very well in academic achievement. For example, an international survey of mathematics and science achievement among high school students in 38 countries found Filipino students ranking third from last in high school mathematics (Mullis, Martin, Gonzales, Gregory, Garden, O'Connor, Chrostowski, & Smith, 1999) and also third from last in high school science (Martin, Mullis, Gonzales, Gregory, Smith, Chrostowski, Garden, & O'Connor, 1999). It seems that this valuing for education and the expressed satisfaction with educational experiences do not translate to educational achievement.

Research in North America has found that the abstract belief that education is important or valuable is not strongly associated with educational achievement. Instead, it is the belief about the pragmatic value of education that is associated with educational achievement. For example, Mickelson (1980) found that students' beliefs about the direct personal benefits of education were related to school achievement of African-American and Anglo-American high school students. She found that the abstract value of education was not associated with school achievement. Steinberg, Dornbusch and Brown (1992) found that the students' belief that one could do well in life without a good education was the critical belief that determines whether the students would work hard to achieve in school. Much research (see Okagaki, 2001) indicate that the belief that schooling leads to relevant, important pragmatic rewards is associated with the motivation to school engagement and achievement.

This paper describes the results of a study that inquired into the beliefs of Filipino college students about the value of education, and how these beliefs relate to educational goals and strategies. In particular, the study sought to determine (a) the students' beliefs about the abstract value of education, (b) the students' beliefs about the pragmatic instrumental value of education, (c) the students' belief about the pragmatic non-instrumental

value of education, (d) the relationship between beliefs about the value of education and achievement goal orientation, and (e) the relationship between beliefs about the value of education and learning strategies. Note that the study did not aim to inquire into the direct or indirect relationship between beliefs about the value of education and actual educational achievement. Instead it aimed to inquire into the relationships with motivational and strategic academic variables that have been shown to be related to academic achievement: achievement goal orientation and learning strategies.

In the present study, beliefs about the value of education are studied in terms of a number of components. The first component is the belief about the value of education in a very abstract and non-specific sense. The second component is the belief about the pragmatic instrumental value of education or the belief that education is an essential factor towards attaining other important goals in life. The third component is the belief about the pragmatic non-instrumental value of education; this refers to the belief that one can attain other important goals in life even without education. The second and third components were studied with reference to two educational targets: finishing a college education and attaining high academic achievement.

One variable that has been strongly associated with a wide range of academic performance variables is achievement goal orientation. Achievement goal orientation is defined as "an integrated pattern of beliefs, attributions, and affect that produces the intentions of behavior and that is represented by different ways of approaching, engaging in, and responding to achievement type activities" (Ames, 1992, p. 261).

There are two broad categories of achievement goal orientations defined in the literature. The first category is referred to as the mastery goal orientation (Ames, 1992; also referred to as learning goals by Dweck and Leggett, 1988, and Elliot and Dweck, 1988, task-focused goals by Maehr and Midgley, 1991, and as task-involvement goals by Nicholls, 1984). Mastery goals focus on the intrinsic value of learning and effort utilization. A student with a mastery goal is oriented towards acquiring new knowledge and skills, improving his or her levels of competence, and gaining mastery in a specific domain of learning based on personal standards (Ames, 1992, Nicholls, 1984).

The second category is referred to as the performance goal orientation (Ames, 1992; Dweck & Legget, 1988; Elliot & Dweck, 1988; also referred to as ability-focused goals by Maehr and Midgley, 1991, and ego-involved goals

by Nicholls, 1984). Performance goals focus on one's ability and self worth, particularly as evidenced by doing better than other students, or by surpassing normative standards of performance (Ames, 1992; Covington, 1984; Dweck, 1986), with the corresponding public recognition of this superior performance (Meece, Blumenfeld, & Hoyle, 1988). The research literature also differentiates between two types of performance goal orientations: approach and avoidance (Elliot, 1999; Elliot & Church, 1997; Middleton & Midgley, 1997). However, in the present study, we only inquire into the performance approach orientation.

Research suggests that the mastery goal orientation is more strongly associated with school achievement, and other adaptive achievement-related outcomes like task interest (Harackiewicz, Barron, Carter, Lehto, & Elliot, 1997), intrinsic motivation (Barron & Harackiewicz, 2001; Elliot & Harackiewicz, 1994), task engagement (McGregor & Elliot, 2002), compared to performance goals (see Ames, 1992; Pintrich, 2000b; Pintrich & Schunk, 1996 for reviews). However, more recent research suggests that in some very specific cases, performance goals (particularly performance-approach goals) may also have some positive achievement-related outcomes (see e.g., Harackiewicz, Barron, & Elliot, 1998; Harackiewicz, Barron, Pintrich, Elliot, & Thrash, 2002; Pintrich, 2000a).

Other researchers have pointed out that not all students are positively motivated in school or classroom environments, and have proposed a third type of achievement goal orientation which is called work avoidance (Archer, 1994; Brophy, 1983; Duda & Nicholls, 1992; Meece et al., 1988). Work avoidance is the motivation to complete schoolwork with minimal effort, and has been associated with deleterious effects on motivation and achievement (Archer, 1994; Elliot & Sheldon, 1997; Elliot, Sheldon, & Church, 1997; Meece et al., 1988). The present study looks at three goal orientations: mastery, performance, and work avoidance, and the scales used by Harackiewicz et al., (1997) were used to study these three.

The other variable that has been strongly associated with a wide range of academic performance variables is the set of strategies for learning adopted by the student. Learning strategies are described as cognitive and behavioral processes which are used to attain or achieve a learning goal (e.g., Pintrich, 1989). Other researches use the term learning strategies in relation to approaches to learning. However, approaches to learning represent a general pattern of motivational orientations and preference for learning strategies (see e.g., Bernardo, 2003; Entwistle & Ramsden, 1983) and not the learning

strategies themselves. For learning categories, many different categories have been defined, but generally the higher level metacognitive, self-regulating learning strategies have been found to be more strongly associated with higher academic achievement (see e.g., Pintrich & De Groot; 1990; Zimmerman, 1990; Zimmerman & Martinez-Pons, 1990). In the present study, the categories of learning strategies defined in the Motivated Strategies for Learning Questionnaire (Pintrich, Smith, Garcia, & McKeachie, 1991, 1993) were used. These strategies are rehearsal, elaboration, organization, critical thinking and metacognition.

To summarize, the present study aimed to explore the relationships among the following variables (a) the belief on the abstract value of education, (b) the belief on the pragmatic instrumental value of education (completing college and attaining high academic achievement), (c) the belief on the pragmatic non-instrumental value of education (completing college and attaining high academic achievement), (d) achievement goal orientation (mastery, performance, and work avoidance), and (e) learning strategies (rehearsal, elaboration, organization, critical thinking and metacognition). These variables were studied in a sample of adolescent college students using self-report questionnaires with Likert-type items. The mean responses for each variable were determined, and their relationships were explored using bivariate correlations and multiple regression analysis.

METHOD

Participants

The research participants were 294 college students from a private university in one of the Southern provinces in the Philippines. The students' ages ranged from 16 to 21 years. The students were majoring in various fields in college, including engineering, management, various social science, natural science, and humanities disciplines. The students were administered the research questionnaire during a class period, and took approximately 15 to 25 minutes to answer the questionnaire.

The Research Questionnaire

The research questionnaire had four parts. The first asked for basic information about the participants. The second part contained the items

inquiring into the students' beliefs about education. The third part contained the items regarding the students' academic goal orientation. The final part referred to the students' learning strategies.

The sub-questionnaire on students' beliefs about education was an instrument developed for this research and contained 16 items, but five items referred to beliefs not related to the value of education within the scope of this study, thus only eleven items were analyzed for this paper. One item referred to the abstract value of education (e.g., "Education is important for young people like me.") Two items referred to the pragmatic instrumental value of college education (e.g., "It is important that one finish college to be successful in life.") Three items referred to the pragmatic non-instrumental value of college education (e.g., "Many people get rich even if they do not finish a college education.") Another two items referred to the pragmatic instrumental value of achieving in school (e.g., "One has to finish a degree with honors in order to get a good job.") Finally, three items referred to the pragmatic non-instrumental value of achieving in school (e.g., "A person can succeed in life even if he/she was not a good student in school.") The subjects were asked to determine whether they agreed with the items, and to indicate their responses using a 7-point scale (7 = strongly agree to 1 = strongly disagree).

To study academic goal orientation, the scale items used by Harackiewicz et al. (1997) were used. Five items referred to the mastery goal orientation (e.g., "The most important thing for me in this course is trying to understand the content as thoroughly as possible."). Another five items referred to the performance goal orientation (e.g., "My goal in this class is to get a better grade than most of the other students."). Finally, two items referred to the work avoidance goal orientation (e.g., "I want to do as little work as possible in this class."). The Cronbach alpha for these scales were .71, .77, and .38 for the mastery, performance, and work avoidance scales, respectively. The work avoidance scale is not reliable; however, it was still included in the analysis to be consistent with earlier research (c.f., Archer, 1994; Harackiewicz et al., 1997; Meece et al., 1988). The subjects were asked to determine whether they agreed with the items, and to indicate their responses using the same 7-point scale as above.

The learning strategies were determined using Pintrich et al.'s (1991, 1993) Motivated Strategies for Learning Questionnaire. In particular items were taken from the Cognitive and Metacognitive Strategies subscales. The rehearsal subscale contained four items (e.g., "When I study for my classes,

I practice saying the material to myself over and over.") and had a Cronbach alpha of .69. The elaboration subscale contained five items (e.g., "When reading for my classes, I try to relate the material to what I already know.") and had a Cronbach alpha of .76. The organization subscale had four items (e.g., "I make simple charts, diagrams or tables to help me organize my course material.") and had a Cronbach alpha of .75. The critical thinking subscale had five items (e.g., "I treat the course material as a starting point and try to develop my own ideas.") and had a Cronbach alpha of .77. Finally, the metacognition subscale contained six items (e.g., "If course materials are difficult to understand, I change the way I read the material.") and had a Cronbach alpha of .50. The subjects were asked to determine whether they agreed with the items, and to indicate their responses using the same 7-point scale described earlier.

RESULTS

For multi-item scales, the means were computed. The scores and mean scores for the various scales and subscales are shown in Table 1.

As expected, the respondents expressed very high valuing for education in the abstract sense. However, the respondents endorsed statements about the pragmatic value of education to a lesser degree. The Analysis of Variance for repeated measures revealed a significant main effect due to type of value, $F(4, 1172) = 238.07$, $MSE = 1.214$, $p < .0001$. Paired contrasts indicated that the mean level of endorsement of the abstract value of education was significantly higher than all the other types of beliefs, $F(1, 1172) = 165.17$, $MSE = 1.214$, $p < .0001$. This result suggests that on the average, the respondents did not believe the pragmatic value of education as much as they believe the abstract value of education. That notwithstanding, the paired contrasts of the means also indicated that the subjects held generally positive beliefs about the pragmatic value of a college education, as they endorsed the pragmatic instrumental value of a college education more strongly than its pragmatic non-instrumental value [5.73 vs. 4.73; $F(1, 1172) = 119.51$, $MSE = 1.214$, $p < .0001$]. However, the appropriate paired contrasts also indicated that the subjects held a general negative view of the pragmatic value of academic achievement, as they endorsed the pragmatic non-instrumental value of academic achievement more strongly than its pragmatic instrumental value [5.74 vs. 4.39; $F(1, 1172) = 222.74$, $MSE = 1.214$, $p < .0001$]. Indeed, the mean endorsement level for the beliefs about

Table 1. Descriptive Statistics for Subscales

Variables	Mean	Std Dev	Range
Beliefs			
Abstract value of education (ABST)	6.91	0.37	4.00 – 7.00
Pragmatic instrumental value of completing college education (PI-CO)	5.73	1.23	1.00 – 7.00
Pragmatic non-instrumental value of completing college (PN-CO)	4.73	1.29	1.00 – 7.00
Pragmatic instrumental value of high academic achievement (PI-AC)	4.39	1.37	1.00 – 7.00
Pragmatic non-instrumental value of high academic achievement (PN-AC)	5.74	1.03	1.67 – 7.00
Achievement Goal Orientation			
Mastery	6.32	0.67	3.60 – 7.00
Performance	5.48	1.18	1.00 – 7.00
Work Avoidance	4.13	1.40	1.00 – 7.00
Learning Strategy			
Rehearsal	5.31	1.12	1.75 – 7.00
Elaboration	5.31	1.08	2.00 – 7.00
Organization	5.25	1.22	1.00 – 7.00
Critical Thinking	5.17	1.06	1.20 – 7.00
Metacognitive Strategies	4.81	0.84	2.00 – 7.00

the instrumental value of academic achievement was the lowest among all five means.

The middle part of Table 1 indicates that the respondents reported different levels of the three goal orientations, F (2, 586) = 313.77, MSE = 1.14, $p < .0001$. Paired contrasts indicated that mastery goals were adopted more strongly compared to performance goals, F (2, 586) = 91.28, MSE = 1.14, $p <$ .0001. Performance goals, on the other hand, were adopted more strongly compared to work avoidance goals, F (2, 586) = 233.48, MSE = 1.14, $p <$ .0001.

Finally, the bottom part of Table 1 suggests that the respondents reported different levels of usage for each of the five learning strategies, F (4, 1172) = 24.64, MSE = 0.52, $p < .0001$. The means show that the most frequently used strategies were rehearsal and elaboration, while the critical thinking and metacognitive strategies were used least frequently. Paired contrasts suggest that the subjects used critical thinking strategies less frequently than rehearsal and elaboration, F (1, 1172) = 5.41, MSE = 0.52, $p < .01$. Moreover, the subjects used the metacognitive strategies much less than all the other strategies, F (1, 1172) = 36.24, MSE = 0.52, $p < .0001$.

Table 2. Intercorrelations among Subscale Means

	Abstract	PI-CO	PN-CO	PI-AC	PN-AC
Values					
PI-CO	.233**				
PN-CO	-.028	-.338**			
PI-AC	.122	.409**	-.137		
PN-AC	-.019	-.141	.587**	-.186**	
Goal Orientation					
Mastery	.094	.191**	.072	.167**	.072
Performance	.226**	.229**	-.109	.317**	-.074
Work Avoidance	.059	.156**	.016	.159**	.056
Strategies					
Rehearsal	.182**	.215**	-.062	.190**	-.044
Elaboration	.088	.119	.009	.176**	-.026
Organization	.140	.168**	-.024	.165**	-.080
Critical Thinking	.031	.127	.052	.113	-.023
Metacognition	.117	.134	-.035	.228**	-.106

Note. PI-CO = pragmatic instrumental value of college education; PN-CO = pragmatic non-instrumental value of college education; PI-AC = pragmatic instrumental value of achieving in school; PN-AC = pragmatic non-instrumental value of achieving in school; **$p < .01$.

Intercorrelations among Beliefs About the Value of Education

Because of the large sample size, a stricter criterion was set for assessing the correlation values. In particular, a correlation was considered significant at $p < .01$. A very interesting result relates to the fact that there seem to be stronger associations among the beliefs about the pragmatic value of education, and less across the abstract and pragmatic beliefs (see top part of Table 2). In particular, we can see that the belief on the abstract value of education correlated positively with the belief that finishing college is important, but not with any of the other pragmatic beliefs. However, we see that beliefs about the pragmatic instrumental value of a college education and academic achievement were positively correlated. Moreover, the beliefs about the pragmatic non-instrumental value of the same were also positively correlated. We also find a clear negative correlation between the beliefs about the instrumental and non-instrumental value of college education, and also between the beliefs about the instrumental and non-instrumental value of academic achievement.

Correlations between Beliefs and Goal Orientation

The middle part of Table 2 shows that the pragmatic beliefs about the instrumental value of education were more strongly associated with the achievement goal orientation. The belief about the abstract value of education was only positively associated with the performance goal orientation; whereas, beliefs about the pragmatic instrumental value of both a college education and academic achievement were positively associated with all goal orientations. Most important, the beliefs about the pragmatic instrumental value of a college education and academic achievement were positively associated with the mastery goal orientation, which is more strongly associated with academic achievement in the research literature.

What was interesting was the positive correlation between the beliefs about the pragmatic instrumental value of a college education and academic achievement and the work avoidance goal orientation. What this suggests is that the college students who endorsed the pragmatic value of education also tended to be work avoidant, which indicates some built-in constraints in the academic belief systems of the students. That is, the students who think that finishing college and achieving in school are important also prefer doing less academic work whenever possible.

Correlations between Beliefs and Learning Strategies

The bottom of Table 2 shows that the beliefs about the pragmatic instrumental value of education, compared to beliefs about its abstract value, tended to be more strongly associated with the learning strategies of the students. The latter was positively associated only with rehearsal, which is usually associated with rote memorization, the lowest level of cognitive strategies. In contrast, the belief about the pragmatic instrumental value of academic achievement was positively correlated with all the learning strategies except critical thinking. Students who endorse the pragmatic instrumental value of achieving in school tend to adopt a wider variety of learning strategies, including the metacognitive strategies that are strongly associated with higher academic achievement in the research literature. The belief about the pragmatic instrumental value of a college education was positively associated with the rehearsal and organization learning strategies.

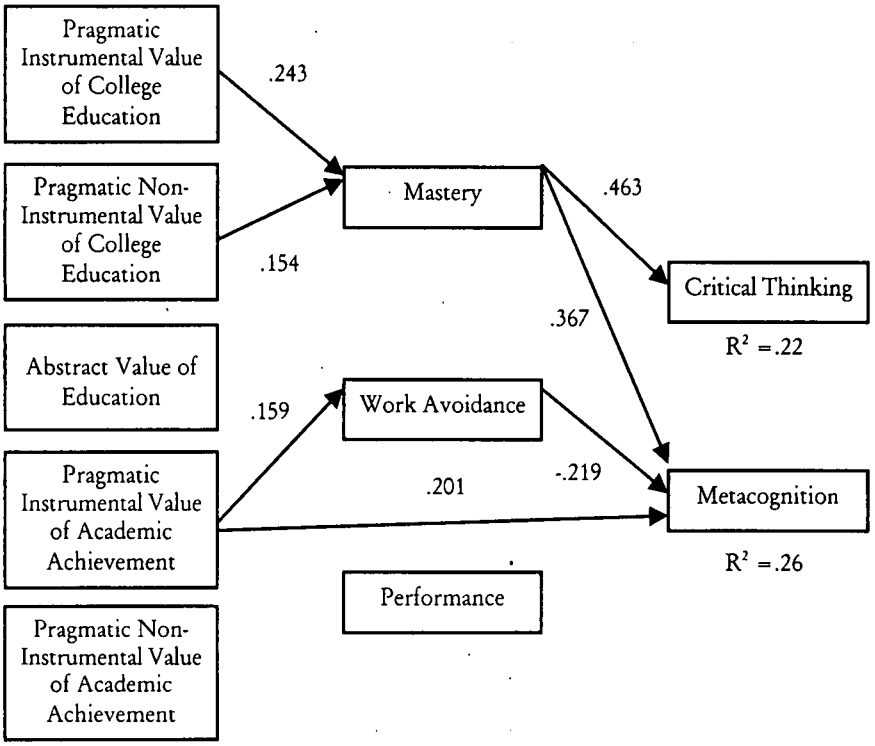
Multiple Regression Analysis and Exploratory Path Analysis

To further explore the relationships among beliefs about the value of education, goal orientation, and learning strategies, multiple regression analyses were conducted. The two higher levels of learning strategies – critical thinking and metacognition – were used as the main dependent variables. The independent variables were the various beliefs about the value of education and the goal orientations. A second set of multiple regressions was conducted using the goal orientations as the dependent variables, and the beliefs about the value of education as independent variables. The results of the multiple regression analyses are summarized in the path model shown in Figure 1. The arrows indicate the significant predictors of the dependent variables. The numbers indicate the beta-weights of the significant predictors.

The multiple regression analysis showed that only the mastery goal orientation was a significant predictor of critical thinking. In turn, the beliefs about the pragmatic instrumental and non-instrumental value of college education were significant positive predictors of mastery goal orientation. On the other hand, three variables were found to be significant predictors of metacognitive strategies. The mastery goal orientation and the belief on the instrumental value of academic achievement were positively associated with

the use of metacognitive strategies, whereas work avoidance was negatively associated with the same. What is interesting is that the multiple regression

Figure 1. Path model indicating significant predictors of critical thinking and metacognitive learning strategies.



on the work avoidance goal orientation found that the belief on the instrumental value of academic achievement was a significant predictor. There is a complex set of interrelationships between believing that academic achievement is important for success, the desire to do as little work as possible, and the use of metacognitive strategies. Finally, it is interesting to note that performance goals were not found to be associated with any of the higher level strategies, and that abstract beliefs about the value of education were not associated with any of the goal orientations and the higher level strategies.

DISCUSSION

So, do Filipino youth truly value education? The results of the study indicate that the young adults in the study valued education in the abstract sense. However, they do not necessarily believe that education is very important to attain their other personal long term goals. The beliefs about the pragmatic instrumental value of college education were less positive than the abstract beliefs. The students were also most likely to think that one can attain personal success without achieving in school.

These results are not entirely surprising considering that some of the most vivid models of success in popular media are people who are not known to have strong ties with academic progress or success. Most Filipino youth's notions of personal success are probably strongly influenced by the images of success of actors in movies and television, pop singers, fashion and commercial models, professional athletes and other celebrity types. Indeed, many of these "models" for our youth have actually made the decision to drop out of school in order to pursue their careers in show business or in professional sports. Moreover, the perception that these "models" earn salaries that are several times larger that what most college graduates earn in their jobs further reduce the perceived pragmatic value of education. It is quite understandable how many of our Filipino youth have a less than idealistic view of the pragmatic value of education.

These less than solidly positive beliefs about the pragmatic importance of education have interesting consequences related to academic related motivations and strategies. The most interesting results relate to the complicated relationships among the beliefs about the pragmatic value of education, the adoption of a goal orientation and use of the higher level learning strategies as indicated by the multiple regression and exploratory path analytic model. The path leading to critical thinking implicates the mastery goal orientation and the beliefs on the pragmatic value of a college education. The relationship between mastery goal orientation and critical thinking is consistent with the current theorizing about the goal orientations that presumes that the mastery goal orientation is associated with learning motivations and achievement goals independent of external standards and information. The critical thinking strategies underscore the importance of skepticism with prescribed information and knowledge, and may thus be associated with independent learning achievement pursuits.

On the other hand, the association between the beliefs about the pragmatic value of education and the mastery orientation is not necessarily consistent with current theorizing about achievement goal orientation. In particular, the literature indicates that a person who is mastery-oriented does not focus on the instrumental value of formal schooling, and should be concerned primarily, if not only, with personal learning and development goals, independent of social comparisons. However, the relationship between the beliefs about the pragmatic value of college does not lend itself to a straightforward interpretation. Notice that both the pragmatic instrumental and non-instrumental beliefs were positively associated with the mastery orientation. One would expect that since the beliefs about the instrumental and non-instrumental value of college education are opposites of each other, the two would correlate differently with the mastery goal orientation. However, for these students, the belief that college education can lead to personal gain is not necessarily the opposite of the belief that not finishing college education will prevent one from attaining one's other goals in life. That is, it is possible that college students believe that finishing college can help them attain long term personal success, but that it is not a necessary requirement for success, as there might be other routes to success. Thus, it is plausible that both beliefs about the instrumental and non-instrumental value of college education were both positively associated with adopting mastery achievement goals. But it may not be the pragmatic gains of college education that are actually associated with mastery goals. Instead, it may be the relatively unromantic assessment about the pragmatic value of a college education that is associated with the pursuit of purer learning goals. This speculative interpretation can be translated concretely as the sentiment of a student who thinks that college may help achieve success in life, but there are other ways of succeeding anyway, so it might not make sense to place all of one's hopes and expectations on the completion of a college degree. It might make more sense to just try to learn as much as possible, to improve herself and realize her full potential.

The path leading to the use of metacognitive strategies poses even more challenges to interpretation. The associations among mastery goal orientation, the belief about the instrumental value of academic achievement and the use of metacognitive strategies are most consistent with the current research literature. We can expect that someone who aims to acquire the highest competence in a domain of learning would employ the highest level of cognitive strategies for learning. It is also easy to see how the belief that academic achievement will lead to personal gains would also be associated

with the employment of these higher level learning strategies. Moreover, a person who adopts work avoidance goals is also unlikely to use the more difficult higher level learning strategies.

What is intriguing is the positive association between the belief about the instrumental value of academic achievement and work avoidance. A straightforward interpretation would mean that those students who believe that being a high achieving student can help one attain one's personal goals tend to be work avoidant. One can have a very cynical reading of this interpretation and just say that Filipino college students know they should aim high in school, but are not willing to do the work. However, it is possible that there are mediating variables that have not yet been explored in this study. One good candidate for such a mediating variable may be the college students' implicit beliefs about the role of ability and effort in academic achievement. It is possible that the students in the study believe that achievement is largely a product of innate ability, and thus the amount of work or effort put in academic pursuits is not necessarily an important factor leading to achievement.

One of the most intriguing findings was a "non-result." Consistent with earlier research, the results of this current study did not reveal any strong associations between the abstract belief about the value of education and academic motivations and cognitive learning strategies. This non-result strongly suggest that believing that education is important in the abstract sense may not actually have any real meaning in the complex system of motivations and strategies that Filipino youth have in school. On the other hand, the youth's beliefs about the personal consequences of education may be more meaningful in trying to understand their academic motivations and behaviors.

The exploratory nature of the study has clear limitations; foremost of these is the rather limited range of academic related variables investigated. As a result of this limited range, it was not easy to make coherent interpretations of the correlation and regression results. The measures and constructs used were adopted from definitions and instruments developed for North American young adult college students. It is possible that there are subtle differences in how Filipino students give meaning to the same constructs and items in the instruments. Future research might do well to address these limitations by trying to more deliberately contextualize the variables, especially goal orientation, in the Philippine setting, and by considering a wider range of variables to investigate.

These limitations notwithstanding, the results of the study suggest a general framework that can be used to pose a model for investigating the consequences of young adult students' beliefs about the pragmatic value of education. The next researches ought to build more precise models with more explicit relationships among variables related to the engagement of the academic environment in more positive ways. As the results of the present study indicate, our students' notions of whether schooling actually has real benefits to them may be an important variable that can help us understand why our students are not achieving in our schools. It is possible that their perceptions and beliefs about the relevance of schooling to their other life goals shape the degree to which they are motivated, engaged, and prepared to undertake the kind of hard work needed to attain the ideal levels of academic achievement.

REFERENCES

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

Archer, J. (1994). Achievement goals as a measure of motivation in university students. *Contemporary Educational Psychology, 19,* 430-446.

Barron, K. E., & Harackiewicz, J. M. (2001). Achievement goals and optimal motivation: Testing multiple goal models. *Journal of Personality and Social Psychology, 80,* 706-722.

Bernardo, A. B. I. (2003). Approaches to learning and academic achievement of Filipino students. *Journal of Genetic Psychology, 164,* 101-114.

Brophy, J. E. (1983). Conceptualizing student motivation. *Educational Psychologist, 18,* 200-215.

Covington, M. V. (1984). The motive for self-worth. In R. Ames & C. Ames (Eds.), *Research on motivation in education: Student motivation* (Vol. 1, pp. 77-113). San Diego, CA: Academic Press.

Duda, J. L., & Nicholls, J. G. (1992). Dimensions of achievement motivation in schoolwork and sport. *Journal of Educational Psychology, 84,* 290-299.

Dweck, C. S. (1986). Motivational processes affecting learning. *American Psychologist, 41,* 1040-1048.

Dweck, C. S., & Leggett, E. L. (1988). A social-cognitive approach to motivation and personality. *Psychological Review, 95,* 256–273.

Elliot, A. J. (1999). Approach and avoidance motivation and achievement goals. *Educational Psychologist, 34,* 169–189.

Elliot, A. J., & Church, M. A. (1997). A hierarchical model of approach and avoidance achievement motivation. *Journal of Personality and Social Psychology, 72,* 218–232.

Elliot, E. S., & Dweck, C. S. (1988). Goals: An approach to motivation and achievement. *Journal of Personality and Social Psychology, 54,* 5–12.

Elliot, A. J., & Harackiewicz, J. M. (1994). Goal setting, achievement orientation, and intrinsic motivation: A mediational analysis. *Journal of Personality and Social Psychology, 66,* 968–980.

Elliot, A. J., & Sheldon, K. M. (1997). Avoidance achievement motivation: A personal goals analysis. *Journal of Personality and Social Psychology, 73,* 171–185.

Elliot, A. J., Sheldon, K. M., & Church, M. A. (1997). Avoidance personal goals and subjective well-being. *Personality and Social Psychology Bulletin, 23,* 915–927.

Entwistle, N., & Ramsden, P. (1983). *Understanding student learning.* London: Croom Helm.

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,* 1–21.

Harackiewicz, J. M., Barron, K. E., Carter, S. M., Lehto, A. L., & Elliot, A. J. (1997). Predictors and consequences of achievement goals in the college classroom: Maintaining interest and making the grade. *Journal of Personality and Social Psychology, 73,* 1284–1295.

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.

Maehr, M. L., & Midgley, C. (1991). Enhancing student motivation: A school-wide approach. *Educational Psychologist, 26,* 399–427.

Martin, M. O., Mullis, I. V. S., Gonzalez, E. J., Gregory, K. D., Smith, T. A., Chrostowski, S. J., Garden, R. A., & O'Connor, K. M. (1999). *TIMSS 1999*

International Science Report: Findings from IEA's repeat of the Third International Science and Science Study at the eighth grade. Boston: International Study Center Boston College.

McGregor, H. A., & Elliot, A. J. (2002). Achievement goals as predictors of achievement-relevant processes prior to task engagement. *Journal of Educational Psychology, 94,* 381-395.

Meece, J. L., Blumenfeld, P. C., & Hoyle, R. H. (1988). Students' goal orientation and cognitive engagement in classroom activities. *Journal of Educational Psychology, 80,* 514-523.

Mickelson, R. A. (1990). The attitude-achievement paradox among Black adolescents. *Sociology of Education, 63,* 44-61

Middleton, M. J., & Midgley, C. (1997). Avoiding the demonstration of lack of ability: An underexplored aspect of goal theory. *Journal of Educational Psychology, 89,* 710-718.

Mullis, I. V. S., Martin, M. O., Gonzalez, E. J., Gregory, K. D., Garden, R. A., O'Connor, K. M., Chrostowski, S. J., & Smith, T. A. (1999). *TIMSS 1999 International Mathematics Report: Findings from IEA's repeat of the Third International Science and Science Study at the eighth grade.* Boston: International Study Center Boston College.

Nicholls, J. G. (1984). Achievement motivation: Conceptions of ability, subjective experience, task choice, and performance. *Psychological Review, 91,* 328-346.

Okagaki, L. (2001). Triarchic model of minority children's school achievement. *Educational Psychologist, 36,* 9-20.

Pintrich, P. R. (1989). The dynamic interplay of student motivation and cognition in the college classroom. In M. Maehr & C. Ames (Eds.), *Advances in motivation and achievement: Motivation enhancing environments* (Vol. 6, pp. 117-160). Greenwich, CT: JAI Press.

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

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

Pintrich, P. R., & De Groot, E. V. (1990). Motivational and self-regulated components of classroom academic performance. *Journal of Educational Psychology, 82,* 33-40.

Pintrich, P. R., & Schunk, D. H. (1996). *Motivation in education: Theory, research, and applications.* Englewood Cliffs, NJ: Prentice Hall.

Pintrich, P. R., Smith, D. A., Garcia, T., & McKeachie, W. J. (1991). *A manual for the use of the Motivated Strategies for Learning Questionnaire (MSLQ).* Ann Arbor, MI: University of Michigan.

Pintrich, P. R., Smith, D. A., 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.

Sandoval, G., Mangahas, M., & Guerrero, L. L. (1998, July). *The situation of Filipino youth: A national survey.* Paper presented at the 14th World Congress of Sociology, Montreal, Canada.

Steinberg, L., Dornbusch, S. M., & Brown, B. B. (1992). Ethnic differences in adolescent achievement. *American Psychologist, 47,* 723-729.

Zimmerman, B. J. (1990). Self-regulated learning and academic achievement: An overview. *Educational Psychologist, 25,* 3-17.

Zimmerman, B. J., & Martinez-Pons, M. (1990). Student differences in self-regulated learning: Relating grade, sex, and giftedness to self-efficacy and strategy use. *Journal of Educational Psychology, 82,* 51-59.

AUTHOR NOTE

This research was supported by a grant from the College of Education Research Fund, De La Salle University-Manila. I thank the university administrators, teachers, and students who enthusiastically participated in the study. I also thank Jojo Grecia, Marissa Calleja, and Ryan Rolloda for assisting in the preparation of the research materials and in the encoding of the research data. Correspondence regarding this article should be addressed to the author at De La Salle University-Manila, 2401 Taft Avenue, Manila 1004. Email may be sent to bernardoa@dlsu.edu.ph.