International Journal of Educational Review
Volume 4 Issue 2 (2022) Page 257-272
ISSN 2685-709X (Online) 2685-905X (Print)

Perceived Choices of Graduation among Master Students: Expectancy-Task Value Theoretical Perspective

F Chosa Kastuhandani[1*], Ke Sambo[2], Harth Bunhe[3]
[1]Universitas Sanata Dharma, [2,3]Royal University of Phnom Penh
Corresponding Author E-mail[*]: chosakh@usd.ac.id

Received 08 June 2022; Revised 30 October 2022; Accepted 05 November 2022

Abstract: This study investigated whether motivational beliefs (expectancy of success and value in research and practice related tasks) among master students predict the achievement related choices for graduation (thesis or non-thesis) and examined the likelihood of those motivational beliefs in thesis and non-thesis preferring group. Participants studied in various master programs of two universities in Cambodia completed the questionnaires about their expectancy of success and values toward research and practice related tasks and preferences of graduation. Results of logistic regression analysis revealed that, among the motivational beliefs, only cost in research indicated a significant predictor of graduation preferences (p = .003). Furthermore, the associated likelihood of thesis preferring group was anchored at students who have higher positive beliefs on cost in research (ß = 2.386, p = .003, Exp (ß) = 10.867, Odd = 986.9), interest in research (ß = .933, p = .431, Exp (ß) = 2.542, Odd = 154.2), utility in practice (ß = .835, p = .226, Exp (ß) = 2.306, Odd = 130.6), and attainment in research (ß = .218, p = .699, Exp (ß) = 1.243, Odd = 24.3) although the rest of expectancy-values components was not completely discriminated in its membership model. Implications of the findings to graduate programs and future direction are discussed.
Keywords: Perceived Choices, Expectancy, Task Value, Motivational Beliefs

1. Introduction

Researches, instructions, and community services have become essential pillars in higher education training principles of many countries. Under these foundations, curriculum of graduate studies is developed adaptively to reach to the demands. Among those, determination of basic and directed competencies for graduates to achieve after graduation is essentially considered. Generally, graduate students are capacitated to achieve some common professional and academic competencies although these skills probably vitiated in according to different study programs and principles of each university. Primarily, academic competencies are known as fundamental standard directing learners to sufficiently engage in conducting scientific researches and completing academic related projects in a specific discipline. These skills are assumed to obtain through completions of coursework activities and other fulfillments of academic requirements of the selected program. Secondly, students are necessarily provided transferable competencies offering applicability to corporate the acquired knowledge and skills into diverse working environments and adaptability to interact with authentic life situations and in broader nature (Rose, 2012). To achieve these missions, graduate studies in Cambodia mainly focus their program curriculum on research projects and practices in addition to learning theories that technically pertained to specific study majors.

In order to meet the framework of professional competency, expected learning outcomes of the programs, and various goal orientations of the graduate students, thesis and non-thesis have been set as system of preferences for master program graduation in Cambodia. Both choices require student to successfully complete fundamental and major coursework and internship for some programs (around 36 units/credits) and another 9 extra units/credits before having a graduation approval. Although the amounts of credit were likely similar among the two preferences, but the conditions of graduation are shaped differently. Completing a master program, non-thesis preferring students have to fulfill a few extra courses in addition to the general courses, complete a small-scale research paper, and take a state exam whereas for those who select a thesis program are required to complete the general common coursework and accomplish procedurally the thesis-writing tasks ranged from conceptualizing a thesis proposal to thesis defense. The requirements to graduate the study seem to be more complex for those who prefer the thesis rather the non-thesis since they may be pressured by extraordinary time invested for thesis writing activities although

self-regulated learning opportunities are provided. However, some students remain preferring the thesis program as a choice for graduation. In this issue, it was limited to get empirically informed whether how choices to graduating a master degree program influenced by the students' individual conditions, for example, their perceived values on conducting academic research and practical tasks among Cambodian students. It is not the matter with the offered curriculum since each program is developed on the basis of its attainment goal and qualification framework, but various personal motivation beliefs of the students themselves may affect their choices of related behaviors.

Motivation refers to moves or forces one engages in processing an activity directed by a specific goal orientation. Thus, considering on the reasons, sources, and thoughts one involves in conducting a task is a better way to be aware of human motivation (Weiner, 1992). Human behaviors and achievement related outcomes such as persistence toward a challenge tasks, achievement performance, and choice of which task to do, are all directly influenced by individuals' expectancy-related and task-value beliefs (e.g., Eccles, 1987; Eccles et al., 1983; Wigfield & Eccles, 1992, 2001; Feather, 1988). From a model of expectancy-value theory, individuals' choice, persistence, and performance can be explained by their beliefs about how well they do in the activity and the extent to which they value the activity (Atkinson, 1957; Eccles et al., 1983; Wigfield, 1994; Wigfield & Eccles, 1992). Focused specifically at the outcomes of choice in doing different activities, the model of expectancy and task values in association with achievement related choice were previously elaborated and tested to prove its model fits in a specific context and population (e.g., Eccles-Parsons et al., 1983; Eccles, 1987; Eccles, et. al., 1984; Eccles & Wigfield, 1995).

Task value refers to high or low quality perceived by individual on a proposed task (Eccles, 1997; Eccles et al., 1983; Wigfield & Eccles, 1992). Perceived task values dimensioned in four distinctive categories including attainment value/importance, utility value/usefulness, intrinsic value/interest, and cost. Those task value components contribute to the selection to do the task through how many positive or negative values one believed. For instance, one' self-image toward a task whether it is more or less important in his/her personal purposes when doing well on it is known as attainment value (Eccles, 2005). Other, utility value involves the quality of a task which facilitates one to achieve long-range goals and lead him/ her to obtain ongoing and future external rewards (Eccles, 2005). It is contradictory to the intrinsic/interest value which refers to

self-perception of engaging in a task with expectation of enjoyment and satisfaction. The other important component is the cost which task value heavily attaches with. Cost is one's belief that deciding to engage in a task lessens the opportunity to do the other tasks. In this case, cost is defined as the perception of how much efforts he/she attaches in doing a task (Eccles, 2005). The more perceived value one provides to the other the task, the less value given in the selected task.

Expectancy of success was intimately engaged in subjective task value in a Eccles' theoretical model. It is defined as a belief of competence indicating how good or bad one expects to do in their future tasks both short term and long term period (Eccles et al., 1983). The proximal relationship among these two constructs was explained by Eccles and colleagues that valuing a task whether positive or negative, individuals primarily needed to get through the evaluation process of belief on competency in doing the task. People would not value the task that they were not expected to do it well (Wigfield & Eccles, 1992). While subjective task value predicted the intention and decision to persist at different task, expectancies of success were attached with subjective task value to influence their choice of activities (Wigfield & Eccles, 2000). Both predictors simultaneously predicted achievement related outcomes when they were put together in the prediction model; and, if expectancy belief were controlled, value belief did not predict achievement related outcome as well (Meece et al., 1990).

Motivational beliefs such as expectancy and subjective task value were contextualized to correlate to achievement related choices such as choice of career/occupation, program/field to study and course to enroll, sport activity, and musical instrument and type. In an attempt to expend insightful understanding of the correlation among motivational beliefs and choices, some individual differences factors such as cultural and gender differences were analytically involved. Typically, from gender different perspectives, young female and male were considerably different in term of perceived values on mathematics. In this view, female students valued less important, useful, and enjoyable than male in math subject which in turn effect their enrolment decision in its associated subject (Eccles, et. al., 1984). Similarly, in an investigation of choice in sport activities in elementary education, boys indicated stronger engagement than girls due to their different perceived task values (Eccles & Harold, 1992). Furthermore, value and importance students placed on occupational characteristic and together with

efficacious beliefs on success of being involved in that occupation were the vital factors contributing to their selection of future careers (Eccles, 2005).

In addition to gender differences, developmental perspectives were also included in the expectancy-value theoretical model. Age differences could be a factor influencing the perception of motivational beliefs basically on competence and task value, and the positive perception was found at the younger age children rather than the older. In several activities, domains such as math, reading, sports, and instrumental music, younger children (first grade students) had more positive belief on competency and subjective task values than the older children in those set domains except sport (Eccles, et al.,1993). Furthermore, with different activities/tasks, students even the younger ones could differentiate their self-belief (Eccles, et al.,1993). Thus, maturation and age differences influenced values on tasks and decision, and different given tasks recruit various perception on task value and competency.

The aspects of contextual differences are associated to the perceived cost, and the value of task should also depend on a set of beliefs that could be best characterized as the cost of participation in an activity. When people grow older, especially adult, they experience plenty of life activities and responsibilities. Therefore, valuing an activity may be done across a very critical thought since engaging in one activity may loss time and energy in doing other important tasks (Eccles, 2005). Cost in making decision is a perceived belief of consequences in engaging in a task such as anticipated anxiety and fearfulness of failure and success that bound by social norm and evaluation, efforts, and the opportunity cost. For instance, some disengaging behaviors are disturbed by the fear of loss of sense of self-worth (Convington, 1992). Moreover, perceived cost also determines the decision whether to do or not, and it is the concept of procrastination that individual have to weigh the necessity of doing a task in comparing to others (Eccles, 1984, 1987, 1989).

Expectancy of success and subjective task value were the predictors of achievement related choices regarding the results of previous studies which attempted to test the Eccles' model. Students' perceptions on expectancy of success and subjective task value were variant in according to the task and its context (subjects, programs, sports, and activities) as both expectancy and value beliefs were highly domain specific (Eccles et al., 1993; Bong, 2001; Krapp, 2002). Furthermore, expectancy and value beliefs increases according to the students ages (Dennisen et al., 2007); therefore, different age groups and social

experiences among students are the factors that may distinct the quality of expectancy of success and task values. A study may have contextual influences if cost variable is inclusively analyzed in the model of expectancy-value. Hence, the proposed study was standing on the previous study extension in term of choices influenced by a specific task (choice of graduation), different population and developmental aspect (adult learners), and cost inclusion.

The purpose of this study was mainly to examine whether students' perception on graduation preferences influenced by their own motivational beliefs characterized in expectancy of success and subjective task values on research and practice related tasks among master students of Cambodian population. It was hypothesized that (1) preferences of graduation among Cambodian master students was likely predicted by the expectancy of success and task values; (2) Cambodian master students who have higher positive beliefs (expectancy of success and task value) in research related tasks were having greater chances in thesis preference for graduation than the ones who have higher positive beliefs (expectancy of success and task value) in practice related tasks.

2. Research Methods

A quantitative research approach was conducted to test the predictive significant levels among predictors and outcome and further investigate the possible livelihood of expectancy of success and sub-dimensions of task values in research and practice related tasks in achievement related choices such graduation preferences (thesis and non-thesis).

Participants in this study were master students doing their course work in six different fields. They were from two separated Cambodian universities. The participants were selected by using purposive sampling technique. Over 95% of the respondent completed questionnaire. The final samples for analysis were 119 master students (39 female students).

Dependent variables. Perceived choices of master graduation were contextually set in two options (non-thesis program and thesis program). The measure of perceived choices was based on a closed-end question item (e.g. What is the option you prefer for your master graduation?) with categorical scales (1 = Thesis and 0 = non-thesis).

Independent variable. Both expectancy and task value scales were adopted from a German validation study on multiplicative term in modern expectancy-value theory (EVT) (e.g. Trautwein et al., 2012), a validated scale targeting in

educational field studies. Expectancy belief in doing researches was measured by using the scale adapted from the mathematics expectancy items in German adaptation (Schwanzer, et al., 2005) of the Self-Description Questionnaire III (SDQ III; Marsh & O'Neill, 1984), a multidimensional self-concept instrument for late adolescents and young adults. Four items (e.g. I have always been good at doing researches.) were formulated into the task's specific domain (researches and practices) with a four-point rating scale ranging from (1 = strongly disagree to 4 = strongly agree). The reliability of expectancy belief scale was observed in an optimal Cronbach Alpha level (œ=.90). Task value beliefs were measured in 12 items (e.g. I'm really keen to learn a lot in mathematics/English.) with also a four-point rating response ranging from (1 strongly disagree to 4 strongly agree), a scale adopted from a German validated scale study (Trautwein et al., 2012). Among those items, four dimensions of expectancy value theoretical model such as attainment value, utility value, interest, and cost were included to consistently adapt to Eccles' model and colleagues, 1983. The content of the items was adjusted to fit the central values of research and practice related tasks. The scale indicated an optimal reliability in Cronbach Alpha level (œ=.75 & .86).

Demographic data. Some relevant participants' personal profiles required for descriptive analyses such as sex, age, working status, and study program were included in the questionnaire.

Procedure

Back translation between Khmer and English were administered to maintain validity. Informed conscience was included in the first part of the questionnaire to ensure research ethical concerns. Selected participants were asked to complete self-administrative questionnaire in their own language which consists of three main parts including demographic data, perceived choices (thesis or non-thesis as preferences of graduation), and expectancy of success and subjective task value.

To test the predictive significant levels among predictors and outcome and to investigate the possible livelihood of expectancy of success and sub-dimensions of task values in research and practice related tasks in achievement related choices such graduation preferences (thesis and non-thesis), logistic regression analysis was conducted. This study involved ten independent variables and one dependent variable. Two-level outcome variable (preferences of graduation) was group into thesis and non-thesis, and expectancy of success and value on research and practices were their characteristics.

Among the ten independent variables, only cost in research indicated strong significant correlation with choices of graduation as an outcome variable with Person significant level .263** (p = .001; 2-tailed) while the rest showed no significant correlation in this population.

3. Results And Discussion

There was no missing value was found, but six outliers were observed and removed from the total amount of 125 participants to satisfy the assumption of logistic regression. Although the normality of the data was not perfectly distributed based on the observed significant value of Spirons' wilk test, however the normal range was found when checking the ratio of skewness divided by Standard Error. Furthermore, the mean scores of each independent variable were observably in the range of minimum and maximum (Table 1).

Demographic information of participant analysis revealed that participants' ages were ranged from 22 to 44 years old and mostly were at around 23 to 30 years old. Participants were from six separated fields of information technology program (32%), development studies (21%), linguistics (16%), economic and finance (14%), Khmer literature (11%), and philosophy (6%). Majority of participants (98%) were employed in government, company, and none-government organizations. Since master students were usually working and studying at the time, they were mostly involved in evening and weekend class, thus minority of students selected program ran at weekday.

Table 1. Descriptive Statistics for Expectancy and Value of Research and practice

	M	SD	Min	Max
Expectancy in research	2.231	.379	1.00	3.25
Expectancy in practice	2.365	.342	1.00	3.25
Attainment in research	3.291	.554	1.67	4.00
Attainment in practice	3.358	.461	1.67	4.00
Interest in research	2.966	.408	1.80	4.00
Interest in practice	3.010	.387	1.80	4.00
Utility in research	3.168	.557	1.50	4.00
Utility in practice	3.239	.516	2.00	4.00
Cost in research	2.991	.627	1.00	4.00
Cost in practice	3.042	.598	1.00	4.00

Table2. Correlation between Choices of Graduation and Expectancy and Task Value

	1	2	3	4	5	6	7	8	9	10	11
1.Graduation choices	1.00										
2.Expectancy in research	.016	1.00									
3.Expectancy in practice	-.023	.457**	1.00								
4.Attainment in research	.092	.264**	.067	1.00							
5.Attainment in practice	-.079	.103	.111	.655**	1.00						
6.Interest in research	.134	.397**	.237**	.524**	.388**	1.00					
7.Interest in practice	-.094	.145	.316**	.333**	.532**	.657**	1.00				
8.Utility in research	.064	.205*	-.030	.507**	.489**	.609**	.365**	1.00			
9.Utility in practice	.000	-.009	.160	.351**	.550**	.420**	.564**	.632**	1.00		
10.Cost in research	.263**	.284**	.261**	.526**	.342**	.663**	.359**	.567**	.346**	1.00	
11.Cost in practice	.130	.111	.291**	.418**	.420**	.484**	.513**	.423**	.475**	.830**	1.00

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Among the ten independent variables, only cost in research indicated strong significant correlation with choices of graduation as an outcome variable with Person significant level .263** (p = .001; 2-tailed) while the rest showed no significant correlation in this population. Also, throughout Person values of correlation, it was indicated that most of the within-independent variables were correlated to each other except expectancy in research with cost in practice (.111), utility in practice (-.009), interest in practice (.145), and attainment practice (.103). Reversely, expectancy in practice were not correlated to attainment research (.067), attainment in practice (.111), utility in research (-.030), and utility in practice (.160) (Table 2).

Table 3. Classification Table for Preferences of Graduation

Observed	Predicted		Percent Correct
	Non-thesis	Thesis	
Non-thesis	23	25	47.9
Thesis	12	59	83.1
		Overall Correct	68.9

The statistic informing at the model summary indicated that 22% of the variances of dependent variable (preferences of graduation) effected by the predictors (expectancy of success and value on research. This variance was observed by the value of Nagelkerke R Square (R2 = .215).

Indicated through Hosmer and Lemeshow test, the proposed model in this study was accurately acceptable in significant value which was greater than .05 (p = .500; Chi-square = 7.340; df = 8). Also, at the significant level .024 (p = .500; Chi-square = 20.641; df = 10) from Omnibus Tests of Model Coefficients was the other indication of the acceptable level of the new model and variance in the outcome. Furthermore, the model also showed an optimal level predicting actual outcomes. In fact, almost 70% of the outcome was accurately predicted by the model. This noticeable percentage was around 10% significant increase if it was compared to the one tested earlier when predictors had not been included in the model (Table 3).

Table 4. Logistic Regression Analysis

	B	SE	P	EXP (B)	Odd (%)
Cost in research	2.386	1.122	.033	10.867	986.9
Interest in research	.933	1.184	.431	2.542	154.2
Utility in practice	.835	.691	.226	2.306	130.6
Attainment in research	.218	.562	.699	1.243	24.3
Expectancy in practice	-.468	.798	.557	.626	-37.4
Expectancy in research	-.508	.725	.484	.602	-39.8
Attainment in practice	-.589	.734	.422	.555	-44.5
Utility in research	-1.044	.701	.136	.352	-64.8
Cost in practice	-1.124	.997	.260	.325	-67.5
Interest in practice	-1.459	1.108	.188	.232	-76.8

Logistic regression analysis revealed that only cost in research was predicting choices of graduation in an optimal significant level p = .033 (p = .05) while the rest showed no significant prediction toward the outcome. However, the group membership can remarkably be distinguishable among those predictors through checking the association of the increase level in one-unit Beta and increase or decrease in Exponential Beta with the different percentage of the odd (Table 4).

In thesis group membership, cost research indicated a strongest chance to be a membership in thesis group. Statistically, one-unit increase in Beta (B = 2.386) associated to the increase in Exponential Beta (Exp B = 10.867) with almost eleven-times of the chance to be in the thesis group (odd = 986.9%). This was following by the interest in research that every unit increase in Beta (B = .933) was 2.542 increased in Exponential Beta and provided about two-time opportunity (odd = 154.2%) to be in the thesis group. For utility in practice, the increase in Exponential Beta (Exp B = 2.306) was associated by the increase in one unit in Beta (B = .835) with the odd (130.6 %) in the thesis group. The last significant livelihood in thesis group was attainment in research which showed 24.3% odds with 1.243 of Exponential Beta associated by one-unit increase in Belta (B = .218) (Table 4).

Distinguished from the thesis group, interest in practices was strongly having chances at the non-thesis group. It was indicated that every unit increase in the Beta (B = -1.459) decreased by .232 in the Exponential Beta reducing by -.76.8% of the odd from the livelihood in thesis group. The following livelihood of non-thesis group was cost in practice that showed the increase in Beta (B = -1.124) associated to decrease in Exponential Beta (Exp B = .325) with percentage of the odd was -67.5 % reducing from being at thesis group membership. Furthermore, it is observed that utility in research had more chance to be in non-thesis when the decrease in Exp B (.352) was associated by the increase in one unit of Beta (B = -1.044) with odds of (-64.8%). The decrease in Exp B (.555) related to one-unit increase in Beta (-.589) with odds of -44.5% was shown in attainment in practice which its livelihood was statistically grouped into non-thesis. The other characteristics such as expectancy in research (odd = -39.8%) and expectancy in practices (odd = -37.4%) were almost in the middle line between thesis and non-thesis although the percentages of the odd grouped them in non-thesis. (Table 4).

This study investigated whether motivational beliefs (expectancy of success and value in research and practice related tasks) among master students predict the

achievement related choices for graduation (thesis or non-thesis) and examine the likelihood of those motivational beliefs in thesis and non-thesis preferred group.

Deriving from the main statistical descriptions, in this population, preferences of graduation was not significantly predicted by expectancy of success and task value except cost in research which was significantly observed.

Logically, the strong values and beliefs of ability to do the task may be confined if students were rigorously struggling with time constrains. Students' positive perception on availability and affordability in using the limited time to do a particular task may essentially lead the other positive motivational beliefs. In fact, thesis writing task is the long and complicated process; hence, students are required to possess solid commitment, better time management, and self-regulated learning skills. The existing result can be explained that these specific master students are prioritized positive cost of time investment and scarification as a major reason in making choice for graduation rather than expectancy of success and other components of task values since thesis writing cannot be effectively conducted without time availability.

Characteristics of expectancy and value of research and practice related tasks were grouped statistically into thesis and non-thesis choice of master graduation in this model. Among the ten proposed characteristics, only cost in research, interest in research, utility in practice, and attainment in research shared their stronger significant membership in thesis preference group while the rest had their livelihood which may classifiable in the non-thesis.

It is reasonable that students' positive beliefs in cost of research are associated with thesis involving group. Graduate students have to primarily invest their huge time to involve in the set phases with a timely manner to do a thesis. Students may not decide to engage in thesis writing unless they scarify their advantages and time spent at other events such as personal life and leisure activities, family engagements, and workload procrastinations (Eccles, 1984, 1987, 1989). Working fulltime and having additional weekend or evening class at a time are extremely tiring situations in the case of Cambodian students. Aside from overloading and challenging classwork, students need to regulate their time for extra-ordinary research projects in thesis program. Thus, satisfying the shortage of time must be an initial motivation to reinforce thesis writing processes.

Interest in research sharing its livelihood in thesis category can be explained that students refer thesis program when they are intrinsically motivated in doing

research related tasks. Students' inherent characteristics function as inner forces to challenge with difficulties of research activities. Being curious to learn new things in research related lessons and exercise the academic knowledge attends to sustain students' engagement in a long way in conducting a thesis.

Interestingly, students who highly values utility in practice associates themselves in the livelihood of thesis group in this study. One of research aspects is to identify the existing authentic problems in association with the theoretical bases and test whether how the real world reflects to oriented theories. Thus, students who value the applicability of theories into practices and vice versa may engage themselves in thesis livelihood. Furthermore, some master programs in development studies such as economic development, community development, and natural resource development are prone to conducting research as a practical knowledge. Hence, developing their research abilities were viewed as an essential practice in graduate program in this population.

Thesis group also accepts attainment in research as one of its member. How much students perceive the importance of being involved in research activities for their study journey motivate students' choice toward related study program directing them to achieve those intentions and beliefs.

On the other hand, having less chance of being grouped in thesis preferences, some expectancy and task value components relates themselves as characteristics of non-thesis. Expectancy in practice and expectancy of research are found in non-thesis group. Expectation of doing well in practice is suitably characterized in non-thesis group preference, however, students who belief positively on their ability in doing research were also significantly engaged in non-thesis one as well. This contradictory phenomenon can be explained in term of the compensation to their limitation in research ability. Students may feel that selecting a non-thesis preference, they would be able to properly fulfill the lower-research-related standards of the non-thesis program than the thesis ones. Noticeably, only research paper is required for the non-thesis group for graduation. Thus, they may look for a certain way to confidently graduate the study program with a fruitful result and avoid failure. This can be part of cost mechanism to maintain self-worth and confront with fearfulness of failure (Convington, 1992).

The other reversed effect is observed in utility in research which is classified in non-thesis preferring group. Research can be mainly applied in real practices. In fact, some action researches are aimed at understanding and reflecting the returning outcomes of particular project. Therefore, research and practice in utility

value are not completely separated from each other and mutually needed in graduate study. Students may value both competences as advantages in their study and professional activities no matter them prefer thesis or non-thesis.

Interest in practice and cost in practice are the other salient membership of non-thesis group. These characteristics indicate strong consistency among predictors and outcome variables. Being joyful and satisfied in practice related tasks is the livelihood deserved to be in this group.

4. Conclusion

In conclusion, master programs are established to produce qualified human resources to become experts in workplaces and academicians. Various program designs (thesis and non-thesis were offered to serve professional competency standards, program learning outcomes, and learners' goal orientations; however, learners' contexts and circumstances, especially cost rather than the components of motivational beliefs (expectancy of success and task value) influenced the preferences. The study result seems to be distant from the theoretical framework in expectancy-value theory; however, contextual differences such tasks and choice of programs might be the other story for investigation so that researcher can make a reflection among the authenticity to the existing theoretical model. This study contributes to the implication of master program development in Cambodia in term of enhancing awareness on students' motivational beliefs on the study programs to program developers and looking for the way to have clearer program orientation basically on learning outcomes and goal of graduate programs (thesis and non-thesis) for learners' references in making correct decisions. Integrating common professional competencies into both programs may be considered due to some inseparable functions of research and practice that observed in this study. It is challenging to completely discriminate the research and practice related tasks since the nature of these two tasks are intimately correlated toward choice of graduation and even sometimes can be interchangeable. These competencies are both needed in academic issues, real life situations, and at work places.

This study indicated some limitations. Samples used in the study were limited for logistic regression. The participants were only from two universities; this may affect the variations of the samples and be difficult to make a generalization to the whole situations in Cambodian context.

5. References

Atkinson, J. W. (1957). Motivation determinants of risk taking behavior. Psychological Review, 64, 359-372.

Bong, M. (2001). Between- and within-domain relations of academic motivation among middle and high school students: Self-efficacy, task value, and achievement goals. Journal of Educational Psychology, 93, 23–34. doi:10.1037//0022-0663.93.1.23.

Convington, M. V. (1992). Making the grade: A self-worth perspective on motivation and school reform, New York: Cambridge University Press.

Denissen, J. J. A., Zarrett, N. R., & Eccles, J. S. (2007). I like to do it, I'm able, and I know I am: Longitudinal couplings between domain-specific achievement, self-concept, and interest. Child Development, 78, 430–447. doi:10.1111/j.1467-8624.2007.01007.x

Eccles J. S., Adler, T. F., Futterman, R., Goff, S. B., Kaczala, C. M., Meece, J. L., & Midgley, C. (1983). Expectancies, values, and academic behaviors. In J. T. Spence (Ed.), Achievement and achievement motivation (pp. 75–146). San Francisco, CA: W. H. Freeman.

Eccles, J, S., Adler, T. F., & Meece, J. I. (1984). Sex differences in achievement: A test of alternate theories, Journal of Personality and Social Psychology, 46, 26-43.

Eccles, J. S. (1984). Sex differences in achievement patterns. In T. Sonderegger (Ed.), Nebraska Symposium on Motivation, 32, 97-132. Lincoln: University of Nebraska Press.

Eccles, J. S. (1987). Gender roles and women's achievement-related decision. Psychology of Women Quarterly, 11, 135-172.

Eccles, J. S. & Harold, R. D. (1991). Gender differences in sport involvement: Applying the Eccles's expectancy-value model. Journal of Applied Sport Psychology, 3, 7-35.

Eccles, J. S., Wigfield, A., Harold, R., & Blumenfeld, P. B. (1993). Age and gender differences in children's self- and task perceptions during elementary school. Child Development, 64, 830–847.

Eccles, J. S., & Wigfield, A. (1995). In the mind of the achiever: The structure of adolescents' academic achievement related-beliefs and self-perceptions. Personality and Social Psychology Bulletin, 21, 215-225.

Eccles, J. S. (2005). Subjective task values and the Eccles et al. model of achievement related choices. In A. J. Elliott & C. S. Dweck (Eds.), Handbook of competence and motivation (pp. 105–121).

Feather, N. T. (1988). Value, valences, and course enrolment: Testing the role of personal value within expectancy-value framework. Journal of Educational Psychology, 80, 381-391.

Krapp, A. (2002). Structural and dynamic aspects of interest development: Theoretical considerations from an ontogenetic perspective. Learning and Instruction, 12, 383–409. doi:10.1016/S0959-4752(01)00011-1.

Meece, J. L., Wigfield, A., & Eccles, J. S. (1990). Predictors of math anxiety and its influence on young adolescents' course enrollment intentions and performance in mathematics. Journal of Educational Psychology, 82, 60–70. doi:10.1037/0022-0663.82.1.60.

Rose, M. (2012). Graduate student professional development: A survey with recommendations. The Canadian Association for Graduate Studies.

Schwanzer, A. D., Trautwein, U., Lu¨dtke, O., & Sydow, H. (2005). Entwicklung eines Instruments zur Erfassung des Selbstkonzepts junger Erwachsener [Development of a questionnaire on young adults' selfconcept]. Diagnostica, 51, 183–194. doi:10.1026/0012-1924.51.4.183.

Trautwein, U., Marsh, H. W., Nagengast, B., Ludtke, O., Nagy, G., Jonkmann, K. (2012). Probing for the multiplicative term in modern expectancy-value theory: A latent interaction modeling study. Journal of Educational Psychology, 104, 3, 763-777.

Weiner, B. (1992). Human motivation: Metaphor, theories, and research. Newbury Park, CA: Sage.

Wigfield, A., & Eccles, J. (1992). The development of achievement task values: A theoretical analysis. Developmental Review, 12, 265–310.

Wigfield, A. (1994). Expectancy-value theory of achievement motivation: A developmental Perspective. Educational Psychology Review, 12, 1-14.

Wigfield, A., & Eccles, J. S. (2000). Expectancy-value theory of motivation. Contemporary Educational Psychology, 25, 68-81.