

A STUDY ON ACADEMIC SELF-CONCEPT OF FIRST YEAR STUDENT TEACHERS

Nu Nu Yee¹, Tin Mar Naing², Si Thu Hein³

Abstract

The primary purpose of this study was to investigate the academic self-concept of first year student teachers in Yangon University of Education. The descriptive survey research method was applied and quantitative data analysis was executed in this study. As the research instrument, the three dimensions of the academic self-concept questionnaire developed by Liu and Wung (2005) was applied in this study. A total of 19 items with three dimensions: academic motivation, academic persistence and academic ability were involved. The total of 300 first year student teachers (150 males and 150 females) from Yangon University of Education. Independent sample *t*-test and ANOVA results revealed that student teachers' academic self-concept differed depending on gender, subject stream, father's job and mother's job. The female student teachers were higher in self-concept than male student teachers. Student teachers who were in arts and science were better than those with science subject stream in academic motivation. In addition, student teachers whose father's job in self-employed was better than those with random academic persistent. Student teachers' mother jobs as house keeper were better than those with government staff and self-employed in academic motivation.

Keywords: Self-concept, Academic self-concept, Academic motivation

Introduction

Educational psychology contributes important background knowledge that pre-service teachers (student teachers) and in-service teachers can utilize as the foundation for professional practice. Educational psychology can be referred to as a distinct scientific discipline within psychology that comprises both a method of study and a resulting knowledge base. It is thought that the development of students' self-concept depends on the focus of educators on educational psychology in classroom practice. A student's favorable self-concept can positively impact their academic performance by fostering optimistic personal expectations about themselves.

Success in school favorably influences one's academic self-concept (Marsh & Yeung, 1997), which in turn affects a student's desire for learning and academic endeavors (Prince & Nurius, 2014). According to Bong and Skaalvik (2003), academic self-concept also influences the amount of effort students put into their learning pursuits, how persistent they are in the face of learning challenges, their approaches to tackling these challenges with the help of others, and their overall motivation for learning.

Not all university students have the academic self-concept required for an effective transition from high school to university. This may impact their aptitude for learning so negatively that their engagement in lifelong learning, a prerequisite for success at and beyond university, may be limited. Moreover, academic self-concept is one of the most important variables in the academic domain due to its significant impact on appropriate cognitive functioning. According to Marsh and Rhonda (2002), it is the opinion and assessment that a student has or makes of their academic abilities. Zimmerman (2000) demonstrated how different cognitive and self-regulatory methods

¹ Department of Educational Psychology, Yangon University of Education

² Department of Educational Psychology, Yangon University of Education

³ Department of Educational Psychology, Yangon University of Education

that are based on an academic self-concept might lead to improved academic achievement. So, it can be said that academic self-concept directly affects learning processes, academic achievement, and expectations of students (Henson & Heller, 2000).

Academic self-concept consists of different aspects which are linked to the academic achievement of the pupils (Liu & Wang, 2005). Students' academic self-concept are more or less concerned with their results in examination. This achievement of students is much more linked to their knowledge about the potential and talents they possess. Therefore, the present study will observe the academic self-concept of first-year student teachers at Yangon University of Education.

Purposes of the Study

The primary purpose of the study was to investigate the academic self-concept of student teachers from Yangon University of Education. The specific objectives of this study are:

1. To examine the academic self-concept of student teachers by gender
2. To investigate the academic self-concept of student teachers by their subject stream
3. To explore the academic self-concept of student teachers by their age, their parent's education and job.

Definitions of Key Terms

Self-concept. Self-concept is generally defined as the knowledge and view about oneself. It is built on self-awareness and assessment of qualities and characteristics made through involvements in one's situation (Eccles, 2005).

Academic self-concept. Academic self-concept is defined as perceptions of individuals' capacity and competence level regarding his or her abilities within the academic settings (Reynold, 1988). It can also be defined as how an individual feels about himself as learner and play his role in academic settings (Guay, Marsh & Boivin, 2003).

Academic motivation. Academic motivation is a student's desire (as reflected in approach, persistence, and level of interest) regarding academic subjects when the student's competence is judged against a standard of performance or excellence (Wigfield & Eccles, 2002).

Review of Related Literature

Theory of Self-concept

The academic self-concept has a long history in the fields of education and psychology. In essence, it is in charge of figuring out how social and academic roles affect people's emotional well-being (Vaughan, Elbaum & Boardman, 2001). Academic self-concept is typically considered a significant academic output. It may be described as an overall perspective of one's surroundings as well as a picture of oneself that is based on information acquired and evaluated via experiences (Eccles, 2005). Academic self-concept is defined as the intellectual attitude of personality. Students believe in themselves and their abilities make them able to deal with the practical issues of professional life. It is commonly referred to as the complex, planned and self-motivated system of opinions, outlooks, and thoughts that each human comprehends to be accurate practically regarding his survival. Self-concept and academic achievement are collaborative and mutual. According to Adler (1930), having an intellectual self-concept helps one set and realize goals as well as offer

life new meaning and perspective. It enhances the idea about one's view regarding the world and it improves one's image of the world and creates a more favorable future vision. Additionally, it helps a person understand who they are, what they are capable of doing, and what they are not (cited in, Guay, Marsh, & Boivin., (2003).

The formation of one's self-concept is influenced by a variety of factors, including parental upbringing, ongoing failure, depression, and internal self-criticism. A positive self-concept can be expanded by acting objectively in knowing oneself, always appreciating oneself, being friends with oneself, and always having positive and rational thinking.

Studies conducted by Marsh, Hau, and Kong (2000) and Trautwein et al. (2006) revealed that the academic self-concept of the pupils can be increased and improved when they engaged in the high achiever group within the classroom situation, and they adjust the characteristics of others in the group in order to understand and enhance their academic self-concept and hence their achievement.

Thus, a learner's enthusiasm for learning outside of school as well as cognitive development in formal educational settings can both be negatively impacted by a lower academic self-concept. A learner who perceives themselves as having a low academic self-concept is probably not motivated to pursue lifelong learning. Therefore, lifelong learning opportunities provided by governmental and non-governmental agencies will fail to reach such individuals. In contrast, learners with a high academic self-concept will stay focused and work hard to succeed (Biney, 2015); they will also be more likely to participate in lifelong learning activities.

Self-Worth Theory

The construct of self-concept is grounded primarily in self-worth theory (Covington, 1992). Briefly, self-worth theory suggests that all individuals have a motivational “tendency to establish and maintain a positive self-image, or sense of self-worth” (Eccles & Wigfield, 2002).

The idea of the self-concept comes mainly from the self-worth theory (Covington, 1992; Eccles & Wigfield, 2002). This theory proposed that all humans have a capacity to build and keep constructive and optimistic self-image and sense of pride and self-worth (Covington, 2000). It asserts that since children spend most of their time being evaluated in school, it is noteworthy to maintain and develop a positive academic self-concept. The academic self-concept of the students plays an important role in their academic progress (Shumane, 2019). It is the ability and assurance of a student about his or her own skills to overcome academic challenges and hurdles successfully. Parents no doubt try to help and guide their children in their studies, but mostly in the early classes.

It is also important to improve and uphold constructive academic self-concept, in such a way that all the students learn with their own will. The students also show a positive attitude towards gaining and acquiring knowledge without having a competitive environment (Covington, 1998). The cooperative learning atmosphere helps each and every student in the classroom to avoid failure in academics and hence promote ones 'understanding regarding one's own self. (Eccles & Wigfield, 2002).

Self-concept is vibrant and dynamic in nature as it gains maturity with the age of the person and this aspect basically plays a vital role in determining that it can be modified and changed. It is not constant because as the person becomes older, he/she gets more insight about his/her abilities, capacities and gets more knowledge about his/her potentialities and knows how to come across

different situations in life (Franken, 1994). Self-concept is the set of views and opinions an individual has about himself, such as qualities, characteristics, lacks, deficiencies, capabilities and capacities, limits and relationships in which an individual thinks/describes his individuality (Marsh & Yeung, 1997). Self-concept is the knowledge and approach a person has about himself. It is the insight that the individual has about himself and the way how he describes his abilities and potentials. Self-concept has great significance and contributed a lot in building personality of an individual. It is how students do school work and feel about themselves as learners. It asserts that since children spend most of their time being evaluated in school, it is noteworthy to maintain and develop a positive academic self-concept.

Trautwein, et al. (2006) said that academic self-concept is referred to as a person's self-evaluation regarding specific academic domains or abilities (Trautwein, et al. 2006). It is how students do school work and feel about themselves as learners. The construct of self-concept is grounded primarily in self-worth theory (Covington, 1992). Briefly, self-worth theory suggests that all individuals have a motivational "tendency to establish and maintain a positive self-image, or sense of self-worth" (Eccles & Wigfield, 2002). It asserts that since children spend most of their time being evaluated in school, it is noteworthy to maintain and develop a positive academic self-concept. It has been studied that as children devote an important part of their lives to acquiring education and remain under school/classroom evaluation process so they come up with the potentials and competencies they hold within (Covington & Dray, 2002).

From the extensive literature, it has been seen that academic self-concept affects the academic achievement of the students and different researchers measured academic self-concept on certain parameters like gender, levels of study and different programs on which the academic achievement depends. But very few researches have been carried out to study the relationship between academic self-concept and academic achievement of distance learners. Many studies have explored the relationship between academic self-concept and academic achievement in the actual classroom environment. Success and failure in academic settings depends upon the belief one has in his or her abilities and the way one feels about the strengths, capabilities and potentials one possesses. It sometimes seems that achievement depend on the capacity of the students and also how strong their self-concept is regarding their potentials and capabilities they possess.

Method

This study sought to investigate the academic self-concept of student teachers from Yangon University of Education. To achieve the purpose of the study the performance of the research procedures as selecting the sample of the study, research design and method, instrumentation, procedure and collection of the data are presented in this study, descriptive research design and survey methods were conducted. Among the types of survey studies, a cross-sectional survey was used. Student teachers' academic self-concept was examined by using a questionnaire survey method.

Participants of the Study

First year student teachers from Yangon University of Education were selected as a sample for the study in the academic year 2022-2023. Total participants were 300 first year student teachers (150 males and 150 females) were selected as participants in quantitative study. The characteristics of the chosen number of participants are presented in Table 1.

Table 1 Characteristics of Participants for Quantitative Study

Region/State	Teacher Education Institutions	Gender		Total
		Male	Female	
Yangon Region	University of Education	150	150	300

Measures of Academic self-concept. To assess student teachers' academic self-concept, the Academic Self-Concept Questionnaire (ASCQ) was used. It was designed by Liu and Wung (2005). The ASCQ includes 19 items and it is a kind of self-report measure. It has three subscales; Academic Motivation, Academic Persistence and Academic Ability. There were six items for Academic Motivation. Each item was assessed along a 4-point Likert scale. The Cronbach's alpha value in this study was 0.75.

Instrumentation and Procedure

The measure used in this study was adapted to the Myanmar language version. Then, the expert review was conducted for face validity and content validity of the instruments by seven experts in the field of educational psychology and educational test and measurement from Yangon University of Education. Next, the questionnaire was modified according to their suggestions and recommendations. And then, a pilot study was conducted to test whether the wording of items, statements and instructions had their clarity in Myanmar language version and were appropriate to student teachers. The Cronbach's alphas for all the measures in the pilot study were above 0.7, hence having satisfactory reliability.

Data Analysis and Findings

Analysis of Data on Student Teachers' Academic Self- Concept

Means and standard deviation of student teachers' academic self-concept were analyzed and the results were shown in Table 2.

Table 2 Descriptive Statistics of Student Teachers' Academic Self-Concept

Variable	<i>N</i>	<i>M</i>	<i>SD</i>	Minimum	Maximum
Academic Self-Concept	300	51.40	4.660	35	63

Note. *M* = Mean, *SD* = Standard Deviation

Analysis of Data on Subscales of Student Teachers' Academic Self-Concept

Mean and standard deviation of subscales of student teachers' academic self-concept were analyzed and the results were shown in Table 3.

Table 3 Descriptive Statistics for Subscales of Student Teachers' Academic Self-Concept

Variables	No. of Items	<i>N</i>	<i>M</i>	Mean%	<i>SD</i>	Minimum	Maximum
Academic motivation	6	300	18.41	24.22%	2.022	9	23
Academic persistence	8	300	20.05	26.38%	2.696	13	27
Academic ability	5	300	12.95	17.04%	1.748	5	18

Note. *M* = Mean, *SD* = Standard Deviation

Comparison of Student Teachers' Academic Self-Concept by Gender

To find out whether there were gender differences in academic self-concept of student teachers, descriptive statistics and independent samples *t*-test were conducted (see Table 4).

Table 4 Means, Standard Deviations and Results of Independent Samples *t*-test of Student Teachers' Academic Self-Concept by Gender

Variables	Gender	<i>N</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Academic motivation	Male	150	18.17	2.222	-2.038*	284	.042
	Female	150	18.65	1.777			
Academic persistence	Male	150	19.95	2.681	-.599	298	.550
	Female	150	20.14	2.717			
Academic ability	Male	150	12.89	1.832	-.528	298	.598
	Female	150	13.00	1.663			
Academic Self-Concept	Male	150	51.02	4.745	-1.427	298	-.155
	Female	150	51.79	4.557			

Note. * $p < .05$.

M = Mean, *SD* = Standard Deviation

The result of independent samples *t*-test stated that the mean score of academic motivation for female student teachers was significantly higher than that of male student teachers, *t* (284.247) = -2.038, $p = .042$

Comparison of Student Teachers' Academic Self-Concept by Subject Combination

To make more detailed information on the difference of student teachers' academic self-concept by subject stream, one-way Analysis of Variance (ANOVA) was conducted (see Table 5).

Table 5 Means, Standard Deviations, and ANOVA Results of Student Teachers' Academic Self-Concept by Subject Stream

Variables	Subject Stream	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Academic motivation	Science	100	17.98	2.309	3.499*	.031
	Arts & Science	100	18.67	1.729		
	Arts	100	18.58	1.934		
Academic persistence	Science	100	20.31	2.677	2.096	.125
	Arts & Science	100	19.60	2.590		
	Arts	100	20.23	2.788		
Academic ability	Science	100	13.04	1.414	.960	.384
	Arts & Science	100	12.90	1.573		
	Arts	100	13.20	1.602		

Note. * $p < .05$.

M = Mean, *SD* = Standard Deviation

ANOVA results indicated that there were significant differences of academic motivation, $p = .031$, with respect to subject stream.

To obtain more detailed information for subject combination, post hoc test was carried out by Tukey HSD multiple comparison procedure for science, arts & science, and arts (see Table 6).

Table 6 Results of Tukey HSD Multiple Comparisons for Student Teachers' Academic Self-Concept by Subject Stream

Variable	(I) Subject Stream	(J) Subject Stream	Mean Difference(I-J)	<i>p</i>
Academic motivation	Art & Science	Science	.690*	.041

Note. * $p < .05$.

According to the above Table 6, it can be concluded that the student teachers who was arts and science group was better than those with science subject stream in academic motivation.

Comparison of Student Teachers' Academic Self-Concept by Father's Jobs

To make more detailed information on the difference of student teachers' academic self-concept by father's job, one-way Analysis of Variance (ANOVA) was conducted (see Table 7).

Table 7 Means, Standard Deviations, and ANOVA Results of Student Teachers' Academic Self-Concept by Father's Job

Variables	Fathers' Job	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Academic motivation	Government Staff	31	17.77	1.783	1.722	.180
	Self-Employed	252	18.48	2.073		
	Random	17	18.53	1.463		
Academic persistence	Government Staff	31	20.32	2.508	2.974*	.05
	Self-Employed	252	20.12	2.693		
	Random	17	18.53	2.764		
Academic ability	Government Staff	31	13.06	13.06	1.029	.359
	Self-Employed	252	13.08	13.08		
	Random	17	12.53	12.53		

Note. * $p < .05$.

M = Mean, *SD* = Standard Deviation

ANOVA results indicated that there were significant differences of academic persistence, $p = .05$, with respect to father's job.

To obtain more detailed information for father's job, post hoc test was carried out by Tukey HSD multiple comparison procedure for government staff, self-employed, and random (see Table 8).

Table 8 Results of Tukey HSD Multiple Comparisons for Student Teachers' Academic Self-Concept by Father's Job

Variable	(I)Father's Job	(J) Father's job	Mean Difference(I-J)	<i>p</i>
Academic persistence	Self-Employed	Random	.1586*	.049

Note. * $p < .05$.

According to the above Table 8, it can be concluded that the student teachers' father job in self-employed was better than random in academic persistence.

Comparison of Student Teachers' Academic Self-Concept by Mother's Job

To make more detailed information on the difference of student teachers' academic self-concept by mother's job, one-way Analysis of Variance (ANOVA) was conducted (see Table 9).

Table 9 ANOVA Results of Each Subscales of Student Teachers' Academic Self-Concept by Mother's Job

Variables	Mothers' Job	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Academic motivation	Government Staff	27	17.48	2.242	15.058*	.000
	Self-Employed	103	17.78	2.183		
	House Keeper	170	18.41	1.709		
Academic persistence	Government Staff	27	20.41	2.965	2.351	.097
	Self-Employed	103	20.44	2.882		
	House Keeper	170	19.75	2.509		
Academic ability	Government Staff	27	12.81	.962	1.654	.193
	Self-Employed	103	13.26	1.584		
	House Keeper	170	12.95	1.564		

Note: * $p < .05$.

M = Mean, *SD* = Standard Deviation

ANOVA results indicated that there were significant differences of academic motivation, $p=.000$, with respect to mother's job.

To obtain more detailed information for subject combination, post hoc test was carried out by Tukey HSD multiple comparison procedure for government staff, self-employed, and house keeper (see Table 10).

Table 10 The Results of Tukey HSD Multiple Comparison for Subscale of Student Teachers' Academic Self-Concept by Mother's Job

Variable	(I)Mother's Job	(J) Mother's job	Mean Difference(I-J)	<i>p</i>
Academic motivation	House Keeper	Government Staff	1.460**	.001
		Self-Employed	1.164***	.000

Note: ** $p < .01$, *** $p < .001$.

According to the above Table 10, it can be concluded that the student teachers' mother job in house keeper was better than those with government staff and self-employed in academic motivation.

Discussion

Firstly, to find out the analysis of data on student teachers' academic self-concept, the results showed that the mean score of academic self-concept was 51.40 and the standard deviation was 4.660. The highest mean score for student teachers' academic self-concept was 63 and the lowest mean score was 35. And then, the observed mean is 51.40 and the theoretical mean is 47.50. It can be said that the academic self-concept of first year student teachers from Yangon University of Education was satisfactory. Then, to find out the analysis of data on subscales of student teachers' academic self-concept, the results showed that the mean percentage of 24.22%, 26.38% and 17.04% in academic motivation, academic persistence and academic ability respectively. It can be concluded that the mean percentage of first year student teachers' academic self-concept in academic persistence (24.22%) was higher than those of other subscales.

According to the independent simple *t*-Test result of first year student teachers' academic self-concept by gender, there was significant difference in academic motivation at 0.05 level. This study is consistent with the results of previous studies by Pirmohamed, Debowska & Boduszek, 2017; Matovu, 2012; Liu, 2010; Liu & Wang, 2005. They found that female students tend to have higher academic self-concept than male students. It was found that female student teachers' academic self-concept was higher than male student teachers. It can be said that female student teachers are generally interested in academic activities and have good attention to learning. They also do carefully in academic work and are able to do the best in academic duties than the male student teachers.

Moreover, based on the ANOVA results in determining the differences in first year student teachers' academic self-concept by subject stream, there was a significant difference in academic motivation at 0.05 level by the subject stream. The results of the present study are similar to the results of Gakhar & Gains, 2011. They found that the students of Science and Arts streams differed significantly in their level of self-concept. Based on the post hoc analysis, it was found that arts and science student teachers possess better academic motivation than science student teachers. It can be said that art and science student teachers have high intrinsic motivation. Deci & Ryan (1985) said that academic motivation is usually described as internal or intrinsic and external or extrinsic factors. Race (1998) believed that internal or intrinsic motivation is connected to the desire for education. They would perform learning activities with internal emotions. They would feel a sense of joy, curiosity, happiness, and interest during teaching learning process.

According to the ANOVA results, there were significant differences in academic persistence at 0.05 level by father's job. Based on the post hoc analysis, it was found that student teachers whose fathers have the self-employed jobs had higher academic self-concept than those of their fathers have random jobs. It can be concluded that the fathers who have the self-employed jobs may have preferred more involvement with children. They can give more than to cater to their children because they don't have rigid work whenever they want to. This desire for involvement in family life, and many arranges their schedules to participate or be present for special activities can support their children's academic self-concept. Craig and Bittman, (2008) said that self-employment provides strong carrying potential as people have more control over their own progression. They also said that going hand in hand with the flexible life style, individual who works for them can go over and above to work long hours on some days, network and reap the benefits of their hard work.

In determining the significant differences in academic self-concept among first year student teachers by mother's job, ANOVA results showed a significant difference in academic self-concept among first year student teachers by mother's job at 0.01 level. Specifically, based on the post hoc results, it was found that student teachers whose mothers are housewives would have higher academic persistence than student teachers whose mother are government staff and non-government staff. Thus, it can be concluded that mothers who are housewives can give their children more time and support, moreover, they allow their children to choose their goals and then they can help their children create a plan and listen for opportunities to help their children to achieve goals of interest to them. Therefore, parents' jobs influence their children academic self-concept.

Limitations of the Study and Future Research

This study was conducted with a cross-sectional study design, so longitudinal studies should be employed to determine the development of academic self-concept. This study included only one university of education. To be more representative, future research should be conducted with the remaining universities of education and education degree colleges. Moreover, participants comprised only student teachers. Additionally, more empirical studies among other populations such as in-service teachers, adolescents, basic education students and other university students should be studied to elucidate the importance of academic self-concept.

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