ARTÍCULOS DE INVESTIGACIÓN

Academic self-concept and motivation in young talents of a private university in Tarapoto

Autoconcepto académico y motivación académica en jóvenes talento de una universidad privada de Tarapoto

Renzo F. Carranza[1a*] & Effer E. Apaza[1b]

[1]Universidad Peruana Unión, San Martín, Perú.

[a]Psychologist. Professor in the School of Health Sciences at the Universidad Peruana Unión. International speaker and writer of several popular science articles. [b]Statistical Engineering from the Universidad Nacional del Altiplano. Professor in the School of Engineering and Architecture at Universidad Peruana Unión.

*Correspondencia

Email: renzo.carranza@upeu.edu.pe

Summary

The objective of this study was to determine the relationship between academic self-concept and academic motivation in young talents (Scholarship 18) at a Private University in Tarapoto city, Peru. The sample was obtained through a probabislitic sampling and there were 92 young talents, being 47.8% male and 52.2% female between 17 and 22 years old. I used a descriptive, correlational and non-experimental design. The sample was evaluated using the AF5 Self-concept Scale (García and Musitu) academic section that consists of 6 items, and the Academic Motivation Scale that consists of 28 items. The psychometric properties of the instruments indicated that they are valid and reliable. Data were processed in SPSS (Statistical Package for the Social Sciences) version 20.0. The results show that there is a direct and highly significant relationship between academic self-concept and academic motivation in young talents ($r = .301**$, $p<.004$), which indicates the higher the academic self-concept, the greater the academic motivation.

Keywords: Young talent, academic self-concept, academic motivation.

Resumen

El objetivo del presente estudio fue determinar la relación entre el autoconcepto académico y la motivación académica en jóvenes talento (Beca 18) de una universidad privada de Tarapoto. La muestra se obtuvo por un muestreo probabilístico, y se tuvo como participantes a 92 jóvenes talento, siendo el 47,8% de sexo masculino y el 52,2% de sexo femenino entre 17 y 22 años. Se utilizó un diseño no experimental de tipo descriptivo correlacional. Se evaluó la muestra con la Escala de Autoconcepto AF5 de García y Musitu, sección académico y compuesta por 6 ítems, y la Escala de Motivación Académica, conformada por 28 ítems. Las propiedades psicométricas de los instrumentos indicaron que son válidos y confiables. Los datos fueron procesados en el paquete estadístico SPSS (Statistical Package for the Social Sciencies) versión 20.0. Los resultados evidencian que existe una relación directa y altamente significativa entre autoconcepto académico y motivación académica en los jóvenes talento ($r = .301**$, $p<.004$), lo que indica que, a mayor autoconcepto académico, mayor será la motivación académica.

Palabras clave: Jóvenes talento, autoconcepto académico, motivación académica.

Introduction

At present, in the education field, academic motivation is considered as one of the topics of gravest concern, due to the levels of academic failure worldwide. One of the main causes of academic dropout is lack of motivation. According to the statistics worldwide, of 1.369.803 students enrolled in the 2008-2009 school period, 20% of them drop out of high school; regarding college education, the outlook turns even more lugubrious. According to the research works carried out by the Organization for Economic Cooperation and Development (OECD) show that the academic dropout rate in countries like the USA reaches 35%; the reality with respect to this topic is also alarming in Spain, since the dropout rate is over 20%, while in Italy 60% of students give up their careers" (OECD, 2008; cited by Logros Perú, 2008).

On the other hand, during the year 2014 nationwide, it has been reported that 27,2% of the school population has dropped out due to lack of interest; consequently, every year in Peru, more than USD 100 million are lost due to college dropouts (Plasencia, 2008; cited by Logros, 2008).

In fact, Peru is not out of touch with that reality. Although teachers constantly keep updated and trained, reality with students is quite different, since the academic performance is not what is expected. The hardest evidence that concerns teachers who are committed to the development of the country, are the results of the PISA test of the year 2011, in which Peru ranked 63, however in the last test, we ranked last in all education categories –mathematics, sciences and reading comprehension- (Bois, 2013).

In such sense, an increasing challenge of the educational institutions is directly related to competitiveness (Barato, 1985), since a significant number of students say that they have difficulties to study and they waste time and do not know what to do to meet the academic requirements appropriately (Rodríguez, 2009).

Competitiveness is related to the academic education and this to the motivation of the individual. The academic motivation is a general process by which a behavior is generated and leaded to the achievement of a goal and in this process cognitive and affective variables are involved and it comprises elements such as self-esteem, self-concept, among others (Alcalay & Antonijevi, 1987).

Vega and Capa (2009) say that, currently, one of the problems that society is interested in and worried about is the self-concept and the high rate of apathy in the first years of college, which are immersed in the college environment and interfere in the academic performance and adaptability, among other factors.

And within this group, the interest in studying the self-concept derived from the idea that other people who perceive themselves in a positive way, see the world in the same way, unlike the others, who perceive themselves in a negative way. For that reason, when we talk about self-concept, we put emphasis on the individual behaviors, since all of them are related to the personal social, emotional, motivational and intellectual terms (Alfaro, 2009; González & Tourón, 2004).

Based on the foregoing, it is stated that emotional problems, instead of being a support for self-fulfillment and academic education, they could complicate the outlook (Hurtado, 2000; Schmidt, 2010). Among the factors favoring the personal and academic development in college students stand out self-concept and academic motivation.

Method

Design and Type of Research.

The research corresponds to a non-experimental cross-sectional correlational design since it was intended to find the relationship between academic self-concept and academic motivation in college students of a Private University in Tarapoto (Hernández, Fernández & Baptista, 2010).

Participants

They were 92 young talents (Scholarship 18) from a private university in Tarapoto; 27 college students from the Systems Engineering program and 65 from the Environmental Engineering program.

a. Inclusion Criteria

- Students enrolled in the 2014-I academic semester.
- Students aged over 16 and under 30.
- Students awarded a scholarship by the State (Scholarship 18).

b. Exclusion Criteria

- Not being under psychological treatment.
- No grant holders.
- Students aged over 30.

Instruments

To carry out the academic self-concept assessment, the Self-concept AF5 Scale of García Musitu created by Musitu, García and Gutiérrez, published in 1999 was applied, an academic self-concept dimension which consists of 6 items. It is worth mentioning that the scale has shown an appropriate validity and reliability in several studies (Sandoval, 2009, Alfaro, 2010 & Bartra and Guerra, 2013), as well as in this study (*Alfa de Cronbach* .867).

On the other hand, to measure the academic motivation, the Academic Motivation Scale (EME) created by Nuñez et al. (2005) was used and it consists of 28 items. It has shown appropriate validity and reliability (*Alfa de Cronbach* .839, *KMO* .765).

It is worth mentioning that in order to validate the instruments, the experts 'opinions was requested and they evaluated coherence, clarity, conciseness, competence, fulfillment of goals, replicability and relevance of the items presented in the instrument. Regarding the statistical justification, a pilot test

was performed before the collection of data in order to obtain information that helps to improve the validity and reliability of the instrument and to detect problems in the validity of construction and content.

Procedure

To collect data, an access authorization document, which establishes the commitment to collaborating in the study to be performed, was submitted. Students of both genders, between 17 and 22 years old, participated and collaborated. Once the individuals were identified, the Academic Self-Concept Scale and the Academic Motivation Scale were applied to each individual and group.

Furthermore, the data collection method was the survey and in instruments, demographic data such as gender, age, origin, religion and cycle of study was included.

For the data analysis, Descriptive Statistical Techniques and correlational techniques were used at a significance level of $p < .05$. To process data and make the corresponding analyses, the Statistical Software for Windows SPSS was used.

Results

Descriptive Analysis of the Academic Motivation Variable its Dimensions.

Regarding the percentage of the academic motivation dimensions, Table 1 shows that young talents have an average level in external regulation dimensions (40.2%, introjected regulation (47.8%), stimulating experiences motivation (47.8%) and high levels in knowledge motivation dimensions (42.4%) and achievement motivation (34.8%) unlike the amotivation dimension where a low level is reported (43.4%) and identified regulation (54.3%).

Table 1.

Descriptive Analysis of the Academic Motivation Variable and its Dimensions.

Academic motivation dimensions	Category	Frequency	Percentage
Amotivation	Low	40	43.5 %
	Average	38	41.3 %
	High	14	15.2 %
	Total	92	100.0 %
External regulation	Low	18	19.6 %
	Average	37	40.2 %
	High	37	40.2 %
	Total	92	100.0 %
Introjected regulation	Low	20	21.7 %
	Average	44	47.8 %
	High	28	30.4 %
	Total	92	100.0 %
Identified regulation	Low	50	54.3 %
	Average	15	16.3 %
	High	27	29.3 %
	Total	92	100.0 %
Knowledge motivation	Low	34	37.0 %
	Average	19	20.7 %
	High	39	42.4 %
	Total	92	100.0 %
Achievement motivation	Low	40	43.5 %
	Average	20	21.7 %
	High	32	34.8 %
	Total	92	100.0 %
Stimulating experience motivation	Low	26	28.3 %
	Average	44	47.8 %
	High	22	23.9 %
	Total	92	100.0 %

Regarding the academic self-concept, Table 2 shows that 53.3% of young talents have an average level of academic self-concept, 15.2% of them have a high level, unlike 31.5% of them have a low level of academic self-concept.

Table 2.

Academic Self-concept Levels.

	Categories	Frequency	Percentage
Academic self-concept	Low	29	31.5 %
	Average	49	53.3 %
	High	14	15.2 %
	Total	92	100.0 %

In Table 3 the most predominant percentage among the age groups according to the academic self-concept and the socio-demographic variables is located in the very average level: feminine gender 28.3%, 33.7%, from 17 to18 years old, regarding the professional academic school, Environmental Engineering 35.9% and according to the religion, Adventist 30.4%.

Table 3.

Self-concept Levels and its Dimensions, according to Socio-demographic Variables.

		Academic self-concept							
		\multicolumn{2}{c}{Low}	\multicolumn{2}{c}{Average}	\multicolumn{2}{c}{High}	\multicolumn{2}{c}{Total}
Gender	Masculine	16	17.4%	23	25.0%	5	5.4%	44	47.8%
	Feminine	13	14.1%	26	28.3%	9	9.8%	48	52.2%
Age	17-18	16	17.4%	31	33.7%	6	6.5%	53	57.6%
	19-20	10	10.9%	14	15.2%	8	8.7%	32	34.8%
	21-22	3	3.3%	4	4.3%	0	0.0%	7	7.6%
Academic Professional School	Environmental Engineering	19	20.7%	33	35.9%	13	14.1%	65	70.7%
	Systems Engineering	10	10.9%	16	17.4%	1	1.1%	27	29.3%
Religion	Adventist	25	27.2%	28	30.4%	6	6.5%	59	64.1%
	Evangelical	0	0.0%	4	4.3%	1	1.1%	5	5.4%
	Catholic	2	2.2%	16	17.4%	5	5.4%	23	25.0%
	Other	2	2.2%	1	1.1%	2	2.2%	5	5.4%
	Total	29	31.5%	49	53.3%	14	5.2%	92	100.0%

Among the age groups according to the academic motivation and socio-demographic variables, the following groups are located in the average level: feminine gender 28.3%, 33.7% from 17 to 18 years old, regarding the academic professional school, environmental engineering 35.9% and according to religion, Adventist 31.5%, see Table 4.

Table 4.

Academic Motivation Levels according to Socio-demographic Variables

		Motivation							
		Low		Average		High		Total	
Gender	Masculine	9	9.8%	22	23.9%	13	14.1%	44	47.8%
	Feminine	14	15.2%	26	28.3%	8	8.7%	48	52.2%
Age	17-18	14	15.2%	31	33.7%	8	8.7%	53	57.6%
	19-20	7	7.6%	14	15.2%	11	12.0%	32	34.8%
	21-22	2	2.2%	3	3.3%	2	2.2%	7	7.6%
Academic Professional School	Environmental Engineering	16	17.4%	33	35.9%	16	17.4%	65	70.7%
	Systems Engineering	7	7.6%	15	16.3%	5	5.4%	27	29.3%
Religion	Adventist	16	17.4%	29	31.5%	14	15.2%	59	64.1%
	Evangelical	2	2.2%	3	3.3%	0	0.0%	5	5.4%
	Catholic	5	5.4%	11	12.0%	7	7.6%	23	25.0%
	Other	0	0.0%	5	5.4%	0	0.0%	5	5.4%
	Total	23	25.0%	48	52.2%	21	22.8%	92	100.0%

Relationship between Self-Concept and Motivation Dimensions-

Table 5 shows that there is a reverse and highly significant correlation between amotivation dimension and academic self-concept dimension ($r = -.317**$; $p = .00$), which indicates that the lower the academic self-concept, the higher the lack of motivation. However, it is observed that there is a

direct correlation between the knowledge motivation (r = .312**; p= .02), achievement motivation (r = .354**; p= .00) and stimulating experience motivation (r = .414**; p= .00), that is, the higher the self-concept, the higher the academic motivation. Finally, it is observed that there is a direct and highly significant relationship between academic self-concept and academic motivation (r = .301; p<.04). The values shown indicate that the higher academic self-concept, the higher the academic motivation.

Table 5.

Correlation between Academic Self-concept Dimension and Academic Motivation Dimension

Self-concept dimensions	Academic self-concept	
	r	p
Amotivación	-.363**	.000
External regulation	.176	.094
Introjected regulation	.156	.156
Identified regulation	.161	.126
Knowledge motivation	.312**	.002
Achievement motivation	.354**	.001
Stimulating experience motivation	.414**	.000
Academic motivation	.301**	.000

*. Correlation is significant at level .01 (bilateral).

Discussion

One of the contributions of this research, is the confirmation of the highly significant relationship between academic self-concept and academic motivation in college students (young talents). Therefore, this study contributes to the empirical knowledge of the education area with an immersed vision in the positive psychology, strengthening the proposal that consists in the fact that the defined and balanced self-concept contributes to the academic motivation stability in college students.

The self-concept has a main role in motivation and self-regulated learning, which is developed by self-perceptions, valuation of them and by the predominance over it through feedback of the significant others (Núñez, 1998; Gonzales, 2009). Therefore, based on the foregoing, the proposal made by Musito, García and Gutiérrez (cited by Jiménez, 2008) is confirmed by the multidimensional theoretical model of self-concept, which proposes that the human consists of 5 dimensions: academic, family, emotional, social and physical; which are related and interrelated, substantially influencing the human being development. Regarding the academic field, Musito, García and Gutiérrez (cited by Jiménez, 2008) propose that the multidimensional balanced aspect of self-concept generates a productive academic motivation in college students by increasing their professional expectations and giving rise to satisfaction in the professional education process.

In addition, it is worth to mention that in this research, young talents (college students) from a private university of Tarapoto show levels of general self-concept ranging from low to average (84.8%). In contrast to the foregoing, Goñy, et al. (2003), in a study developed in students from the Psychology program at Universidad Nacional Mayor de San Marcos, showed that 88,7% of them have a global self-concept between average and high levels. When comparing these findings with other studies performed in several parts of the world, the indicators found are higher; this is explained considering that to measure the self-concept in college students, several instruments were used in different realities. In a study performed by Schmidt (2010) in students from Universidad Católica de Argentina, the levels of self-concept interfere in the motivation for the students to continue with their careers. Besides, a study performed by Esnaola, 2008 indicates that women have more difficulties in their self-concept levels. However, in our study, women have higher levels of academic self-concept.

Other important finding in the study is the fact that the students between the age of 17 and 18 have higher levels of academic self-concept and academic motivation. Similar data are observed in the research carried out by Vega and Capa (2009).

Besides, the analysis of correlation between each dimension of academic motivation and the academic self-concept, the following results are shown: there is a reverse and highly significant correlation between amotivation dimension and academic self-concept dimension ($r = -.317**$; $p= .00$), which indicates that the lower the academic self-concept, the higher the lack of motivation. However, it is observed that there is a direct correlation between knowledge motivation dimension ($r = .312**$; $p= .02$), achievement motivation ($r = .354**$; $p= .00$) and stimulating experience motivation ($r = .414**$; $p= .00$), that is, the better the self-concept, the more the desire to achieve the academic goals set.

In view of these results, the academic self-concept must be considered as a main factor to achieve an adequate level of academic motivation since it influences the education and development, building self-confidence to face obstacles and making greater effort to achieve goals set.

References

Alcalay, L., & Antonijevic, N. (1987). Motivación para el aprendizaje: Variables afectivas. *Revista de Educación*, *1*(14), 29-32.

Alfaro, R. (2009). Autoconcepto y conducta disciplinaria de los alumnos del nivel secundario de la Institución Educativa Adventista Miraflores (tesis inédita de maestría). Universidad Peruana Unión. Lima.

Barato, G. (1985). *Familia y comunidad*. Bogotá: Usta.

Bois, F. (4 de diciembre de 2013). Editorial: Una propuesta hípica. *El Comercio*. Recuperado de http://elcomercio.pe/politica/opinion/editorial-propuesta-hipica-noticia-1668333

Carranza, R. (2012). Depresión y características demográficas asociadas en estudiantes líderes universitarios de Lima Metropolitana. *Revista Apuntes Universitarios*, *2*, 79-90. Recuperado de http://apuntesuniversitarios.upeu.edu.pe/index.php/revapuntes/article/view/24/22

Cronbach, L. (2001). *Fundamentos de los Test Psicológicos*. Madrid: Biblioteca Nueva.

Esnaola, I. (2008*). El autoconcepto físico durante el ciclo vital. Anales de psicología*, *24*(1), 1-8. Recuperado de http://www.um.es/analesps/v24/v24_1/01-24_1.pdf

García F. & Musitu, G. (2001). *Manual AF5 Autoconcepto*. Madrid: TEA Ediciones.

Goñi, A., Esnaola, I., Ruiz de Azua, A., Rodriguez, A., & Zulaika, L. (2003). Autoconcepto físico y desarrollo personal: perspectivas de investigación. *Revista de Psicodidáctica*, *15*(16), 7-62. Recuperado de http://redalyc.uaemex.mx/redalyc/pdf/175/17515081003.pdf

González, D. (2009). *Psicología de la Motivación*. La Habana: Editorial Ciencias Médicas.

González, M. & Tourón, J. (1994). Autoconocimiento y rendimiento escolar. Sus implicaciones en la motivación y en la autorregulación del aprendizaje. Barañain: Eunsa.

Hernández, R., Fernández, C. & Baptista, P. (2010). *Metodología de la Investigación*. México: Mc Graw-Hill.

Jimenez, J. (2008). *Autoconcepto emocional como factor de rechazo en estudiantes universitarios.* México: Nuevas Era.

Logros Perú (2008). *Deserción universitaria.* Recuperado de: http://www.logrosperu.com/noticias/actualidad/810desercion-universitaria-preocupa-al-mundo.html

Musitu, G., García, F. & Gutiérrez, M. (1999). *Autoconcepto Forma 5 (AFA)*. Madrid: TEA, Ediciones, S.A.

Núñez, J. (1998). *Intervención sobre los déficits afectivos y motivacionales en alumnos con dificultades de aprendizaje.* Madrid: Síntesis.

Núñez, J., Martín, J., & Navarro, J. (2005). Validación de la versión española de Escala de Motivación Académica. *Psicothema*, *17*(2), 344-349.

Rodríguez, G. (2009). *Motivación, estrategias de aprendizaje y rendimiento académico en estudiantes de E.S.O.* (Tesis doctoral). Recuperado de http://ruc.udc.es/dspace/bitstream/2183/5669/1/RodriguezFuentes_Gustavo.TESIS_GRF_210109.pdf

Schmidt, A. (2010). *Autoconcepto y motivaciones vocacionales en estudiantes de primer año de carreras de Humanidades y Ciencias*

Exactas (tesis de licenciatura). Recuperado de http://bibliotecadigital.uca.edu.ar/repositorio/tesis/autoconcepto-motivaciones-vocacionales-en-estudiantes.pdf

Vega, M. & Capa, W. (2009). Influencia del autoconcepto, las estrategias de aprendizaje y percepción acerca del docente en el rendimiento académico de los alumnos de Psicología. *Revista de Investigación Universitaria*, *1*(1), 105-114.