

PERSONALITY AND CAREER DECISION MAKING IN UNDERGRADUATES

[*Personalidad y toma de decisiones vocacionales en universitarios*]

In  format

[Article record](#)
[About the authors](#)
[Print this article](#)

por / by

Bethencourt, José-Tomás (jbethen@ull.es)
Cabrera, Lidia (dcabrera@ull.es)

En formato 

[Ficha del artículo](#)
[Sobre los autores](#)
[Imprimir el artículo](#)

Abstract

The relationships between personality and career decision making in undergraduates are analyzed in this work. The hypothesis is that efficient personality is associated with the more mature process of career decision making. For this hypothesis, the Questionnaire of Efficient Personality and the Inventory of Career Factors was administered to 497 students in their final year of undergraduate school. The collected data was put under factorial analysis, analysis of differences of averages, and analysis of variance. The results confirm that an effective personality is tied to career decision making based as much on one's knowledge of oneself as an understanding of the working world.

Keywords

Personality, Career decision making, Career development, Undergraduates.

Resumen

En este trabajo se analizan las relaciones entre la personalidad y la toma de decisiones vocacionales en estudiantes universitarios. La hipótesis de partida es que la personalidad eficaz está asociada a un proceso de toma de decisiones vocacionales más maduro. Para ello se administró el *Cuestionario de Personalidad Eficiente* y el *Inventario de Factores Vocacionales* a 497 estudiantes de último y penúltimo curso de carrera. Se encontraron diferencias significativas en las dimensiones constitutivas de la decisión vocacional en grupos extremos de alta y baja personalidad eficiente. Los resultados confirman que la personalidad eficaz está vinculada a una toma de decisión vocacional más basada en el conocimiento óptimo tanto de sí mismo como del mercado laboral.

Descriptores

Personalidad, Toma de decisiones vocacionales, Desarrollo vocacional, Estudiantado universitario.

Introduction

Career decision-making, from a cognitive-behavioral perspective, as a problem-resolution process used when choosing between socio-occupational alternatives continues to receive a great deal of attention in psycho-educational research (Gati et al., 2010; Krieschok et al., 2009; Tian, 2010).

There have been a number of articles that have focused on characterizing the career decision-making process. Some of them have focused on describing the factors that influence it and others

on characterizing the different sequential phases that are involved in the decision-making process (González et al., 2002; Amir, 2008).

In this work, we focus on the study of personality, as one of the many psychogenic factors that influence career decision-making of undergraduates. In the relationship between personality and vocational behavior, Walsh (2004) states that the influence of the constructs of self-efficacy and subjective well-being, which are traits of an efficient personality, should be studied in greater depth in the development of vocational satisfaction.

This psychological construct of an “efficient personality” is understood as the combination of personal characteristics that people use to successfully face their surroundings and has been researched for some time. Consequently, a person with a highly efficient personality would be one who shows and uses high levels of assertiveness, self-esteem, work capacity, self-confidence, emotional stability, capacity to learn from an experience, comprehensive conscience, higher conceptual ability, ability to solve problems, imagination, intuition, vision about the future, persuasion, versatility, realistic view of their surroundings, liveliness, extroversion, flexibility, independence, initiative, motivation by achievement, optimism, perseverance, tolerance of uncertainty, risk-taking and personal values (Aciego, Domínguez & Hernández, 2005; Martín del Buey et al., 2004, 2008; Mehran, 2010; Staudinger & Bowen, 2010).

As for the internal structure of this empirical-theoretical construct known as the efficient personality, Martín del Buey et al., (2004) state that it is made up of four spheres or dimensions of self: strengths (self-concept and self-esteem); demands (motivation, attribution and expectations); challenges (facing problems and decision-making) and relationships (communications, empathy and assertiveness).

In Spain, we have recently had the benefit of an efficient personality questionnaire specifically directed at undergraduates (Rocabert, Gómez & Descals, 2006). This questionnaire is made up of 32 items, structured in two factors: “non-adaptive personality characteristics” and “efficient personality”. Both show an adequate level of reliability with internal consistency values of over 0.80. The internal structure of the second factor includes the components of initiative and optimism, persistence, tolerance of frustration, innovation and adaptability, self-efficacy expectations, absence of fear of failure, self-control and stress management.

For other ages and educational levels, such as vocational training, we also have instruments of proven psychometric reliability to measure efficient personality (Dapelo and Martín del Buey, 2007; Marcone et al., 2006; Martín del Buey et al., 2008).

Similarly, Martín del Buey & Fernández (2003) have designed, applied and evaluated a program for the development of efficient personality, still at an experimental stage, directed at primary and secondary education, vocational training and university education. It demonstrates that the four components of an efficient personality (strengths, demands, challenges and relationships) can be taught satisfactorily.

The influence of an efficient personality in the academic, vocational and social development of people has been clearly shown in various publications (Bandura, 1997; Carbonero & Merino, 2004; Martín del Buey et al., 2004). Specifically, we have studied the relationship between this construct and university drop-out rates (Bethencourt et al., 2008), where we verified that the psychological characteristics of students are the most influential when it comes to dropping out of their university studies. In particular, among the psychological characteristics, the lack of persistence is the one that most stands out in its incidence in dropping out of university.

However, there are no specific studies known that relate efficient personality with career decision-making: this has motivated us to carry out the present study. Thus, our aim is to demonstrate that in final-year undergraduates, an efficient personality is associated with more mature career decision-making. Theoretically, a “more mature career decision-making” means one that is based on personal self-knowledge, on the ability to take advantage of opportunities that arise in the social and academic setting, and less based on specific reasons of the academic-contextual kind (López & Rivas, 2003).

Method

Objectives

The objectives of this research are to demonstrate, on the one hand, that the efficient personality of university students is associated with more mature career decision-making and, on the other, investigate the possible existence of differences in the efficient personality among the five professional groups of undergraduates (cultural, bio-sanitary, experimental, education-welfare and socio-economic). This second aim is based on previous scientific results (González,

Álvarez, Cabrera & Bethencourt, 2007; Martín & González, 2010) that have systematically found better academic performance and lower dropout rates among students of health sciences.

Therefore our starting hypotheses were:

- 1) Undergraduates with highly efficient personalities make career decisions that are based more on their knowledge of themselves.
- 2) Undergraduates with highly efficient personalities make career decisions that are based more on their knowledge of labor market.
- 3) Undergraduates with highly efficient personalities make career decisions that take into account external resources of support, like, the family, influential people and advisors.
- 4) Undergraduates in the bio-sanitary field demonstrate more efficient personalities than students in other vocational groups.

Population and sample

The target population for this study (N=5.007) was the total number of students in the final and penultimate year of their degrees at the University of La Laguna, who were registered for a total of 58 different qualifications in the 2004-05 academic year. First of all, we determined the size of the sample. To do this, we carried out a polietapic study beginning with the selection of half of the 58 qualifications that students were studying. These were selected at random giving a

total of 28 qualifications, which represented 48.27% of the overall offer.

To select the students from within the group (natural group of a class) we used quota sampling: questionnaires were given to all the students present in the classroom on the data-collection day. In this way, we complied with the condition that the students were in their last or second from last year of their degree. The number of students that completed the questionnaires was greater (n=497) than the recommended sample size (n=370), but we decided to include all the participants since we considered that it would not alter the results, and it would only make the sample and any findings more representative. When making these decisions on sample size, we took into account Cardona (2002, p.121) who states that from a population size of 5,000, a sample size of 400 is adequate.

The characteristics of the sample were the following: 153 men (30.4%) and 344 women (69.6%), with a mean age of 23.56 years old (SD=3.36), of whom 278 (56%) were studying degrees and 219 (44%) diplomas. In the end, 382 (77.1%) were in the last year of their studies, and the rest, 115 (22.9%), in the penultimate year and all belonging to the five professional groups: cultural, bio-sanitary, experimental, education-welfare and socio-economic. Table 1 shows the distribution of the sample according to these criteria.

Table 1. Distribution of students by degree studied and professional group

DEGREE	FREC	%	DEGREE	FREC	%
Geography	18	3.6	Physical Education Teacher	10	2
History	11	2.2	Infant teacher	10	2
Fine Arts	24	4.8	Music Teacher	5	1
Spanish language	15	3	Primary school teacher	7	1.4
Philosophy	11	2.2	Foreign language teacher	3	0.6
Journalism	10	2	Psychologist	20	4
TOTAL CULTURAL	89	18	Pedagogue	55	11.1
Nursing	16	3.2	Psycho-pedagogue	14	2.8
Speech therapy	29	5.8	TOTAL EDUCATION-WELFARE	124	25
Physiotherapy	33	6.6	Law	41	8.2
Biology	12	2.4	Sociologist	24	4.8
TOTAL BIO-SANITARY	90	18	Economist	1	0.2
Mathematics	5	1	Business Administration	49	9.9
Chemistry	7	1.4	Tourism	16	3.2
Technical engineering in computer science of management	7	1.4	TOTAL SOCIO-ECONOMIC	131	26
Technical engineering in system computer science	3	0.6			
Technical Architecture	41	8.2	TOTAL	497	100
TOTAL EXPERIMENTAL	63	13			

Instruments

In this study, the following instruments were used:

1) The Efficient Personality Questionnaire of Rocabert, Gómez & Descals (2006) is composed of 32 items with four possible values as answers, and in which students have to answer a list of questions on behavior and ways of thinking and must mark option A, B, C, or D which best reflects their case. Specifically, the four options were: “it is exactly the same in my case”; it is quite similar to my case”; “it is different in my case” and “it is the opposite in my case”. The psychometric goodness of fit of this instrument has already been presented in the introduction of this article. In our sample, the reliability obtained according to Cronbach’s Alpha was 0.83. This instrument was subjected to a new factorial analysis with the data from the sample and the 32 original items were reduced to 27, distributed among 4 factors: “efficient personality”; “self-control and effort”; “empathy and self-esteem” and “assertiveness”.

2) The Inventory of Vocational Factors (IVF), used in the research project coordinated by Professor Rivas (2005), is composed of 22 items with four possible answers. Students had to evaluate a list of statements according to what they believed had influenced them in the choice of their degree they were currently studying, choosing from options A, B, C, or D whichever best reflected their case. Specifically, the options referred to “a lot of influence”, “quite lot”, “little” and “no influence”. The reliability obtained in our sample for the IVF gave a Cronbach’s Alpha of 0.79.

As with the previous instrument, this one also underwent factorial analysis, whose results will be shown later. In our study, out of the 22 original items 21 remained distributed in 7 factors: “Self-knowledge and self-confidence”; “Family atmosphere”, “Difficulty of studies”, “External support”, “Professional opportunities”, “Chance” and “Labor market knowledge and training opportunism”.

The instruments were collectively applied to the natural class groups by five Psychopedagogy students trained to do so. The dates of

the data collection were between the months of March and May during the academic year. The student being interviewed had to respond to only one of the four options for each item of the two instruments used. The data obtained were subjected to a statistical process using the SPSS program, version 17.0 for Windows.

Procedure

The procedure that was followed to prepare and reduce the original data and subsequently carry out the relevant statistical analyses was the following:

1. Factorialization of the applied instruments, with the aim of repeating the factorial structure of these in our sample and adapting the identified constructs to the aims of our study.

a) Factorial analysis of Personality

The 32 items of the personality instrument were subjected to a Principal Component Factorial Analysis with Varimax Rotation. Four factors are generated that explain 35.21% of the variance. The distribution is shown in table 2. We decided to adopt this wider factorial structure as opposed to the bi-factorial structure of the authors, owing to the range of the constructs, which are more appropriate for our aims. The bi-factorial structure of the authors’ version (Rocabert, Gómez & Descals, 2006) is very basic and forced, thus reducing the diversity of aspects and the components of the efficient personality.

Factor 1, which we have called the “Efficient Personality” is made up of the items that reflect initiative and optimism, persistence, tolerance of frustration, adaptability, self-efficacy and finally absence of fear of failure in undergraduates. This is the factor that shows the highest percentage for the explanation of variance (18.36%) and which groups together the greatest number of items. This gives it a rich and diverse, psychologically, significant character.

Factor 2, “Self-control and effort” groups five items that indicate personality traits focused on the control of oneself in situations of social interaction and the performance of tasks.

Factor 3, “Empathy and self-esteem” includes just two items that indicate the capacity of undergraduates to be empathetic and attribute

external blame to failures without damaging their positive self-esteem.

Finally, factor 4 “Assertiveness” also includes two items that denote the capacity to establish positive interpersonal relationships,

characterized by the avoidance of unnecessary conflicts, by the confident expression of feelings and the respectful defense of desires and needs.

Table 2. Factorial distribution of personality

FACTOR	ITEMS	Saturation
Factor 1 (18.36%) Efficient Personality	Positive Items	
	<ul style="list-style-type: none"> - I feel confident that I can get the job that I think I should do. .62 - When problems get worse, I find new strengths. .60 - I can achieve the professional objective that I have set myself. .57 - When I take decisions, I tend to trust in my own ideas and ways of doing things. .51 - When I have to face something or get through an unpleasant situation, I prefer to act instead of going round in circles and complaining about the situation .51 - When I set out to do something, I keep trying even though I don't achieve it at first. .47 - When I face a difficult challenge, I tend to focus on the positive aspects of the situation and avoid thinking of possible failure. .47 - When I have to express or defend what I think and my opinion clashes with that of others I hesitate and choose to say nothing. .41 	
Factor 2 (7.82%) Self-control and effort	Negative items	
	- When someone criticizes me strongly, I think I'm not worth anything and everything I do is wrong. -.65	
	- I reject difficult challenges to avoid the disappointment of not achieving them. -.60	
	- I feel afraid, anxious and a deep unease when I have to face change. -.60	
	- I think I'm useless. -.55	
	- The thought of finishing my studies makes me anxious and afraid that I won't be able to fit into a job. -.54	
	- I feel bad when I think about having to look for a job. -.53	
	- I'm afraid I won't be able to achieve the goals I have set myself. -.53	
	- If I don't get the job I want, I'll be a failure. -.50	
	- I feel bad because I change my plans too much. -.46	
- It doesn't seem worth making an effort as working in something I like is going to be very difficult. -.42		
Factor 3 (4.95%) Empathy and self-esteem	- When I have to relate to someone, I try to capture their gestures, tone of voice, etc., to anticipate and understand the situation better. .53	
	- When I speak with other people I try to get a good idea of how they will react. .52	
	- When I have to do something important, I usually make an effort and keep doing the best I can. .45	
	- When I face a task, I know what my resources, my abilities and my limitations are. .43	
	- If setbacks arise that prevent me from achieving my aims within the time predicted, I analyze if it is due to events out of my control and I try to control them to achieve what I have set myself to do. .41	
Factor 4 (4.08%) Assertiveness	- When a friend tells me a problem, it's difficult for me to put myself in their place. -.53	
	- If I take an exam and get a bad mark; I don't doubt my general competence. .45	
	- When someone “plays a dirty trick” on me, I prefer to keep quiet and take it into account in future situations. .52	
	- When someone treats me badly I tell them what I think in a direct way, without being pushy and giving them the chance to explain themselves. .48	
	TOTAL EXPLAINED VARIANCE	35.21%

b) Factorial analysis of career decision-making

The 22 items of the career decision-making instrument were subjected to a factorial analysis with varimax rotation. The resulting distribution gave 7 factors that explained 63.37% of the variance (see table 3). As in the personality questionnaire, we decided to adopt our factorial structure because the added factor represents highly relevant sub-dimensions in the career-making decision structure.

Factor 1, which we have called “Self-knowledge and self-confidence”, is made up of five items which reflect career decision-making in undergraduates, based both on a good knowledge of oneself and confidence in one’s own abilities to achieve the goals set.

Factor 2 “Family environment” groups four items together that indicate the influence of parents and family circumstances in career decision-making.

Factor 3 “Difficulty of studies” includes three items that take into consideration the difficulty, length and geographical proximity of the university studies in the career choice.

Factor 4 “External support” includes four items that show the importance of the teaching staff, vocational guidance, the other persons as professional models and academic-educational background of students themselves in the decision-making process.

Factor 5 “Professional opportunities” only include one very distinctive item, which reflects the great importance to undergraduates of the professional and job opportunities for different degrees, when taking a decision on what degree to study.

Factor 6 “Chance” brings together two items, one with a negative sign, indicating the possibility of chance, coincidence or luck as reasons for career choice and the omission or lack of consideration of interests or career preferences.

Finally, factor 7 “Knowledge of the labor market and training opportunities” also include two items that indicate the importance of knowing the labor market and knowing how to take advantage of training opportunities that arise.

Table 3. Factorial distribution of career decision-making

FACTOR	ITEMS	Saturation
Factor 1 (13.30%)	- Knowledge about myself, my abilities and chances of success.	.82
Self-knowledge and self-confidence	- My confidence in being able to complete my studies successfully.	.81
	- My perseverance and my capacity for work and sacrifice.	.69
	- Being aware of advantageous possibilities that cross my path.	.62
	- I use my time and my schedule (work and leisure) in an appropriate way.	.44
Factor 2 (12.13%)	- The favorable influence of my mother (wishes, tastes, successes, advice, profession,...).	.84
Family atmosphere	- The favorable influence of my father (wishes, tastes, successes, advice, profession,...).	.80
	- The favorable atmosphere of my home towards my studies.	.80
	- The possibilities and economic resources of my family (many/few).	.59
Factor 3 (9.64%)	- Length of studies.	.84
Difficulty of studies	- Difficulty of studies.	.82
	- The possibility to study close to my residence without having to travel.	.58
Factor 4 (8.89%)	- The support, stimulus and help of someone/ a teacher/ in particular.	.84
External support	- Career advice received or looked for to choose my studies or specialization.	.63
	- Having known someone important for me in the career or profession I have chosen.	.60
	- My previous schooling, the subjects that I was good at, etc.	.59
Factor 5 (6.71%)	- The professional opportunities of the area I have chosen to study.	.79
Factor 6 (6.67%)	- Luck or chance.	.74
Chance	- My preferences and likes for the subjects of my degree.	-.51
Factor 7 (6.03%)	- The knowledge I already had about the world of the career I am heading towards.	.77
Knowledge of labor market and training opportunities	- I take advantage of training opportunities that have arisen (courses, conferences, etc.).	.49
TOTAL EXPLAINED VARIANCE		63.37%

2. The items were added together and final score for each person in each of the factors of the two instruments was obtained. Using these scores, we obtained the mean and standard deviation for the sample in each factor. This distribution allowed us to identify groups with high and low scores.

3. The sample of students was divided into three groups. a) students with high scores in factors of efficient personality; these were the ones who obtained higher than mean scores plus one standard deviation; b) students with mean scores; c) students with low scores, that is to say, lower than the mean minus one standard deviation.

4. With the aim of finding out if an efficient personality significantly affects career decision-making; comparisons between the means of the two groups at either extreme were made (high/low efficient personality). As dependent variables, the global scores in each factor obtained were used with the decision-making instrument. Subsequently, with the aim of checking if there were differences in the personality factors in students belonging to each of the different professional groups, according to the degree being studied, we carried out an ANOVA-ONEWAY analysis among the five groups.

Results

The results shown in this section are in the following order, firstly, we present the differences in the means in career decision-

making among the groups of positive and negative personality characteristics, and secondly, we show the differences in personality among the five professional groups.

A) Differences in career decision-making according to personality characteristics.

In this section, we show the results of the analysis of the differences in the means for independent samples, among the university groups with respect to positive and negative personality characteristics, in the range of career decision-making factors.

1. Differences in career decision-making among students with high and low efficient personality.

Table 4 shows that the students with efficient personality can be distinguished by career decision-making based on self-knowledge and self-confidence, on knowledge of the labor market and on taking advantage of training opportunities that arise. Similarly, students with efficient personality rely less on chance, luck and coincidence when it comes to making career decisions, they also tend to be less influenced by their families and external support when making mature vocational choices. Furthermore, undergraduates with both high and low efficient personalities are similar in the way they give equal importance to career opportunities and difficulty of the university studies when making their decisions.

Table 4. Differences in career decision means according to the efficient personality

Career Factors	High Efficient Personality	Low Efficient Personality	t-test Sig.	t.	gl.
F1. Self-knowledge	M=14.52; SD=3.06	M=11.86; SD=3.09	.000	-5.944	192
F2. Family environment	M=8.26; SD=3.04	M=9.10; SD=3.16	.062	1.876	194
F3. Difficulty	M=4.90; SD=1.83	M=5.08; SD=1.94	.506	0.667	195
F4. External support	M=7.18; SD=2.72	M=7.96; SD=2.87	.054	1.935	195
F5. Professional opportunities	M=2.42; SD=1.10	M=2.57; SD=0.91	.307	1.030	196
F6. Chance	M=3.32; SD=1.31	M=4.36; SD=1.48	.000	5.151	194
F7. Knowledge of labor market and training opportunities	M=4.90; SD=1.55	M=4.25; SD=1.38	.003	-3.027	196

2. Differences in career decision-making among undergraduates with and without self-control and effort.

In table 5, students with the capacity for self-control and effort can be observed, who

know how to direct their effort towards what they want to achieve, they are characterized by career decision-making based on both the knowledge of themselves, as well as that of the labor market, and thus their career decisions are little influenced by chance or coincidence.

Table 5. Differences in means of career decision-making according to self-control and effort

Career Factors	High self-control and high effort	Low self-control and low effort	t-test Sig.	t.	gl.
F1. Self-knowledge	M= 15.01; SD=2.80	M=12.17; SD=3.06	.000	-4.882	104
F2. Family atmosphere	M=9.23; SD=3.46	M=8.39; SD=2.93	.194	-1.306	107
F3. Difficulty	M=5.33; SD=2.16	M=4.75; SD=1.62	.140	-1.488	107
F4. External support	M=8.47; SD=3.15	M=7.52; SD=2.71	.110	-1.612	108
F5. Professional opportunities	M=2.36; SD=0.99	M=2.61; SD=1.01	.202	1.283	108
F6. Chance	M=3.25; SD=1.44	M=3.90; SD=1.65	.035	2.138	106
F7. Knowledge of labor market and training opportunities	M=5.14; SD=1.64	M=3.97; SD=1.07	.000	-4.111	108

3. Differences in career decision-making among undergraduates with and without empathy and self-esteem.

In table 6, it can be seen that undergraduates characterized by high empathy and self-esteem make their career decisions bearing in mind various external and socio-genic aspects, such as the difficulty of the studies, external support received and a favorable family

atmosphere. This result contrasts with the one obtained for the factor of the efficient personality in that subjects with high empathy and self-esteem make career decisions that depend more on the social and academic setting and are less dependent on aspects that are internal, psychogenic or centered on themselves.

Table 6. Differences in means of career decision-making according to empathy and self-esteem

Career Factors	Empathy and high self-esteem	Empathy and low self-esteem	t-test Sig.	t.	gl.
F1. Self-knowledge	M= 13.67; SD=3.15	M=12.98; SD=3.06	.139	-1,488	179
F2. Family environment	M=9.37; SD=3.08	M=8.38; SD=3.40	.042	-2,043	181
F3. Difficulty	M=5.82; SD=1.95	M=4.67; SD=1.67	.000	-4,196	179
F4. External support	M=8.23; SD=2.90	M=6.90; SD=2.43	.001	-3,365	181
F5. Professional opportunities	M=2.55; SD=1.08	M=2.40; SD=0.98	.345	-0'947	181
F6. Chance	M=3.78; SD=1.44	M=3.71; SD=1.44	.740	-0,332	178
F7. Knowledge of labor market and training opportunities	M=4.75; SD=1.46	M=4.45; SD=1.44	.174	-1,364	364

4. Differences in career decision-making among students with and without assertiveness.

Finally, with regard to the differences in decision-making according to personality characteristics, table 7 shows that, in general, students with high and low assertiveness make

career decisions in a similar fashion, taking equally into account the range of decision factors to be considered. We should, however, make one point clear with reference to the influence of the family atmosphere which is significantly less important for students with high assertiveness when choosing their degree studies.

Table 7. Differences in means of career decision-making according to assertiveness

Career Factors	High Assertiveness	Low Assertiveness	t-test Sig.	t.	gl.
F1. Self-knowledge	M= 13.88; SD=2.71	M=13.18; SD=2.64	.199	-1,291	138
F2. Family environment	M=8.10; SD=2.83	M=9.56; SD=3.52	.016	2,427	140
F3. Difficulty	M=5.02; SD=1.81	M=5.62; SD=2.31	.127	1,535	140
F4. External support	M=7.35; SD=2.54	M=8.34; SD=3.25	.122	1,803	139
F5. Professional opportunities	M=2.46; SD=1.02	M=2.43; SD=1.01	.899	-0,127	140
F6. Chance	M=3.49; SD=1.36	M=3.84; SD=1.43	.210	1,259	141
F7. Knowledge of labor market and training opportunities	M=4.56; SD=1.46	M=4.31; SD=1.71	.414	-0,819	140

B) Differences in personality among the five professional groups

On the whole, the results obtained from the analysis of the variance (ANOVA ONEWAY) (with the two groups at either extreme, high and low personality factors) indicate a lack of important differences between undergraduates from different professional groups with regard to their personality characteristics, in contrast to what we had hypothesized. Table 8 shows the means of each of the four personality factors corresponding to

the five professional groups of undergraduates that were considered. In particular, in factor 1 “efficient personality” ($F=1.163$; $p=0.327$) no statistically significant differences were obtained among the five professional groups. In factor 2 “Self-control and effort” ($F=1.328$; $p=0.258$), factor 3 “Empathy and self-esteem” ($F=2.205$; $p=0.067$), and factor 4 “Assertiveness” ($F=0.437$; $p=0.782$), the results were equally of little significance.

Table 8. Personality factor means of the five professional groups

PERSONALITY FACTORS	CULTURAL	BIO-SANITARY	EXPERIMENTAL	EDUCATION-WELFARE	SOCIO-ECONOMIC
Efficient personality	M=54.38; SD=8.23	M=56.10; SD=5.45	M=54.54; SD=7,44	M=55.87; SD=7.55	M=54.39; SD=7.01
Self-control and effort	M=14.93; SD=2.27	M=15.75; SD=2.07	M=15.05; SD=1.98	M=15.25; SD=2.00	M=15.13; SD=2.01
Empathy and self-esteem	M=4.61; SD=1.23	M=4.75; SD=1.08	M=4.57; SD=1.22	M=4.26; SD=1.25	M=4.50; SD=1.20
Assertiveness	M=5.51; SD=1.31	M=5.64; SD=1.19	M=5.46; SD=1.09	M=5.64; SD=1.41	M=5.48; SD=1.33

Discussion

This study demonstrates that the efficient personality is associated with more mature career decision-making. In particular, it is shown that undergraduates are characterized by their initiative, optimism, persistence, tolerance to frustration, adaptability to the socio-academic setting, self-efficiency and the absence of fear of failure and choose their career based more on factors that are genuinely vocational. These factors include the knowledge both of themselves and the labor market, the confidence in their own personal resources and taking advantage of training opportunities that arise, thus confirming the first and second hypothesis.

On the other hand, and contrary to what was predicted in our third hypothesis, there are hardly any differences between students with a highly efficient personality and a low one as to the influence exercised by other people and contextual circumstances when it comes to career decision-making. Both high and low efficient personalities pay the same attention to future career opportunities and the difficulty of the university studies when choosing their university degrees

The specific personality factor related to “self-control and ability to make an effort” behaves in a very similar way to the “efficient personality” factor, as students who score high in

this factor state that they base their career decisions more on the knowledge of themselves and the labor market and less on chance.

However, in the other two personality factors analyzed, we find that students with greater “empathy and self-esteem” and “assertiveness” take into account more the social, family and academic setting when it comes to career decision-making.

From the results obtained in this study, we can state that the dimensions of “strengths”, “demands” and “challenges”, components of the psychological construct of the efficient personality, as described by Martín del Buey et al. (2004), are associated with career decision-making by the more mature and independent undergraduates, whereas the “relationships” dimension of the efficient personality (empathy, assertiveness) is more linked to career decision-making that depends more on the context surrounding the subject, be it social, family or academic.

The differences between undergraduates of different degrees, with regard to personality characteristics, have not been confirmed in the present study, as only in the “efficient personality” and “empathy and self-esteem” factors is a slightly higher tendency observed in the health sciences group compared with the other four professional groups. We put forward our hypothesis with the support from other findings on university drop-out rates (Bethencourt et al., 2008; Cabrera et al., 2006), in which the health sciences group showed greater persistence, with highly significant scores in comparison with the other groups.

In the research on the relationship between personality and career decision-making, there is a great deal of evidence that has confirmed the relationship between them. There are a range of personality variables, measures and hypothetical constructs that have demonstrated its connection with career decision-making. Along these lines, Saka & Gati (2007) found that undergraduates with low self-esteem, high anxiety as a trait, general high indecision and low identity showed greater difficulties in making a consistent career decision. Furthermore, the

relationship between self-efficiency and commitment to the career decision in undergraduates has been demonstrated by Wang et al. (2006).

Career interests are one of the most influential factors in career decision-making for students of various ages, which explains the attention paid to them in psycho-educational research, particularly in the relationship between career interests and personality. Along these lines, we find the work of Sullivan and Hansen (2004), who show that personality and career interests have a clear relationship between each other. Furthermore, extroversion and openness to experiences show links to some of the career interests of Holland’s model (1992) - RIASEC/Realistic, Investigative, Artistic, Social, Enterprising, Conventional- more specifically, extroversion is associated with social and enterprising career interests, while openness to experiences is linked to artistic interests and openness to ideas is related to investigative interests.

Within this research area focused on the analysis of the relationship between personality and career interests, we also come across the study by Mount, Barrick & Scullen (2005) who use cluster analysis and multidimensional scaling. They found that the relationship between personality and career interests can be explained based on three dimensions of a higher order: (a) Interests versus personality; (b) Orientation towards achievement versus orientation towards personal growth; (c) Interact with people versus interact with things.

The relationships between personality and career interests have been investigated at the phenotype and genotype level by Harris et al. (2006), who found that in twins and siblings the genetic components explain up to 56% of the variance in career interests and 65% for personality. These authors state that personality is related to some career interests and some of these relationships observed have a common genetic basis.

We conclude, in accordance with Walsh & Eggerth (2005) that the renewed interest in investigating the relationships between

personality and career decision-making has mainly arisen from the future implications that such links have for the subject in terms of job performance, job satisfaction and subjective well being.

References

- Aciego, R., Domínguez, R. & Hernández, P. (2005). Consistencia interna y estructura factorial de un cuestionario sobre autorrealización y crecimiento personal. *Psicothema*, 17(1), 134-142.
- Amir, T., Gati, I. & Kleiman, T. (2008). Understanding and interpreting career decision-making difficulties. *Journal of Career Assessment*, 16(3), 281-309.
- Bandura, A. (1997). *Self-efficacy: the exercise of control*. New York: Freeman.
- Bethencourt, J. T., Cabrera, L., Hernández, Álvarez, P. & González, M. (2008). Variables psicológicas y educativas en el abandono universitario. *Revista de Investigación Psicoeducativa*, 6(3), 293-307. También on-line en *Revista Electrónica de Investigación Psicoeducativa* (http://www.investigacion-psicopedagogica.org/revista/articulos/16/espanol/Art_16_223.pdf).
- Cabrera, L., Bethencourt J. T., Álvarez, P. & González, M. (2006). El problema del abandono de los estudios universitarios. *RELIEVE*, 12 (2). http://www.uv.es/RELIEVE/v12n2/RELIEVEv12n2_1.htm
- Carbonero, M. A. & Merino, E. (2004). Autoeficacia y madurez vocacional. *Psicothema*, 16(2), 229-234.
- Cardona, C. (2002). *Introducción a los métodos de investigación en educación*. Madrid: EOS.
- Dapelo, B. & Martín del Buey, F. (2007). Personalidad eficaz en el contexto de la educación técnico-profesional. *Revista de Orientación Educativa*, 39, 13-29.
- Gati, I., Landman, S., Davidovitch, S., Asulin-Peretz, L. & Gadassi, R. (2010). From career decision-making styles to career decision-making profiles: A multidimensional approach. *Journal of Vocational Behavior*, 76(2), 277-291.
- González, M. C., Álvarez, P., Cabrera, L. & Bethencourt, J. T. (2002). La toma de decisiones académicas del estudiantado de la Universidad de La Laguna en la elección de créditos de libre configuración. *Contextos Educativos*, 5, 123-139.
- González, M. C., Álvarez, P., Cabrera, L. & Bethencourt, J.T. (2007). El abandono de los estudios universitarios: factores determinantes y medidas preventivas. *Revista Española de Pedagogía*, 236, 71-85.
- Holland, J. L. (1992). *Making vocational choices: A theory of vocational personalities and work environments* (2nd ed.). Odessa: FL, Psychological Assessment Resources.
- Krieschok, T. S., Black, M. D. & McKay, R. A. (2009). Career decision making: The limits of rationality and the abundance of non-conscious processes. *Journal of Vocational Behavior*, 75(3), 275-290.
- López, M. L. & Rivas, F. (2003). Toma de decisiones vocacionales. In F. Rivas: *Asesoramiento vocacional. Teoría, práctica e instrumentación* (377-410). Barcelona: Ariel.
- Marcone, R., Martín, E., Martín del Buey, F., Dapelo, B. & Fernández, A. (2006). Adaptación chilena del cuestionario personalidad eficaz para adolescentes. *Psicothema*, 18(1), 130-134.
- Martín, E. & González, M. C. (Coord.) (2010). *El rendimiento académico del alumnado de nuevo ingreso en la Universidad de La Laguna*. Servicio de Publicaciones Universidad de La Laguna. ISBN: 978-84-7756-921-3.
- Martín del Buey, F., Fernández, A., Martín, E., Dapelo, B., Marcone, R. & Granados, P. (2008). Cuestionario de personalidad eficaz para la formación profesional. *Psicothema*, 20(2), 224-228.
- Martín del Buey, F., Martín, E., Fernández, A., Dapelo, B. & Marcone, R. (2004). Evaluación de la personalidad eficaz en contextos educativos: primeros resultados. *Revista de Orientación Educativa*, 33-34, 79-101.
- Mehran, F. (2010). *Psychologie positive et personnalité*. Paris: Elsevier-Masson SAS.
- Mount, M. K., Barrick, M. R. & Scullen, S. M. (2005). Higher-order dimensions of the big five personality traits and the big six vocational interest types. *Personnel Psychology*, 58(2), 447-478.
- Rivas, F. (2005). *Conducta vocacional y asesoramiento profesional de los estudiantes*

universitarios: protocolo informático para la autoayuda preprofesional. Informe final del proyecto I+D BS02001-3150, Universidad de Valencia.

Rocabert, E., Gómez, A. & Descals, A. (2006). Elaboración de un cuestionario de personalidad eficiente para el análisis de la conducta vocacional universitaria. *Revista galego-portuguesa de psicología e educación: revista de estudios e investigación en psicología y educación*, 13, 399-412.

Saka, N. & Gati, I. (2007). Emotional and personality-related aspects of persistent career decision-making difficulties. *Journal of Vocational Behavior*, 71 (3), 340-358.

Staudinger U. M. & Bowen, C. E. (2010). Life-span perspectives on positive personality development in adulthood and old age. In M. E. Lamb, A. M. Freund, & R.M. Lerner (Eds.). *The handbook of life-span development, vol. 2: Social and emotional development*. Hoboken, NJ, US: John Wiley & Sons Inc. pp. 254-297.

Sullivan, B. A. & Hansen, J. C. (2004). Mapping association between interest and personality: toward a conceptual understanding of individual differences in vocational behaviour. *Journal of Counseling Psychology*, 51(3), 287-298.

Tian, L., Hou, Z. & Shao, J. (2010). Utility of problem-solving training on career decision-making ability of university students. *Chinese Journal of Clinical Psychology*, 18(5), 675-679.

Walsh, W. B. (2004). Vocational psychology and personality. In B. Schneider & D. B. Smith (Eds.), *Personality and Organizations* (pp. 141-161). Mahwah, NJ: LEA.


Walsh, W. B. & Eggerth, D. E. (2005). Vocational psychology and personality: The relationship of the five-factor model to job performance and job satisfaction. In W. B. Walsh & M. L. Savickas (Eds.), *Handbook of vocational psychology: Theory, research and practice* (pp. 267-295). Mahwah, NJ: LEA.


Wang, N., Jome, L. M., Haase, R. F. & Bruch, M. A. (2006). The role of personality and career decision-making self-efficacy in the career choice commitment of college students. *Journal of Career Assessment*, 14(3), 312-332

NOTAS

- [i] These students were Artemisa Barreto Espino, Piedad García Piñero, Mercedes Hernández Pedreira, Mónica Montesdeoca Bosa, Omaira Pérez García
-

ABOUT THE AUTHORS / SOBRE LOS AUTORES

José Tomás Bethencourt Benítez (jbethen@ull.es): profesor titular del área de Psicología Evolutiva y de la Educación. Es el autor de contacto para este artículo. Sus líneas de investigación están relacionadas con la psicología escolar. Su dirección postal es Facultad de Educación. Campus Central. Universidad de La Laguna. 38204-La Laguna. Tenerife.. [Buscar otros artículos de este autor en Scholar Google](#) 

Lidia Cabrera Pérez (dcabrera@ull.es): es profesora titular del área Métodos de Investigación y Diagnóstico en Educación (MIDE). Sus líneas de investigación están relacionadas con la orientación en la universidad y la evaluación e intervención socioeducativa. Su dirección postal es Departamento de Didáctica e Investigación Educativa. Facultad de Educación. Campus Central. Universidad de La Laguna. 38204-La Laguna. Tenerife. [Buscar otros artículos de esta autora en Scholar Google](#) 

ARTICLE RECORD / FICHA DEL ARTÍCULO

Reference / Referencia	Bethencourt, José-Tomás y Cabrera, Lidia (2011). Personality and career decision making in undergraduates. <i>RELIEVE</i> , v. 17, n. 1, art. 4. http://www.uv.es/RELIEVE/v17n1/RELIEVEv17n1_4eng.htm
Title / Título	Personality and career decision making in undergraduates. [<i>Personalidad y toma de decisiones vocacionales en universitarios</i>].
Authors / Autores	Bethencourt, José-Tomás y Cabrera, Lidia
Review / Revista	RELIEVE (Revista ELectrónica de Investigación y EValuación Educativa), v. 17, n. 1
ISSN	1134-4032
Publication date / Fecha de publicación	2011 (Reception Date: 2010 June 23; Approval Date: 2011 June 26. Publication Date: 2011 June 27).
Abstract / Resumen	<p><i>The relationships between personality and career decision making in undergraduates are analyzed in this work. The hypothesis is that efficient personality is associated with the more mature process of career decision making. For this hypothesis, the Questionnaire of Efficient Personality and the Inventory of Career Factors was administered to 497 students in their final year of undergraduate school. The collected data was put under factorial analysis, analysis of differences of averages, and analysis of variance. The results confirm that an effective personality is tied to career decision making based as much on one's knowledge of oneself as an understanding of the working world.</i></p> <p>En este trabajo se analizan las relaciones entre la personalidad y la toma de decisiones vocacionales en estudiantes universitarios. La hipótesis de partida es que la personalidad eficaz está asociada a un proceso de toma de decisiones vocacionales más maduro. Para ello se administró el <i>Cuestionario de Personalidad Eficaz</i> y el <i>Inventario de Factores Vocacionales</i> a 497 estudiantes de último y penúltimo curso de carrera. Se encontraron diferencias significativas en las dimensiones constitutivas de la decisión vocacional en grupos extremos de alta y baja personalidad eficaz. Los resultados confirman que la personalidad eficaz está vinculada a una toma de decisión vocacional más basada en el conocimiento óptimo tanto de sí mismo como del mercado laboral.</p>
Keywords / Descriptores	<i>Personality, Career decision making, Career development, Undergraduates.</i> Personalidad, Toma de decisiones vocacionales, Desarrollo vocacional, Estudiantado universitario.
Institution / Institución	Facultad de Educación. Universidad de La Laguna (España).
Publication site / Dirección	http://www.uv.es/RELIEVE
Language / Idioma	English & Español version (Title, abstract and keywords in English & Spanish)

RELIEVE

Revista ELectrónica de Investigación y EValuación Educativa
E-Journal of Educational Research, Assessment and Evaluation

[ISSN: 1134-4032]

© Copyright, RELIEVE. Reproduction and distribution of this articles it is authorized if the content is no modified and their origin is indicated (RELIEVE Journal, volume, number and electronic address of the document).

© Copyright, RELIEVE. Se autoriza la reproducción y distribución de este artículo siempre que no se modifique el contenido y se indique su origen (RELIEVE, volumen, número y dirección electrónica del documento).