



# Subjective well-being based on creativity and the perception of happiness

## El bienestar subjetivo a partir de la creatividad y la percepción de felicidad

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### Abstract

*In this paper the relationship that exists between the concepts of «happiness» and «creativity» with «subjective wellbeing» is analyzed. The importance of these elements is reviewed to confirm the positive relationship that is supposed to exist between them and in this way to propose organizational development strategies. The goals to achieve are to find the correlation between the variables in the local environment. To this end, a questionnaire is applied, and 249 responses are obtained, this instrument includes questions for each of the variables under study and have been obtained from a sample of a population of university students and graduates former students of management degrees in the city of Tijuana, BC, Mexico. Results confirm that the variables «happiness» and «subjective wellbeing» and the variables «creativity» and «subjective wellbeing» have a high mutual relationship based on the results in Pearson's correlation analysis, in the analysis of variance and in the regression equation model. It reaches to the conclusion of the importance of applied strategies for the development of the human element in organizations based on the implementation of actions that promote creativity and increase perception of happiness to influence the development of subjective well-being in individuals and organizations from collaboration networks and organizational tools.*

### Resumen

*El presente trabajo analiza la relación que existe entre los constructos de «felicidad» y «creatividad» con el «bienestar subjetivo». La importancia de estos elementos se revisa para confirmar la relación positiva que se asume, para de esta manera proponer estrategias de desarrollo organizacional. Los objetivos son encontrar la correlación entre las variables en el entorno local. Para ello se lleva a cabo la aplicación de un cuestionario que incluye ítems para cada una de las variables que conforman el estudio y se obtuvieron 249 respuestas, que son parte de la muestra de una población correspondiente a estudiantes universitarios y a egresados de carreras administrativas en la ciudad de Tijuana, B.C., México. Los resultados confirman que las variables «felicidad» y «bienestar subjetivo» y las variables «creatividad» y «bienestar subjetivo» presentan una alta correlación con resultados en análisis de correlación de Pearson, en el análisis de varianza y en el modelo de ecuación de regresión las variables. Se concluye la importancia de elaborar estrategias para el desarrollo del elemento humano en las organizaciones a partir de la implantación de acciones que impulsen la creatividad y la percepción de felicidad para que éstas influyan en el incremento del bienestar subjetivo en los individuos y en las organizaciones a partir de redes de colaboración y herramientas organizacionales.*

### Keywords | palabras clave

*Subjective wellbeing, quality of life, creativity, perception, happiness, society, organizations, people.*

Bienestar subjetivo, calidad de vida, creatividad, percepción, felicidad, sociedad, organizaciones, individuos.

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## 1. Introduction

### 1.1. Background

Creativity and happiness are topics that are related when studying organizational cases, where the value of the company depends on human capital. This perspective addresses the need to counteract the objective dynamics based on the achievement of business and organizational goals, without taking into account the perception of employees in their sense of subjective well-being, personal achievements and sense of belonging to the organization (Goucha *et al.*, 2004).

Addressing the topic of creativity should start with the need to explain a reality about its development. Creativity can be considered to be an inherent part of the person from the beginning of his growth, so that it remains in the person as he grows, and then it is affected from the introduction of educational, social and cultural elements in the individual who regulates his ideas with those of the social group in which he belongs to and in which he must meet requirements for his insertion into the surrounding society in social, labor and economic aspects. This causes his creativity to be limited or focused primarily on those issues considered necessary in the society for his integration into the production systems that underpin the economic development. Explaining creativity has been part of researchers since the end of the last century. The association of “creativity” and “happiness” can be considered a natural duo, since one is identified as part of the other. In this sense, the construct of “subjective welfare” is addressed as a consequence of the implementation or development of the two variables of “happiness” and “creativity” (Chacón, 2005).

It has been mentioned in different studies how the presence of a perception depends on the conjugation of social and structural factors and in the expectation of understanding the phenomenon studied. Multiple factors can affect the development of subjective well-being. This is related to the contexts that determine whether the person is happy in their area of development or to the activities they perform creatively. In addition, the influence presented on optimism and self-perception has been studied as a consistent part of the development of subjective well-being, assuming that by raising both variables in the individual, then he is able to develop an inner state of greater improvement and positive interpersonal relationships (Moreno & Marrero, 2015).

Literature on “subjective well-being” includes happiness, satisfaction with life and positive affection, and it is found in different areas such as measurement, causal factors and theory (Huppert, Baylis & Keverne, 2012). Causal influences are known as demographic factors and influence health, social contact, activity and personality.

### 1.2. The problem

Creativity in the organization is part of a wide range of research in the medical and social sciences, as well as in other related scientific fields. Over the past four decades, psychologists, anthropologists and sociologists have focused more on this construct. It is possible to say that at this time more is known about creativity than at any time in history. This phenomenon is not only part of classical arts such as painting, music,

sculpture or literature, but it is also linked to activities such as science, theatre, business innovation and creativity in solving problems of an everyday nature.

In addition to examining psychological studies on creativity and exploring research on happiness and subjective well-being, it is important to review anthropologists' research on creativity in various cultures, both Western and non-Western; sociological research on situations, contexts and networks of creative activities, as well as cognitive neuroscientific studies of the brain. All this to investigate the questions that understand the perceived reality of the individual and to consider the social and cultural contexts of creativity, including the role of social collaboration and teamwork required for the creative process (Sawyer, 2012).

Happiness is a factor that has been identified as a relevant element in the study of subjective well-being and education among university students from a perspective oriented to the perception of professional ability of students and university graduates (Ahumada-Tello, 2017). However, there are authors who mention that happiness has specific characteristics that may not necessarily be part of subjective well-being (*v. gr.* Raibley, 2012).

### **1.3. Justification**

"Creativity" and "happiness" have been studied in recent years. Both factors are a means of analyzing and evaluating the strategies and tools used to determine the perception of "subjective well-being" in individuals and social groups (Moccia, 2016). They are understood as an organizational and individual development tool that provides personal and professional benefits in the different environments in which the individual develops.

The acquisition of new skills, experiences, knowledge, and commitments, as well as taking on new challenges, goals, objectives and status, is what drives individuals to develop more and more to be better and to project progressively changes in the environment. This can be reflected perceptively in the performance and attitude that these changes arise (Ahumada-Tello, Ravina-Ripoll & Hernández de Velasco, 2018). These activities can be considered as part of a strategy for the development of subjective well-being.

From various perspectives, the perception of living a subjective well-being can focus on the context of the success that has been a goal to achieve by individuals. It is important to note that success is a scale of processes and levels proposed for a goal. If the individual uses tools that support him to develop knowledge and expand his network of people he knows, it is possible to assume that he will have a better performance and a greater degree of self-satisfaction, which can be equated to happiness and subjective well-being (Huppert *et al.*, 2012).

This study will determine the influence that happiness and creativity offer to the perception of incremental subjective well-being to improve the conditions that arise in the means that the individual develops personally and professionally. From this improvement in their perception and in their individual and social reality, it is expected that professional and personal results will be improved, so it is feasible that they favor and give an effective result in their personal, family, social situations, among others, covering with it the expectations of the environment (Helliwell & Putnam, 2004). This

can cause new studies in different contexts and new variables that explore subjective well-being by enriching knowledge through different research approaches.

#### **1.4. Theoretical references**

It is important to consider that the individual develops the sense of happiness from internal and external constructs. The science of happiness has been studied as a proven method for achieving subjective well-being, which can arise through what each individual does and how he does it in the different phases of his development, but influenced by the effect on others, becoming a stimulus for a good performance in personal or academic activities (Lyubomirsky, 2008).

Within these aspects, personal happiness can be related not only to the objective, but also to the environment in which individuals are developed, adding situations or subjective factors which can be personal, social, academic, work and professional, reason for which good behavior attitudes are reflected in the direct treatment among the individuals of the social group and may have the prospect of being positive or negative depending on the observer who analyses this environment.

Happiness is an important reality in the lives of individuals. There is even a position that the goal of life is to reach a point of happiness, which in a philosophical way gives meaning to existence. The lives of individuals would not make sense without the meaning of having a happy life. Man by nature seeks those challenges that complement him and give him goals and possible achievements to his life, even if these are subjective and subjected to the individual perception (Angner, 2010). The pursuit of happiness is an important goal for many individuals and organizations. However, there is little scientific research on the approach to obtaining and increasing happiness, making it also sustainable and with permanent economic benefits (Easterlin, 2004), i.e., that perception is maintained from internal and external factors (Baumeister, Vohs, Aaker & Garbinsky, 2013).

Despite pessimistic determinism and the hedonic adaptation of happiness, there are emerging sources of optimism regarding permanent and productive happiness (Oswald, Proto, & Sgroi, 2015). Some authors indicate the existence of factors that allow this type of happiness to be sustained: a) a genetic determination for happiness; b) factors external to the individual and; c) activities and practices relevant to the individual happiness. This last element or factor is the one that the individual can control and boost, reason for which sustainability efforts should focus on the latter factor (Lyubomirsky, Sheldon & Schkade, 2005).

Creativity is a basic characteristic of the human being. It reflects the experiences and knowledge of the individual (Ferrando, Prieto, Ferrándiz & Sánchez, 2005). There is an increase of studies in relation to creativity due to its significant role in multiple fields of science, art, education and organizations (Pascale, 2005). Creativity has emerged models and theories that seek to capture its complexity and multifaceted nature; among them, Mihaly Csikszentmihalyi's system model, which appears as a major reference in the academia and proposes an important run-up to traditional postures in psychology, which focuses on the study of creativity from the person's perspective to integrate aspects of culture, society and the individual into a holistic model (Pascale, 2005). An example of the application of social knowledge for the development of creativity are studies on open innovation (Ooms, Bell & Kok, 2015).

This one is related to intelligence. The relationship between creativity and intelligence is a frequent topic of research and debate in the Social Sciences. In the case of Sternberg's work, definitions of creativity and intelligence are examined as well as how they can be related. The model developed from his research consists of five possible relationships: a) creativity as a subset of intelligence; b) intelligence as a subset of creativity; c) creativity and intelligence as overlapping sets; d) creativity and intelligence as coincidental sets; and e) creativity and intelligence as disjointed sets. In this sense, Sternberg addresses the prospect that creativity and intelligence must consider a mutual relationship that shows coexistence and dependence, demonstrating that one cannot exist without the other (Plucker, Esping, Kaufman & Avitia, 2015).

In the modern world, there are hardly any cases of people who by themselves carry out the creative process. This suggests that creativity is now underpinned by the power of teamwork (Zhou, Shin, Brass, Choi & Zhang, 2009). The existence of a privileged individual with an outstanding creativity is no longer the only paradigm, but has been replaced by the efficiency of multidisciplinary work, which is the environment present in the highly collaborative environments in which many employers and workers operate.

Creativity can be analyzed socially to fully understand its structural and relational aspects (Cornejo & Tapia, 2011). First, it is important for all organizations to understand creativity from the perspective of a social network and it is especially relevant for the study of business nature (Moccia, 2016). Creativity and its research from a social media perspective classifies relational and structural approaches, where the first approach emphasizes the strength of the links and the quality of relationships and the second emphasizes the structure of the relationships that forms it (Shalley, Hitt, Zhou, Perry-Smith & Mannucci, 2015).

The interest in analyzing creativity from the social group approach has to do with the influence attributed to individual creativity and innovation, although this social vision does not guarantee success (Freire-Gibb & Nielsen, 2014). In this sense, creativity can be conceptualized as a process of generating innovation by following the following steps: a) generation of the idea; b) elaboration of the idea; c) defense of the idea; and d) implementation of the idea (Kijkuit & Van Den Ende, 2007). In this sense, these have been defined as characteristics required for an individual who develops this process. The following are applied to each phase mentioned above: a) cognitive flexibility; b) support; c) influence; and d) shared vision. In addition, individual creators are required to have relational and structural elements to help them evolve at each stage (Perry-Smith & Mannucci, 2017), business efforts to develop and introduce more automated solutions into creative processes are also important (O'Brien & Murray, 2015).

In the development of social analysis of creativity, studies that analyze the use of social networks and their relationship to employee creativity have been carried by adopting a knowledge management approach to consider the influence of social media and interactions in the creativity of individuals (Sigala & Chalkiti, 2015). The most intensive use in time and in the activities of users who frequently use social networks with special impact in those activities that allow to maintain contact and share content with their peers (García, López-de-Ayala & Catalina, 2013), also provide an opportunity

to document, describe and analyze creativity (Peppler & Solomou, 2011), friendship and collaboration opportunities are built from teamwork (Gandasegui, 2011), in the development of new industrial products (Kratzer, Leenders & Van Engelen, 2010), illustrating with joint actions the future of the society (Fundación iS+D, 2011).

There are multidimensional proposals to analyze subjective well-being in individuals and social groups (Ryff, 2005). The five-dimension proposal of social welfare, social integration, social contribution, social coherence, social updating and social acceptance is theoretically based on the existing literature (Keyes, 2006).

## 2. Materials and Method

The study was conducted through the quantitative approach by means of questionnaires to determine whether there is a relationship between the variables, as well as the collection of data to test the hypothesis raised, all this reflected in numerical and statistical data to establish existing relationships. As a non-experimental, correlational outreach, the aim is to evaluate the relationship between the dependent and independent variable and its behavior.

Figure 1. Diagram of study variables

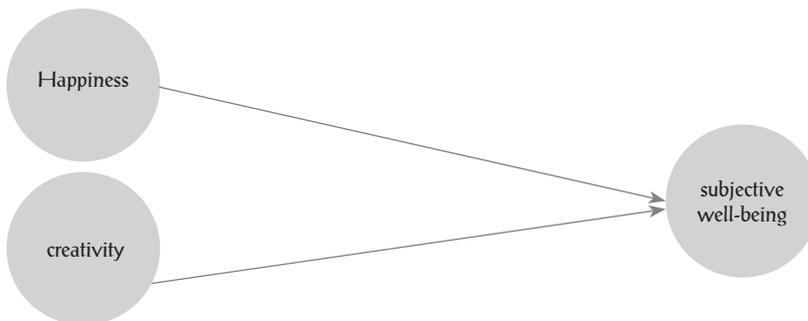


Figure 1 illustrates the study variables that make up this research. Research questions, hypotheses and objectives are derived from this assessment. Below are these points that will be analyzed in the items to be followed.

### 2.1. Research questions

1. Is happiness a factor influencing the perception of subjective well-being?
2. Is creativity a factor influencing the perception of subjective well-being?

### 2.2. General hypothesis

1. H. Happiness and creativity are factors that positively influence the perception of subjective well-being.
2. H0. Happiness and creativity are not factors that positively influence the perception of subjective well-being.

### 2.3. Research hypothesis

1. H1 Happiness positively influences the perception of subjective well-being.
2. H10 Happiness does NOT positively influence the perception of subjective well-being.
3. H2 Creativity positively influences the perception of subjective well-being.
4. H20 Creativity does NOT positively influence the perception of subjective well-being.

### 2.4. General objective

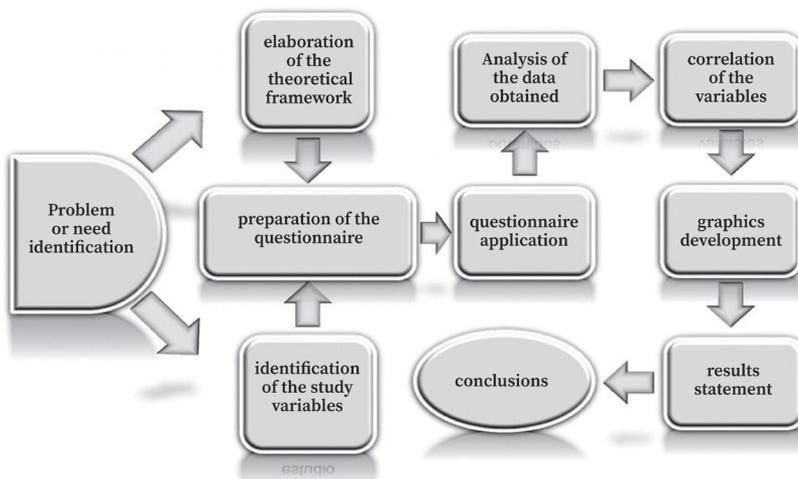
To determine whether happiness and creativity are factors that positively influence the perception of subjective well-being.

### 2.5. Specific objectives

1. To determine whether happiness positively influences the perception of subjective well-being.
2. To determine whether creativity positively influences the perception of subjective well-being.

It is an applied, documentary, correlational, non-experimental and transectional research that seeks to understand the phenomenon of research, where an analysis was carried out based on three variables: creativity, happiness and subjective well-being. It has been carried out with students and graduates of the Faculty of Accounting and Administration in Tijuana, B.C., Mexico to know the perception on the study variables and from which the process indicated in Figure 2 is followed.

Figure 2. Methodological diagram



Source: Own elaboration based on (Hernández-Sampieri *et al.*, 2014).

## 2.6. Determination of the sample

The total number of questionnaires was calculated according to the formula corresponding to this type of sampling on the population of the Faculty of Accounting and Administration at Universidad Autónoma de Baja California, which amounts to 3900 students plus a detected population of 1200 graduates, for a total of 5100 individuals for this calculation.

Thus, proportionally and with initial variability levels of  $p = q = 0.5$ , 95% confidence and a 6.21% error, for  $Z = 1.96$ , the sample was determined in 249 instruments (Fernández-Nogales, 1998).

**Table 1. Sample determination**

Finite population	
Population (N)	5,100 student
Origin of the population	FCA - UABC*
P	50.00%
Q	50.00%
Permissible error (E)	6.21%
Z	1.96
Confidence level (K)	95.00%
Sample size (n)=	249
$E = 2 * \text{raíz} (N-n) / (n-1) * (p*q / n) =$	6.34%

\* Faculty of Accounting and Administration – Universidad Autónoma de Baja California

## 2.7. Sample description

The composition of the study sample is detailed in Table 2, which concentrates data on gender, marital status, area and level of studies, age range, nationality, country of residence and work activity. This data provides a more holistic perspective on the characteristics of the universe under study.

**Table 2. Descriptive sample data**

Descriptive indicators	Number	Definition
Gender	113	Masculine
	136	Femenine
Marital status	194	Single
	24	Married
	22	Free union
	3	Divorced
	6	Other
Age	18-25	197
	26-35	30
	36-45	16
	45-62	6

Indicador descriptivo	Number	Definition
Academic level	19	Baccalaureate
	209	Bachelor's degree
	18	Master's degree
	2	PhD
	1	Post-doctorate
Working status	123	Yes
	126	No

## 2.8. Measuring instrument

To meet the objectives of the research, it is necessary to operationalize the theoretical and conceptual framework. Research objectives and questions, along with study variables and hypotheses, are basically the indicators for building the measuring instrument. This chapter applies empirical knowledge to collect field information. Once this stage is complete, the information must be prepared for its processing. The points that indicate this process are:

- Measurement of instrument design.
- Measurement scales.
- Instrument reliability tests.
- Data collection.
- Data processing.

**Table 3. Measuring Instrument Scales**

Scale type	Index amplitude
Likert	<ol style="list-style-type: none"> <li>1. Totally disagree</li> <li>2. Disagree</li> <li>3. Partially disagree</li> <li>4. Neither agree nor disagree</li> <li>5. Partially agree</li> <li>6. Agree</li> <li>7. Totally agree</li> </ol>

The instrument chosen for the collection of information was the questionnaire, this being multiple options from specific scales, providing information for the analysis of each of the variables that influence the factors involved in the perception of subjective well-being.

Likert scale was used to describe the perceptions of the interviewees in reference to each of the items that make up the questionnaire. Table 3 shows the values presented in the instrument responses and the value they represent in the index amplitude column. Finally, Table 4 presents the instrument used to carry out this research

**Table 4. Measuring Instrument**

variables	items	references
Subjective well-being	Well-being depends on the person's subjective perception of his or her life. With regard to this, the conditions of my life make me feel totally fulfilled.	(Angner, 2010), (Atkinson, Bagnall, Corcoran, South & Curtis, 2019) (Goucha et al., 2004), (Moreno & Marrero, 2015), (Huppert, Baylis, & Keverne, 2012), (Diener & Ryan, 2009), (Helliwell & Putnam, 2004), (Keyes, 2006), (Nyklíček, Zeelenberg, & Vingerhoets, 2011), (Appau, Churchill & Farrell, 2019).
	In most things I do, my life is close to my ideal.	
	The activities and occupations I have, make me feel accomplished.	
	So far I have achieved the things that are important to me in life.	
Happiness	In general, I consider myself a happy person.	(Lyubomirsky, 2008), (Ahumada-Tello, 2017), (Huppert et al., 2012). (Baumeister, Vohs, Aaker, & Garbinsky, 2013), (Moccia, 2016).
	Compared to my peers, I consider myself a happy person.	
Creativity	Generally speaking, to what extent do you consider yourself a creative person?.	(Perry-Smith & Mannucci, 2017), (Freire-Gibb & Nielsen, 2014), (Bourdieu, 2015), (Sawyer, 2012), (Pascale, 2005), (Ooms, Bell, & Kok, 2015), (Zhou, Shin, Brass, Choi, & Zhang, 2009), (Chacón, 2005), (Fanchini, Jongbloed & Dirani, 2019).
	Generally speaking, to what extent do you consider yourself an innovative person?.	

### 3. Results

#### 3.1. Reliability tests

Table 5 shows that high rates of Cronbach's Alpha are obtained when performing reliability analysis of the results of the questionnaire application, indicating that the reliability of the instrument is significant. Also, it can be observed that the relationship between factors and Alpha of Cronbach indicates that the instrument has significant content validity.

**Table 5. Reliability Study**

variables	# Items	Alpha de Cronbach
Bienestar subjetivo	4	.877
Creatividad	2	.768
Felicidad	2	.900

Table 5 shows that Cronbach's Alpha values for the Subjective Well-being variable is 0.877, for the Creativity variable is 0.768 and for the Happiness variable is 0.900. All three values demonstrate that in a sufficient proportion, respondents understood the same construct for each of the evaluated elements. According to

Nunnally (1967), when this value is 0.600 or higher, it is considered valid and accepted for social studies.

### 3.2. Pearson correlation

A correlation between Subjective Well-being and Happiness can be observed in Table 6 (= 0.672 and  $p < 0.001$ ). In the same way, the correlation between Subjective Well-being and Creativity is representative ( $r = 0.406$  and  $p < 0.001$ ). This interpretation does not imply causation, since the relationship only implies that the variables would confine each other. It is important to consider that the correlation level in both cases is moderate positive.

**Table 6. Pearson Correlation Table**

		Subjective well-being	Happiness	Creativity
Subjective well-being	Pearson Correlation	1		
	Sig. (bilateral)			
	N	249		
Happiness	Pearson Correlation	.672**	1	
	Sig. (bilateral)	.000		
	N	249	249	
Creativity	Pearson Correlation	.406**	.227**	1
	Sig. (bilateral)	.000	.000	
		249	249	249

\*\* The correlation is significant at 0.01 (bilateral).

It is also important to mention that the correlation between Happiness and Creativity is positive and representative, since it mentions that  $r = 0.227$  and it is reliable since  $p < 0.001$ . However, the latter relationship is lower and does not indicate high correlation.

**Table 7. Hypothesis assessment**

Hypothesis	Description	Conclusions
H <sub>10</sub>	Happiness DOES NOT positively influence the perception of subjective well-being	It is rejected because $p < .05$
H <sub>20</sub>	Creativity does NOT positively influence the perception of subjective well-being	It is rejected because $p < .05$

Table 7 indicates that null hypotheses are rejected. The results indicate that if there is a relationship between variables with an acceptable significance level, the correlation between these variables is significant at 0.01, causing changes that affect the other variable observed in a positive measure. It is then confirmed that Happiness

and Creativity have a positive and significant influence on the subjective well-being of the studied population.

### 3.3. One-way ANOVA

The ANOVA analysis is carried out to find the relationship between the predictor variable happiness and the dependent variable subjective well-being, obtaining the results presented in Tables 8 and 9.

**Table 8. One-way ANOVA Happiness - Subjective Welfare**

	Sum of squares	df	Quadratic mean	F	Sig.
Intragroups	753.549	22	34.252	10.038	0,000
Groups	771.150	226	3.412		
Total	1524.699	248			

Table 8 shows a positive relationship between subjective well-being and happiness. In this sense, it is observed that the perception of happiness should be promoted and improved as far as possible to impact subjective well-being. The results of the variance analysis indicate that the predictor variable has a significant impact on the academic performance. Likewise, the happiness data, where  $F(22, 226) = 10.038$  and  $p = 0.000$ , tends to increase subjective well-being as the perception of the happiness ratio increases.

**Table 9. One-way ANOVA Creativity – Subjective Welfare**

	Sum of squares	df	Quadratic mean	F	Sig.
Intragroups	394.489	22	17.931	4.030	0,000
Intergroups	1005.568	226	4.449		
Total	1400.056	248			

Table 9 indicates that there is a direct relationship between subjective well-being and creativity. In this regard, creativity should be promoted and improved as far as possible to impact subjective well-being. The results of the variance analysis indicate that the predictor variable has a significant impact on the academic performance. Likewise, the happiness data, where  $F(22, 226) = 4,030$  and  $p = 0.000$ , presents a trend towards the increase of subjective well-being as the perception of the happiness ratio increases.

**Table 10. One-way ANOVA - Hypothesis Evaluation**

hypothesis	Description	F	p	Conclusions
H <sub>1</sub> 0	happiness -> subjective well-being	F(22, 226) = 10.038	0,000	is rejected
H <sub>2</sub> 0	creativity -> subjective well-being	F(22, 226) = 4.030	0,000	is rejected

The data presented in Table 10 show that the null hypotheses H10 and H20 are rejected in correspondence referred to in this Article. These results are consistent with the correlation analysis previously conducted by Pearson's study. The tests confirm an existing relationship between the study variables.

### 3.4. Regression analysis

Multiple regression is a statistical technique through which relationships between different variables can be analyzed. For example, between dependent or criteria variables and a group of independent or predictive variables. Table 11 illustrates the result of applying the Enter procedure for linear regressions. In this case, a mathematical model that describes the behavior of independent variables relative to the dependent is obtained.

**Table 11. Coefficients<sup>a</sup>**

Model		Non-standardized coefficients		Standardized coefficients	t	Sig.
		B	Standard error	Beta		
1	(Constant)	3.311	1.109		2.985	.003
	Creativity	.507	.086	.267	5.895	.000
	Happiness	1.112	.082	.612	13.481	.000

a. Dependent variable: Subjective well-being

The obtained model is represented in Table 12, showing the results that validate the rejection of null hypotheses by obtaining  $P < 0.05$  on all the elements that make up the regression equation.

**Table 12. Regression Model**

Model	Constant B	Coefficients		Method	Level of significance
		Creativity	Happiness		
1	3.311	.507	1.112	Enter	10%
<b>Subjective well-being = 3.311 + 0.507 Creativity + 1.112 happiness</b>					

The model shows that happiness has more influence on the sense of subjective perception of well-being than creativity. This analysis confirms the results of Pearson's correlation and variance analysis.

#### 4. Conclusions and discussion

Happiness and creativity are part of human life. In both constructs, phenomena that enhance or restrict them occur. In this sense, the importance of studying these variables in relation to subjective well-being becomes relevant. The perception of an emotion is variable and is subjected to countless factors that affect individuals in the face of the prerogative to indicate an evaluation level for concepts based on appreciation. The fact that the constructs of "happiness" and "creativity" are related to "subjective well-being" opens the analysis of the scenarios where these initial factors are promoted and finally accepted as part of subjective well-being, to which individuals aspire and can access according to strategies that are promoted in the areas of work and education.

In a society that constantly evolves and transforms, the human factor becomes the fundamental element for socio-economic growth, reason for which investigating the constructs that affect their perception of satisfaction, and therefore an appreciation of subjective well-being is important. Organizations and society should be focused on achieving their social and economic goals by relying on a human satisfied with his achievements and aware of his limitations in the personal and social sphere. Studies on these subjective concepts open the possibility of better understanding what an individual considers as part of his realization and at what level this affects his personal perceptions.

A total of 249 questionnaires were applied in this research. The object variables in this study were analyzed using the statistical techniques of Cronbach's Alpha, Pearson correlation, variance analysis and regression equation. The results show the following findings:

- The H<sup>1</sup> hypothesis indicating that the more happiness there will be greater subjective well-being in students and graduates of Universidad Autónoma de Baja California is validated in Pearson's statistical correlation tests, variance analysis and regression equation. This dually confirms the relevance of happiness in the perception of better subjective well-being of students and graduates (Ravina-Ripoll, Galiano-Coronil & Tobar-Pesántez, 2019).
- The H<sup>2</sup> hypothesis that refers to creativity as an impact on the subjective well-being of students and graduates of Universidad Autónoma de Baja California is confirmed in Pearson's correlation test, the variance analysis, as well as the regression analysis; therefore, it is accepted and as a final result of the research it is considered that the requirements for its acceptance are met, confirming the exercise of correlation where it has already been accepted.

The results found confirm the need to expand the spectrum of variables to be addressed to understand the phenomenon of increasing subjective well-being according to its subjective nature (Diener & Ryan, 2009). As can be confirmed, happiness is important for the subjective well-being as well as for the creativity, thus, in future work it is desirable to make approaches with holistic characteristics to include differences in economic, social, cultural and emotional systems (Nyklíček, Zeelenberg &

Vingerhoets, 2011), the influence of modern trends in gender equity and modification or consolidation of individual and social values that reinforce the perception of happiness, strategies for creativity and therefore subjective well-being.

This topic is broad and it is equally important to understand the behavior towards obtaining organizational growth. Subjective well-being is expected to be a precedent for what will be the ability to solve problems and meet objectives in the workplace in the future. It even goes further and considers that good-performing behaviors can be extrapolated to success in personal relationships.

## References

- Ahumada-Tello, E. (2017). Perception of Personal Competitiveness. A Study from the Perspective of Happiness, Well-Being and Education in University Graduates. *Revista de Estudios Empresariales - Segunda Epoca*, (1), 34-54. <https://doi.org/10.17561/ree.v0i1.3187>
- Ahumada-Tello, E., Ravina-Ripoll, R., & Hernández de Velasco, J. (2018). El rol de las redes digitales en el desempeño académico y en la percepción de felicidad social en estudiantes universitarios en Baja California. En R. Ravina Ripoll, L. Tobar y A. Galiano (Coords.), *Claves para un desarrollo sostenible: la creatividad y el "happiness management" como portafolio de la innovación tecnológica, empresarial y marketing social* (pp. 99-116). España: Editorial Comares.
- Angner, E. (2010). Subjective well-being. *Journal of Socio-Economics*, 39(3), 361-368. <https://doi.org/10.1016/j.socec.2009.12.001>
- Appau, S., Churchill, S.A., & Farrell, L. (2019). Social integration and subjective wellbeing. *Applied Economics*, 51(16), 1748-1761. <https://doi.org/10.1080/00036846.2018.1528340>
- Atkinson, S., Bagnall, A.M., Corcoran, R., South, J., & Curtis, S. (2019). Being Well Together: Individual Subjective and Community Wellbeing. *Journal of Happiness Studies*, Article in Press, 1-19. <https://doi.org/10.1007/s10902-019-00146-2>
- Baumeister, R. F., Vohs, K. D., Aaker, J. L., & Garbinsky, E. N. (2013). Some key differences between a happy life and a meaningful life. *Journal of Positive Psychology*, 8(6), 505-516. <https://doi.org/10.1080/17439760.2013.830764>
- Chacón, Y. (2005). Una revisión crítica del concepto de creatividad. *Actualidades Investigativas en Educación*, 5(1), 1-30. <https://doi.org/10.15517/aie.v5i1.9120>
- Cornejo, M., & Tapia, M. L. (2011). Redes sociales y relaciones interpersonales en internet. *Fundamentos En Humanidades*, 12(2), 219-229.
- Diener, E., & Ryan, K. (2009). Subjective well-being: A general overview. *South African Journal of Psychology*, 39(4), 391-406. <https://doi.org/10.1177/008124630903900402>
- Easterlin, R. A. (2004). The economics of happiness. *Daedalus*, 133(2), 26-33. <https://doi.org/10.1162/001152604323049361>
- Fanchini, A., Jongbloed, J., & Dirani, A. (2019). Examining the well-being and creativity of schoolchildren in France. *Cambridge Journal of Education*, 49(4), 391-416. <https://doi.org/10.1080/0305764X.2018.1536197>
- Fernández-Nogales, A. (1998). *Investigación de mercados: obtención de información*. Madrid, España: S.L. CIVITAS EDICIONES.
- Ferrando, M., Prieto, M. D., Ferrándiz, C., & Sánchez, C. (2005). Inteligencia y creatividad. *Electronic Journal of Research in Educational Psychology*, 3(3), 21-49.
- Freire-Gibb, L. C., & Nielsen, K. (2014). Entrepreneurship Within Urban and Rural Areas: Creative People and Social Networks. *Regional Studies*, 48(1), 139-151. <https://doi.org/10.1080/00343404.2013.808322>
- Gandasegui, V. (2011). Mitos y realidades de las redes sociales. *Prisma Social: Revista de Ciencias Sociales*, (6), 1-26.

- García, A., López-de-Ayala, M., & Catalina, B. (2013). Hábitos de uso en Internet y en las redes sociales de los adolescentes españoles. *Revista Científica de Comunicación y Educación*, 21(41), 195-204.
- Gaut, B. (2010). The Philosophy of Creativity. *Philosophy Compass*, 5(12), 1034-1046. <https://doi.org/10.1111/j.1747-9991.2010.00351.x>
- Helliwell, J. F., & Putnam, R. D. (2004). The social context of well-being. En *Philosophical Transactions of the Royal Society B: Biological Sciences*, 359(1449). <https://doi.org/10.1098/rstb.2004.1522>
- Hernández-Sampieri, R., Fernández-Collado, C., & Baptista-Lucio, P. (2014). *Metodología de la Investigación* (6ta. ed.). México: McGraw-Hill.
- Huppert, F. A., Baylis, N., & Keverne, B. (2012). *The Science of Well-Being*. United Kingdom: Oxford Scholarship Online. <https://doi.org/10.1093/acprof:oso/9780198567523.001.0001>
- Keyes, C. L. M. (2006). Social Well-Being. *Social Psychology Quarterly*, 61(2), 121-140 <https://doi.org/10.2307/2787065>
- Kijkuit, B., & Van Den Ende, J. (2007). The organizational life of an idea: Integrating social network, creativity and decision-making perspectives. *Journal of Management Studies*, 44(6), 865-882. <https://doi.org/10.1111/j.1467-6486.2007.00695.x>
- Kratzer, J., Leenders, R. T. A. J., & Van Engelen, J. M. L. (2010). The social network among engineering design teams and their creativity: A case study among teams in two product development programs. *International Journal of Project Management*, 28(5), 428-436. <https://doi.org/10.1016/j.ijproman.2009.09.007>
- Lyubomirsky, S. (2008). *La ciencia de la felicidad: un método probado para conseguir el bienestar*. Barcelona, España: Ediciones Urano.
- Lyubomirsky, S., Sheldon, K. M., & Schkade, D. (2005). Pursuing happiness: The architecture of sustainable change. *Review of General Psychology*, 9(2), 111-131. <https://doi.org/10.1037/1089-2680.9.2.111>
- Moccia, S. (2016). Felicidad en el Trabajo. *Papeles Del Psicólogo*, 37(2), 143-151.
- Moreno, Y., & Marrero, R. (2015). Optimismo y autoestima como predictores de bienestar personal: diferencias de género. *Revista Mexicana de Psicología*, 31(1), 27-36.
- Nunnally, J. C. (1967). *Psychometric Theory*. New York, Estados Unidos: McGraw Hill.
- Nyklíček, I., Zeelenberg, M., & Vingerhoets, A. (2011). *Emotion regulation and well-being*. New York, Estados Unidos: Springer. <https://doi.org/10.1007/978-1-4419-6953-8>
- O'Brien, C. & Murray, S.E. (2015). Sustainable wellbeing, creativity and innovation. *International Journal of Innovation, Creativity and Change*, 2(1), 117-126.
- Ooms, W., Bell, J., & Kok, R. A. W. (2015). Use of Social Media in Inbound Open Innovation: Building Capabilities for Absorptive Capacity. *Creativity and Innovation Management*, 24(1), 136-150. <https://doi.org/10.1111/caim.12105>
- Oswald, A. J., Proto, E., & Sgroi, D. (2015). Happiness and Productivity. *Journal of Labor Economics*, 33(4), 789-822. <https://doi.org/10.1086/681096>
- Pascale, P. (2005). ¿Dónde está la creatividad? Una aproximación al modelo de sistemas de Mihaly Csikszentmihalyi. *Arte Individuo y Sociedad*, 17, 63-86.
- Peppler, K. A., & Solomou, M. (2011). Building creativity: collaborative learning and creativity in social media environments. *On the Horizon*, 19(1), 13-23. <https://doi.org/10.1108/10748121111107672>
- Perry-Smith, J. E., & Mannucci, P. V. (2017). From creativity to innovation: The social network drivers of the four phases of the idea journey. *Academy of Management Review*, 42(1). <https://doi.org/10.5465/amr.2014.0462>
- Plucker, J. A., Esping, A., Kaufman, J. C., & Avitia, M. J. (2015). Creativity and intelligence. En S. Goldstein, D. Princiotta, y J. A. Naglieri (Eds.), *Handbook of Intelligence: Evolutionary Theory, Historical Perspective, and Current Concepts* (283-291). New York, Estados Unidos: Springer. [https://doi.org/10.1007/978-1-4939-1562-0\\_19](https://doi.org/10.1007/978-1-4939-1562-0_19)

- Raibley, J. R. (2012). Happiness is not Well-Being. *Journal of Happiness Studies*, 13(6), 1105-1129. <https://doi.org/10.1007/s10902-011-9309-z>
- Ravina-Ripoll, R., Galiano-Coronil, A., & Tobar-Pesántez, L. (2019). Towards A Happy, Creative And Social Higher Education Institution: The Case Of Non-Profit Marketing And Business Creation Subjects At The University Of Cadiz. *Journal of Entrepreneurship Education*, 22(1), 1-8. Recuperado de <https://bit.ly/2MPXQ60>
- Ryff, C. D. (2005). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57(6), 1069-1081. <https://doi.org/10.1037/0022-3514.57.6.1069>
- Sawyer, R. K. (2012). *Explaining Creativity: The Science of Human Innovation*. Creativity. New York, Estados Unidos: Oxford University Press.
- Perry-Smith, J., & Mannucci, P. V. (2015). Social Networks, Creativity, and Entrepreneurship. En C. E. Shalley, M. A. Hitt, & J. Zhou (Eds.), *The Oxford Handbook of Creativity, Innovation, and Entrepreneurship*. Oxford Handbooks Online. <https://doi.org/10.1093/oxford-hb/9780199927678.013.0016>
- Sigala, M., & Chalkiti, K. (2015). Knowledge management, social media and employee creativity. *International Journal of Hospitality Management*, 45, 44-58. <https://doi.org/10.1016/j.ijhm.2014.11.003>
- Smith, T.S.J., & Reid, L. (2018). Which 'being' in wellbeing? Ontology, wellness and the geographies of happiness. *Progress in Human Geography*, 42(6), 807-829. <https://doi.org/10.1177/0309132517717100>
- Zhou, J., Shin, S. J., Brass, D. J., Choi, J., & Zhang, Z. X. (2009). Social Networks, Personal Values, and Creativity: Evidence for Curvilinear and Interaction Effects. *Journal of Applied Psychology*, 94(6), 1544-1552. <https://doi.org/10.1037/a0016285>