# THE INFLUENCE OF PERSONAL VALUES ON INTERNET USE AND WELLBEING

# LA INFLUENCIA DE LOS VALORES PERSONALES EN EL USO DE INTERNET Y EL BIENESTAR

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#### Abstract

Personal values influence the behavior, feelings, and lives of individuals, but also, Internet use which penetration is expected it continues expanding all over the world. Values determine attitudes and behaviors of individuals and they also affect relationships people maintain with others and themselves. Furthermore, those relations are as well influenced by the adoption and usage of the internet, what is changing the way individuals interact and relate. So, both, values and internet use, impact on individuals Wellbeing (WB) perception. The present study analyses the influence of personal values on internet use and WB perception on a sample of 33,123 respondents of the European Social Survey (2016), 51 % of female

respondents and 47.9 % male aged 15 and over, from different European countries. By this way, first, an Exploratory Factorial Analysis has been applied on data related to personal values, and four different profiles have been defined. Second, there have been individually analyzed and correlated the level of internet use and life satisfaction individuals report to analyze their influence on each profile. Finally, the interaction of both variables has been considered. When p-value is significative (p < .05) individual profile moderate relationship between internet use and life satisfaction. Results demonstrate personal values influence internet use and life satisfaction.

**Keywords:** Internet use; Wellbeing; life satisfaction; personal values; measurement; ESS.

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#### Resumen

Los valores personales influyen en el comportamiento, los sentimientos y la vida de las personas, pero también, el uso Internet cuya penetración se espera expandiéndose por todo el mundo. Los valores determinan las actitudes y los comportamientos de las personas, y también afectan las relaciones que las personas mantienen con los demás y con ellas mismas. Además, esas relaciones se ven influenciadas por la adopción y el uso de Internet, lo que está cambiando la forma en que las personas interactúan y se relacionan. Así, tanto los valores como el uso de Internet, impactan en la percepción del Bienestar (WB) de las personas. El presente estudio analiza la influencia de los valores personales en el uso de Internet y la percepción del Bienestar en una muestra de 33123 encuestados de la Encuesta Social Europea (2016), 51 % de mujeres encuestadas y 47.9 % hombres de 15 y más años, de diferentes países europeos. De esta forma, en primer lugar, se ha aplicado un Análisis Factorial Exploratorio sobre datos relacionados con los valores personales, y se han definido cuatro perfiles diferentes. En segundo lugar, se ha analizado y correlacionado individualmente el nivel de uso de Internet y la satisfacción con la vida que reportan las personas para analizar su influencia en cada perfil. Finalmente, se ha considerado la interacción de ambas variables. Cuando el valor p es significativo (p < .05), el perfil individual modera la relación entre el uso de Internet y la satisfacción con la vida. Los resultados demuestran que los valores personales influyen en el uso de Internet y la satisfacción con la vida.

**Keywords:** uso de Internet; Bienestar; satisfacción vital; valores personales; medidas; ESS.

#### Introducción

Well-being (WB) is a multidimensional concept that involves lots of perspectives, sense, and affections (Huppert & So, 2009; Vittersø et al., 2010) and gives individuals a sense of how their lives are going through the interaction between their circumstances, environments, activities, and psychological resources or 'mental capital':

"Mental capital means the degree of mastery of life skills at the time an individual faces the choices of life (Weehuizen, 2008). It is not only positive attitudes (comprise, hope, self-efficacy, optimism, or resiliency among others) it also includes certain key skills that allow one to produce such mental goods as self-esteem and sense of achievement, as well as self-reflective skills". (Ho, 2012).

WB refers to both objective and subjective valuations of human life (Lane, 2000). The objective component assesses observable characteristics, such as economic development among others, while the subjective element relates to a person' satisfaction with different aspects of life and global satisfaction.

Within the subjective component, personal values can provide predictive and explanatory power. They influence behavior and WB because they held motivations as striving towards goals underlying individuals (Huppert & So, 2009). They are considered subjective because they reflect what people think and state about themselves, and they can predict attitudes, opinions, preferences, specific behaviors, and actions of individuals. Researchers have determined the usefulness of values because understanding personal values mean understanding human behavior, and understanding human behavior approximates to understand WB fulfillment (Sagiv et al., 2017).

Diener, one of the most prestigious researchers on this field, defined Subjective Well-Being (SWB), as: "a phenomenon that includes people's emotional response, levels of satisfaction in various domains and global judgments of life satisfaction" (Diener & Lucas, 1999, p. 277). And it is important because it includes two new terms and concepts (happiness and life satisfaction), both of them related to SWB and WB; and sometimes used indistinctly.

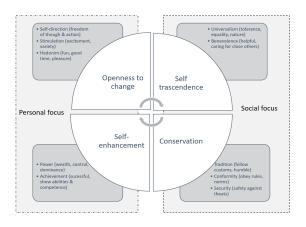
There are some studies analyzing life satisfaction and happiness meaning and definition (Argyle, 2001; Cohn et al., 2009; Pavot & Diener, 2009; Seligman, 2011, 2016; Veenhoven, 2013; Welsch, 2006). For this study, Life satisfaction has been defined in the literature as the informed and cognitive judgment of one's life in which the criteria of evaluation are up to the person, with experiencing good feelings and making favorable judgments about how life

is going (Pavot & Diener, 1993). And Happiness has been considered as a mental or emotional state of WB which can be defined by, among others, positive or pleasant emotions ranging from contentment to intense joy (Seligman, 2004).

One of the most popular and recent scales for measuring values is the Schwartz one. It is currently the most widely used by social and cross-cultural psychologists for studying individual differences in values. It underpins ten different motivational types of values that allow the measure of personal goals, as Figure 1 displays: (1) Achievement; (2) Power; (3) Security; (4) Conformity; (5) Tradition; (6) Benevolence; (7) Universalism; (8) Self Direction; (9) Stimulation; and (10) Hedonism (Schwartz & Sortheix, 2018).

Figure 1.

Basic values and motivational sources of Prof. Schwartz

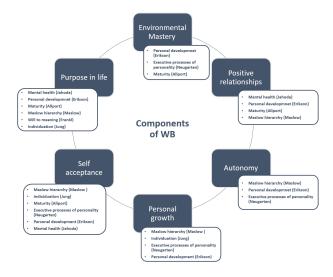


Note: Own elaboration based on Schwartz and Sortheix (2018).

Carol Ryff one of the most popular researchers studying WB, defined six components constitute it: Autonomy, Environmental Mastery, Personal Growth, Self-Acceptance, Positive Relationships, Purpose in life (Ryff, 1989, 2014, 2017). Figure 2 presents Ryff' model and its foundations and theoretical underpinnings (Ryff, 2017).

Figure 2.

Core dimensions Ryff Model and foundations



Note: Own elaboration based on Ryff (2018).

**Autonomy factor** is related to Maslow hierarchy (Maslow, 1968), turning inward in later life (Erikson, 1959) and freedom from the norms (Neugarten, 1973).

Environmental Mastery factor relates to mental and physical actions (Erikson, 1959; Neugarten, 1973), and to maturity (Allport, 1961).

The personal Growth factor is concerned with personal potential (Jahoda, 1958; Maslow, 1968), fully individuated (Jung, 1933), and tasks at different periods of life (Erikson, 1959; Neugarten, 1973).

**Self-Acceptance** factor is related to having positive self-regard (Maslow, 1968), maturity (Allport, 1961), optimal functioning (Rogers, 1961), mental health (Jahoda 1958), and the acceptance of one's past life (Erikson, 1959; Jung, 1933; Neugarten, 1973).

**Positive Relations with Others** factor refers to mental health (Jahoda, 1958), empathy with others (Maslow, 1968), or intimacy and affection (Allport, 1961; Erikson, 1959).

The purpose in life factor concerns to intentionality to life (Allport, 1961; Jahoda, 1958); existential formulations (Frankl, 1959), and its evolution over age (Erikson, 1959; Jung, 1933; Neugarten, 1973).

Regarding internet use, the number of internet users is growing year by year. According to the research developed by Nielsen Online – by ITU, the International Telecommunications Union, by GfK, by local ICT Regulators and another reliable source—in June 2017 there were 3,885 million internet users in the world, and, although Asia was the continent with major number of internet users (1,938075 users) due it has the most % population of the World, only 46.7 % of individuals use the internet, while North America (88.1 %) followed by Europe (80.2 %) – were the regions with higher internet penetration. OECD (based on ITU World Telecommunication/ICT Indicators Database and Eurostat Information Societe Statistics-Database, January 2017) confirms that asymmetrical use of the Internet. While nearly all (95 %) adults in Iceland, Norway, Denmark, and Luxembourg accessed to the Internet in 2015, only half of the adult population did so in Turkey and Mexico, and 20 % or less in India and Indonesia. Those differences exist because digital infrastructures, necessary for support the Internet access, are nearly fully deployed and overgrowing beyond across OECD countries, while in other countries lasts more<sup>1</sup>. And today, despite the quick blow-out of the Internet, nearly 60 % of the world's population, four billion people, remain offline (OECD, 2017).

However, internet use could represent both positive and negative aspects for individuals, and there exists a discrepancy between some effects of the Internet on WB.

Some studies argue that the Internet use is positively correlated with depression, loneliness, and stress (Kraut et al., 1998; Kraut et al., 2002). Others defend that internet use decreases loneliness and depression while perceived social support and self-esteem increase significantly (Rains & Young, 2009; Shaw & Gant, 2002; Steinfield et al., 2008) or even it can help practitioners and researchers

to train positive emotions (Baños et al., 2017). Nevertheless, there has been a recent consensus consistent depending on the use of the Internet; it affects in one or other way.

Furthermore, the age of first Internet use is rapidly descending (Vatavu et al., 2015; Wartella et al., 2005) and compulsive internet use –that refers to excessive internet use that interferes with daily life–should not be neglected. Although most people use the internet appropriately, for individuals who present compulsive internet, it influences negatively their behavior that is controlled through negative reinforcement, among others (Fernández & Gámez-Guadix 2010; Rial et al., 2015).

And despite a broader psychometrically impact analysis is required, data suggest higher levels of internet use can improve psychosocial functioning, including self-esteem, positive affect, personal WB, optimism, and social connectedness in old people (Mellor et al., 2008) and better life satisfaction and psychological WB among older adults (Heo et al., 2015).

Taking all together into consideration, the present study analyses how personal values influence internet use and WB perception of individuals included in the sample.

#### Method

## **Participants**

For our study, it has been considered data provided by the European Social Survey - Round 8 - 2016 2.0 version.

It includes information of 33,123 individuals of 18 countries distributed by: Austria (5.8%); Belgium (5.1%); Switzerland (4.4%); Czech Republic (6.6%); Germany (8.2%); Estonia (5.8%); Finland (5.5%); France (5.9%); United Kingdom (5.6%); Ireland (7.9%); Israel (7.3%); Iceland (7.9%); Netherlands (4.8%); Norway (4.4%); Poland (4.9%); Russian Federation

<sup>&</sup>lt;sup>1</sup> Individuals using the Internet 2005 to 2014", Key ICT indicators for developed and developing countries and the world (totals and penetration rates), International Telecommunication Union (ITU). Retrieved 25 May 2015.

(7.0 %); Sweden (4.5 %), and Slovenia (3.8 %). All countries and available data have been accepted.

Gender participation is balanced with 51 % of female respondents and 47.9 % male respondents at overall.

The age distribution is also well-adjusted. Individuals from 15 to 30 years old represent 20.2 % of the sample, those from 31 to 50 the 32 % of the sample, those from 51 to 65 the 25.7 % of the sample and those from more than 65 years old 21.8 %. So, the group of individuals from 31 to 50 years represents more share because it involves 20 years- 5 more than other groups.

#### Instruments and Procedure

ESS survey includes questions regarding WB that refer to general aspects of one's perception of life, health, happiness, trust in others, social exclusion, religion, perceived discrimination, and national and ethnic identity. Specifically, it has been selected following question related to general aspects of life satisfaction: *All things considered, how satisfied are you with your life as a whole nowadays?* – measured with a scale from 0 to 10 being 0. Extremely bad and 10 Extremely good.

Concerning internet use and its measure, Round 8 (2016) offers the capability to measure the digital divide between and within European countries. In these questions, respondents should include all internet use whether at home, work or on mobile devices, providing a measure of regularity's use the internet. In Particular, it has been selected the question related to general aspects of internet use as: People can use the internet on different devices such as computers, tablets, and smartphones. How often do you use the internet on these or any other devices, whether for work or personal use? – measured with a scale from 1 to 5 being 1. Never; 2. Occasionally; 3. A few times a week; 4. Most days and 5. Everyday.

Regarding human Values, ESS survey includes a wellestablished item measure of human values, which was developed by the Israeli psychologist, Professor Shalom Schwartz. The 'Human Values Scale' is designed to classify respondents according to their basic value orientations. Thus, there have been selected from ESS questions related to WB that refer to items defined by Prof. Schwartz associated with human values of respondents: "Important to be rich, have money and expensive things"; "Important that people are treated equally and have equal opportunities"; "Important to show abilities and be admired"; "Important to try new and different things in life"; "Important to understand different people"; "Important to do what is told and follow rules"; "Important to be humble and modest, not draw attention"; "Important to have a good time"; "Important to make own decisions and be free"; "Important to help people and care for others well-being"; "Important to be successful and that people recognize achievements"; "Important to seek adventures and have an exciting life"; "Important to behave properly"; "Important to follow traditions and customs"; "Important to seek fun and things that give pleasure"— measured all of them with a scale from 1 to 6, being 1 very much like me, 2 like me; 3 some-what like me; 4 a little like me; 5 not like me and 6 not like me at all.

Selected questions and variables have been linked to the Ryff dimensions attending a personal consideration. Autonomy dimension includes importance to be rich, to follow the rules or to make their own decisions. Environmental mastery refers to importance to seek adventures or to be creative. Personal growth relates to trying new and different things in life. Positive relationships comprise importance to follow traditions, to behave properly or to be humble. The purpose in life refers to importance to seek fun, to have a good time, to treat equal people, to understand or help others. And self-acceptance relates to importance to show abilities and to be successful.

Then, an Exploratory Factor Analysis (AFE) analyses human values and relate them with different profiles of individuals. Once characterized different identified profiles, we check if, by one hand, different profiles are related to Life Satisfaction by themselves. And by the other, if the individual characteristics of each profile moderate relationship between Life Satisfaction and Internet Use. In this way, Chi2 test and equality pair columns - using a Z-test that performs equality pairs column in tables that have at least one category variable in rows and columns analyze data consistency. The p-values of the checks are adjusted using the Bonferroni method. Furthermore, two linear re-

gressions have been applied. The first one analyzes internet use and individual profile, while the second one adds the interaction between the individual profile and internet use. If this last regression is significative, we could conclude individual profile moderate relationship between internet use and life satisfaction. Accordingly, four profiles have been analyzed.

### Data Analysis

AFE consistency relies on the method of the main components with VariMax rotation and criterion of auto values higher than 0,9. By this way, on the AFE presented:

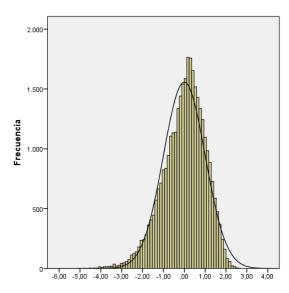
- The entire correlation matrix through Bartlett's sphericity contrast provides the statistical probability required for the correlation matrix of the variables to be an identity matrix. It is obtained from the transformation of the Chi-square of the determinant of the correlation matrix. As this statistic is high, being the level of significance lower than 0.05, it is rejected the null hypothesis that the matrix is an identity matrix.
- The statistician of Kaiser-Meyer-Olkin (KMO). This index varies between 0 and 1, reaching 1 when each variable is correctly predicted without error by the other variables. If KMO value is 0.8 or higher, the sample suitability measure is outstanding; if it is 0.7 or higher the measurement is regular, if it is 0.60 or higher the measurement is mediocre; 0.50 or above negligible and below 0.50 unacceptable for exploratory analysis. This measure of adequacy or sample sufficiency increases as the sample size increases, the average correlations increase, the number of variables increases, or the number of factors decreases.

The factors of the factorial analysis define each different profile. By factor definition, this is a normal variable with mean 0 and standard deviation 1. Therefore, to establish the profiles have been taken a standard deviation as a measure of differentiation. Low-profile individuals are those persons below-1, middle-profile ones are those that are between-1 and 1, and high-profile ones are those that are above 1. By normal variable definition, the percentage of the sample that remains between minus a standard de-

viation and more a standard deviation is 68 %. So below minus a standard deviation will be 16 % of the sample and above more a standard deviation there will be another 16 %, as Figure III displays.

Figure 3.

Definition profiles of sample



Nota: Media = 1.32E-15, Desviación estándar = 1.00000; N = 33.185

Low profile	Medium profile	High profile
<μ-α	μ± α	>μ+α
16% sample	68% sample	16% sample

As high-profile defines a person that has a dominant prevalence of this profile, there will be 16 % of people with each one of the profiles. Consequently, when displayed graphically, balls charts of each profile will have the same size for all of them.

#### Results

Taking into consideration the explained procedure, there have been characterized four different profiles. Table 1 displays the results of the analysis. Therefore, 14 of the 16 variables could have been included in the AFE,

while two variables (Importance to make own decisions and be free, and Important to think new ideas and being creative) have been rejected because they do not correlate with any other item and their level of significance is lower than 0.5.

Table 1.

Component Matrix Rotated Profile.

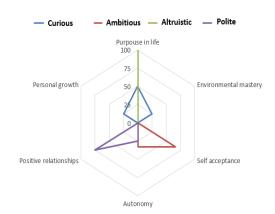
	1	2	3	4
Importance to seek fun and	•			
things that give pleasure	.800			
Importance to have a good	.724			
time	.124			
Importance to seek				
adventures and have an	.684			
exciting life				
Importance to try new and	.646			
different things in life				
Importance to be successful		.793		
and that people recognize achievements		.793		
Importance to show abilities				
and be admired		.762		
Importance to be rich, have				
money and expensive things		.683		
Importance that people are				
treated equally and have			.761	
equal opportunities				
Importance to understand			.736	
different people			.730	
Importance to help people				
and care for others well-			.676	
being				
Importance to behave				.727
properly				
Importance to do what is told and follow rules				.695
Importance to follow				
traditions and customs				.692
Importance to be humble and				
modest, not draw attention				.506
Importance to make own				
decisions and be free	-	-	-	-
Important to think new ideas				
and being creative	-	-	-	-
Barlett test:				
Chi <sup>2</sup> =92260				
sig. 0,000				

Furthermore, as the KMO test is higher than 0.7 and Chi2 is significative, AFE defined with 14 variables is adequate. Additionally, the four resulting factors explain more than 50 % of the variance, so the presented model seems to be respectable. Thus, with those variables and identified four components, we have created the following four different individual profiles and named them attending predominant behaviors of individuals.

Most of the profiles have a mix of dimensions, for instance: the Curious or Adventurer profile enhances the importance to seek fun, pleasure and a good time, that refers to Purpose in Life dimension of Ryff. But it also highlights to seek adventures (Environmental Mastery) or to try new things in life (Personal Growth). Ambitious profile enhances the self by the importance of being admired or being successful (Self-acceptance) and money (Autonomy). While Altruistic profile emphasizes the others by the importance of treated equally, understand or help others (Purpose in Life), and Polite profile enhances the correctness by following traditions and rules, behave properly or be humble (Positive relationship).

As Figure 4 displays, except the Altruistic profile that focuses 100 % specifically on Purpose in life, the other ones have a mix of different dimensions. Polite profile enhances positive relationships mixed with autonomy dimension, while Ambitious profile remarks self-acceptance and autonomy dimension.

**Figure 4.**Relationship individual profiles with Ryff dimensions



Once characterized different identified profiles, at overall the relationship among internet use and life satisfaction for each one has been analyzed - analysis and results are statistically significative, thus profiles are adequate-. As Figure 5 displays, the Ambitious (those individuals who enhance self-acceptance and autonomy dimension) and Curious (those that boost purpose in life, personal growth and environmental mastery) collectives are the ones that most Internet use have, representing the lowest and highest life satisfaction. By contrast, Polite group (that enhance positive relationships and autonomy) presents the lowest use and middle evaluation of life satisfaction, similar at Altruistic group (those that boost purpose in life) that use it at a greater extent.

Figure 5.

Internet Use and Life Satisfaction at different profiles

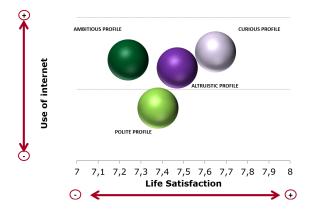


 Table 2.

 Analysis of Frequency of Internet Use on different Curious Profiles.

However, we would deepen on the characteristics of each individual profile to analyze those influence and relationship. Thus, results are presented.

#### Curious Profile

The Curious group –that seek fun and pleasure, have a good time, adventures and try new and different things–enhances purpose in life, personal growth and environmental mastery Ryff dimensions.

To deepen in this profile, different grades or levels of curiosity- low, medium and high- have been created. Remark majority of the population (N = 33,123) fits in a medium level of curiosity (67.0 %), low level (16.57 %) and high level (16.35 %) because of the distribution criterion explained before. Moreover, level of curiosity is positively related to life satisfaction as means and standard deviations of low, medium and high profiles display (6.88 and 2.25; 7.36 and 1.93; and 7.65 and 1.98 respectively).

ANOVA test of a factor (*p-value* = .000) indicates there exists a relationship between life satisfaction and Curious profile, by the way, the more curious, the more life satisfaction individuals have.

Regarding Internet Use, Chi2 test and equality pair columns remark as more curious individuals present major internet use they do. Table 2 resumes, while 29.8% of individuals with low curiosity profile never use the Internet, only 8.1 % of high curiosity profile does not. In the same way, the rates of high restless profiles that use the Internet daily is 28.8 % over low restless profiles.

	Low curious level		Medium Curious Level		High Curious Level	
	Obs	%	Obs	%	Obs	%
FREQUENCY OF INTERNET USE	5502	(100.0%)	22244	(100.0%)	5417	(100.0%)
Never	1638	(29.8%)	3040	(13.7%)	441	(8.1%)
Only occasionally	398	(7.2%)	1235	(5.6%)	207	(3.8%)
A few times a week	394	(7.2%)	1495	(6.7%)	239	(4.4%)
Most days	450	(8.2%)	2186	(9.8%)	408	(7.5%)
Every day	2622	(47.7%)	14288	(64.2%)	4122	(76.1%)

Table 3 defines the model and interaction between internet use for the Curious profile. First interaction relates the Curious profile positively to Life Satisfaction (*pvalue* = .000); thus, as more curious more satisfied are individuals. Moreover, second interaction reflects the level of this influence, concluding interaction is significative (*pvalue* = .001). Thus, the Curious profile moderates relationship between internet use and life satisfaction.

Table 3.

Relationship Curious Profile and Internet Use.

		В	SE	ß	
			В		
1	(Constant)	6.614	.031		*
	Internet use	.178	.007	.135	*
	Curious	.198	.011	.098	*
2	(constant)	6.645	.033		*
	Internet use	.173	.008	.130	*
	Curious	.290	.029	.144	*
	Interaction	024	.007	049	*

Note: a. Dependent Variable: Life Satisfaction.

Figure 6 displays the relationship between internet use and life satisfaction for Curious profile. It is observed how for the more adventurers, the relationship between the use of the internet and life satisfaction is weaker than for the quieter ones. Inclinations of slopes at different levels of the profile (low, medium, up) differ slightly because the coefficient of interaction is very low; thus, it could be concluded there exists moderation, although slight.

It could make sense if we consider curious individuals are more used to use the internet. The incidence of daily use of the internet is higher for more curious. Thus, they could have more integrated that use, maybe for searching and researching issues, so it influences lower their satisfaction.

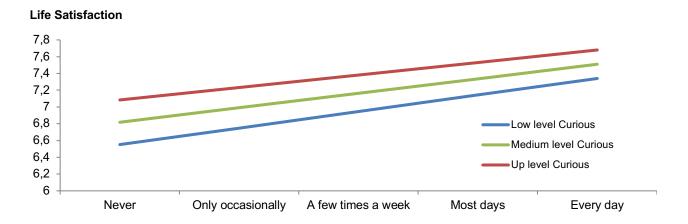
#### Ambitious Profile

Ambitious individuals are focused on the self. They need show abilities, be admired, and people recognize achievements, give importance to have money and expensive things, thus, although they have the highest net income, they do not feel comfortable with it. This profile enhances self-acceptance and autonomy Ryff dimension.

To deepen in this profile, different grades or levels of ambition- low, medium and high- have been created. Re-

Figure 6.

Relationship between internet use and life satisfaction moderated by Curious profile.



<sup>\*</sup> *p* < .00; \*\* *p* < .05.

Table 4.

Analysis of Frequency of Internet Use on different Ambitious Profiles.

		curious vel	Medium ( Lev		_	urious vel
	Obs	%	Obs	%	Obs	%
FREQUENCY OF INTERNET USE	5773	(100.0%)	21947	(100.0%)	5443	(100.0%)
Never	1244	(21.5%)	3320	(15.1%)	555	(10.2%)
Only occasionally	352	(6.1%)	1255	(5.7%)	233	(4.3%)
A few times a week	335	(5.8%)	1474	(6.7%)	319	(5.9%)
Most days	484	(8.4%)	2089	(9.5%)	471	(8.7%)
Every day	3358	(58.2%)	13809	(62.9%)	3865	(71.0%)

mark majority of the population (N = 33,123) fits in a medium level of ambition (66.18 %), low level (17.41 %) and high level (16.40 %) because of the distribution criterion explained before. Moreover, level of ambition is negatively related to life satisfaction as means and standard deviations of low, medium and high profiles display (7.47 and 2.12; 7.31 and 1.97, and 7.24 and 2.05 respectively).

ANOVA test of a factor (*p-value* = .000) and post-hoc tests indicate there exists a negative relationship between life satisfaction and Ambitious profile, by the way, the more ambitious, the lower satisfaction individuals have.

Regarding Internet Use, Chi2 test and equality pair columns comment the more ambitious grade individuals have the more internet use they do. Table 4 resume, while 21.5 % of individuals with Ambitious low profile never use the Internet, only 10.2 % of high profile not do it. In the same way, the rate of high profile that use the internet daily is 12.8 % over the low profile.

Table 5 defines the model and interaction between internet use and the Ambitious profile. First interaction relates the Ambitious profile negatively with life satisfaction, thus, as more ambitious less satisfied are individuals. Second interaction results not significative (p-value = .063) although this value is as close to acceptation umbral (p-value = .05). Thus, it could be affirmed the Ambitious profile tend to moderate the relationship. Consequently, among more ambitious individuals, the relationship between internet use and life satisfaction tend to be stronger than among lower ambitious ones.

Table 5.

Relationship Ambitious Profile and Internet Use.

		В	SE	ß	
			В		
1	Internet use	6.468	.031		*
	Ambitious	.215	.007	.162	*
	(constant)	105	.011	052	*
2	Internet use	6.459	.031		*
	<b>Ambitious</b>	.217	.007	.164	*
	Interaction	159	.031	079	*
	Internet use	.013	.007	.029	*

Note: a. Dependent Variable: Life Satisfaction.

Lines displayed at Figure 7 shows how among more ambitious individuals, the relationship between internet use and life satisfaction, tend to be stronger than among lower ambitious. As lines are closed, and nearly with the same slope, moderation has not to result significative; thus it marks only a tendency.

#### Altruistic Profile

Altruistic individuals are focused on search a purpose in life, enhancing others: understand, help, take care, treat equally different people, among others.

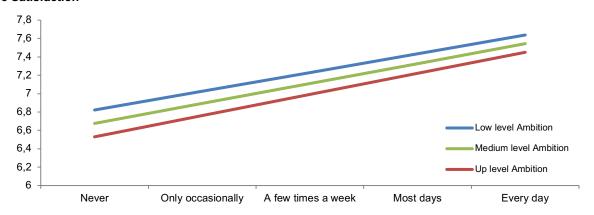
To deepen in this profile, different grades or levels of altruism –low, medium and high– have been created. Re-

<sup>\*</sup> p < 0.00; \*\* p < 0.05.

Figure 7.

Relationship internet use and life satisfaction moderated by Ambitious profile.

#### Life Satisfaction



mark majority of the population (N = 33,123) fits in a medium level of altruism (66.62%), low level (15.86%) and high level (15.50%) because of the distribution criterion explained before. Moreover, level of altruism is positively related to life satisfaction as means and standard deviations of low, medium and high profiles display (6.9 and 2.05; 7.39 and 1.95; and 7.47 and 2.16 respectively).

ANOVA test of a factor (*p-value* = .000) and post-hoc tests confirms there exists a positive relationship between life satisfaction and Altruistic profile, by the way, the more altruism individuals present, the more life satisfaction they report.

Regarding internet use, Chi<sup>2</sup> test and equality pair columns conclude as more generosity grade individuals have more internet use individuals they do. Also, the more solidarity individuals have, the more use of the internet they do, but with a lower difference than in other profiles. Table 6 resume, while 17.4 % of individuals with low altruism profile never use the internet, only 14.8 % of high altruism profile not do it. In the same way, the rate of high profile that use the internet daily is 11.6 % over the low profile.

Table 7 defines the model and interaction between internet use and the Altruistic profile. First interaction relates the Altruistic profile positively with life satisfaction (p-value=.000). Thus, the more altruistic individuals are, the more satisfied they are. Moreover, second interaction

Table 6.

Analysis of Frequency of Internet Use on different Altruistic Profiles.

	Low curious level		Medium Curious Level		High Curious Level	
	Obs	%	Obs	%	Obs	%
FREQUENCY OF INTERNET USE	5262	(100.0%)	22759	(100.0%)	5142	(100.0%)
Never	918	(17.4%)	3490	(15.3%)	711	(13.8%)
Only occasionally	339	(6.4%)	1253	(5.5%)	248	(4.8%)
A few times a week	442	(8.4%)	1422	(6.2%)	264	(5.1%)
Most days	563	(10.7%)	2091	(9.2%)	390	(7.6%)
Every day	3000	(57.0%)	14503	(63.7%)	3529	(68.6%)

reflects the level of this influence, concluding interaction is significative (*p-value* = .000). So, Altruistic profile moderate relationship between internet use and life satisfaction, although slightly because the interaction coefficient is shallow.

Table 7.

Relationship Curious Profile and Internet Use.

		В	SE	ß		
			В			
1	(Constant)	6.528	.031		*	
	Internet use	.200	.007	.151	*	
	Curious	.187	.011	.093	*	
2	(constant)	6.537	.031		*	
	internet use	.199	.007	.150	*	
	Altruism	.328	.030	.163	*	
	Interaction	036	.007	075	*	

Note: a. Dependent Variable: Life Satisfaction.

Life Satisfaction

Never

6

Figure 8 displays the relationship between internet use and life satisfaction on Altruistic profile. It is observed how for the more altruistic individuals, the relationship between the use of the Internet and the satisfaction is fewer intense than for the selfish ones. Inclinations of slopes at different levels of the profile (low, medium, up) differ slightly because the coefficient of interaction is very low.

Thus, it could be concluded that there exists moderation, although slight. For the most supportive individuals, the importance of using the internet related to their life satisfaction is less relevant than for the less altruistic ones.

#### Polite Profile

The Polite group enhance following traditions, customs, and rules, behave properly, be humble and enhancing positive relationships and autonomy components of Ryff model.

To deepen in this profile, different grades or levels of correctness – low, medium and high – have been created. Remark majority of the population (N = 33,123) fits in a medium level of correctness (67.91%), low level (16.65%) and high level (15.57%) because of the distribution criterion explained before. Moreover, level of rightness is positively related to life satisfaction as means and standard deviations of low, medium and high profiles display (7.29 and 2.04; 7.33 and 1.96; and 7.38 and 2.17 respectively).

Most days

Every day

Figure 8.

Relationship internet use and life satisfaction moderated by Altruistic profile.

Only occasionally

# 7,8 7,6 7,4 7,2 7 6,8 6,6 6,4 6,4 Up level Altruism 6,2

A few times a week

<sup>\*</sup> p < .00; \*\* p < .05; \*\*\* p < .01

Table 8.

Analysis of Frequency of Internet Use on different Polite profiles.

		urious vel	Medium ( Lev		High C	urious vel
	Obs	%	Obs	%	Obs	%
FREQUENCY OF INTERNET USE	5476	(100.0%)	22526	(100.0%)	5161	(100.0%)
Never	349	(6.4%)	3314	(14.7%)	1456	(28.2%)
Only occasionally	211	(3.9%)	1260	(5.6%)	369	(7.1%)
A few times a week	246	(4.5%)	1511	(6.7%)	371	(7.2%)
Most days	428	(7.8%)	2140	(9.5%)	476	(9.2%)
Every day	4242	(77.5%)	14301	(63.5%)	2489	(48.2%)

ANOVA test of a factor (*p-value* = .063) indicates there not exists a relationship between life satisfaction and the Polite profile. However, this value is as close to acceptation umbral (*p-value* = .05), as it could be affirmed that life satisfaction tends to increase with correctness.

Regarding internet use, Chi<sup>2</sup> test and equality pair columns remark as more correctness lower internet use are. Table 8 displays that while 6.4 % of individuals with low correctness profile never use the Internet, this rate increases to 28.2 % of high ones profile not do it. In the same way, the rates of high profile that use the Internet daily is 29.3 % above low profile.

Table 9 defines the model and interaction between internet use and Polite profile. First interaction relates positively Polite profile with life satisfaction (*p-value* = .000). Thus, the politer, the more satisfied are individuals. More-

over, second interaction reflects the level of this influence, concluding interaction is significative (*p-value* = .000), thus Politic profile moderates relationship between internet use and life satisfaction.

Table 9.

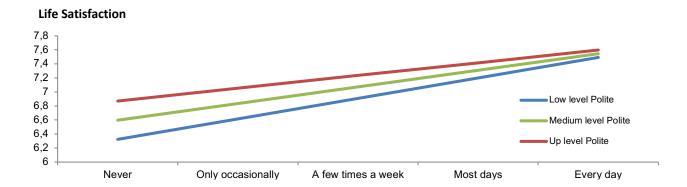
Relationship Polite profile and internet use.

		В	SE	ß	
			В		
1	(Constant)	6.438	.031		*
	Internet use	.223	.007	.168	*
	Correctness	.102	.011	.051	*
2	(constant)	6.360	.033		*
	Internet use	.237	.008	.179	*
	Altruism	.328	.033	.163	*
	Correctness	055	.008	117	*

Note: a. Dependent Variable: Life Satisfaction.

Figure 9.

Relationship internet use and life satisfaction moderated by Altruistic profile.



<sup>\*</sup> p < .00; \*\* p < .05; \*\*\* p < .01

Figure 9 displays the relationship between internet use and life satisfaction for Polite individuals. It is observed how for the more correctness individuals, the relationship between the use of the Internet and the satisfaction is weaker than for the rude ones. Inclinations of slopes at different levels of the profile (low, medium, up) differ slightly because the coefficient of interaction is very low. Thus, it could be concluded that there exists moderation, although slight.

In the end, conclude, as the fewer correctness individuals present greater Internet use, for them. For the most correct individuals, the importance of using the Internet related to their relationship between internet use and life satisfaction is less intense than for the other ones.

#### Discusión

Our study concludes Internet use, in general, influences positively on WB perception of individuals.

Comparing with previous research, there exists a discrepancy between some effects of Internet use and WB perception, for instance, some studies argue that Internet use is positively correlated with depression, loneliness, and stress (Kraut et al., 1998; Kraut et al., 2002), while others defend that Internet use decrease loneliness and depression significantly, and perceived social support and self-esteem increase significantly (Rains & Young, 2009; Shaw & Gant, 2002; Steinfield et al., 2008). However, there has been a recent consensus consistent depending on the use of the Internet; it affects in one or other way. For instance, communicating online with close friends and family declines in depression, loneliness, and stress, while other uses of the Internet, including gaming, searching information, entertainment or communicating online with weaker ties, generate worse impact (Kraut & Burke, 2015). And also, it is crucial to distinguish among social and emotional loneliness to predict effects explained before (Nowland et al., 2018).

Thus, Internet can be highly advantageous, and have positive effects on users and its WB providing significant benefits for WB (Kostić-Opsenica & Panić, 2017; Lifshitz

et al., 2018; Khalaila & Vitman-Schorr, 2018 among others); however the risks of adverse outcomes are real, and the negative effects or compulsive use behaviours should not be neglected (Muusses et al., 2014; Raccanello et al., 2017). Furthermore, Internet can make people demand to be connected at any time and anywhere, fact that could affect negatively their stress levels and mental health affecting by the end to their WB (Çikrıkci, 2016) and consequently also been associated with insomnia, depression, anxiety, and self-esteem (Younes, et al. 2016).

From our point of view, personal values influence the impact of Internet use, so, it could not be generalized one or other effect. It depends on individual's personality.

Overall different profiles increase life satisfaction when they increase the frequency of internet use. Furthermore, personal values also influence internet use and life satisfaction, although that influence differs depending on the frequency of use. While for individuals that use internet with fewer frequency personal values may influence at greater extent their WB perception, for individuals that use it daily differences among low-medium-high profiles tend to be closer. It would be interesting to analyze type of use or diversity of activities people do on Internet, because, it could influence results and conclusions; however, ESS data did not provide that information, so it could not been examined. By contrast current study offers a wide information about personal profiles, WB and Internet Use that provide interesting results.

Specifically, our results indicate influence of each profile is:

- For Curious individuals, the level of curiosity is positively related to life satisfaction and internet use; and furthermore, internet use moderates the relationship of life satisfaction. For lower curious profile internet use influences at slightly major extent satisfaction than for higher curious profile.
- For Ambitious individuals, the grade of ambition is negatively related to life satisfaction, although Internet use on this profile is not significative, and it marks a tendency. Among more ambitious individuals, the relationship between internet use and life satisfaction tend to be stronger than among lower ambitious ones.
- For Altruistic individuals, the level of altruism is pos-

- itively related to life satisfaction and internet use. The most supportive individuals present a lower influence of internet use on life satisfaction than less altruistic ones.
- At last, for Polite individuals, the level of correctness does not influence life satisfaction, although it affects internet use and moderates relationship among internet use and life satisfaction. The most correctness individuals present the lower Internet use they do, due to for them the importance of using the Internet related to their relationship between Internet Use and Life Satisfaction is less intense than for the other ones.

Present research only has considered data related to the frequency of use, and it could not be linked to time spent online, neither type of use or channel or device used to connect to the Internet, individuals do. Further research should consider those variables to reinforce the relationship between internet use and personality of individuals and WB, taking into consideration the impact of compulsive internet use or other adverse effects the internet has.

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