THE INTERNET AND VALUES IN SOCIETY: HIGHER EDUCATION STUDENTS’ PERSPECTIVES

INTERNET Y VALORES EN LA SOCIEDAD: PERSPECTIVAS DEL ALUMNADO DE EDUCACIÓN SUPERIOR

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RESUMEN
Se vive en una sociedad interconectada y mediada por Internet, asumiendo gran importancia en las relaciones humanas y observando la progresiva degradación de los valores sociales, tanto en la escuela, como en la sociedad. Por ello, en el ámbito educativo y formativo de la Enseñanza Superior, se defiende la necesidad de cultivar valores para vivir mejor en sociedad como uno de los referentes sustanciales para la construcción y transmisión de valores sociales. Esta reflexión se desarrolla a partir de los datos obtenidos a través de un cuestionario, una muestra de 255 estudiantes del área de Educación, dos instituciones de educación superior, una española y otra portuguesa. Se buscó apreciar la percepción de los estudiantes sobre la promoción de valores y contravalores en Internet, así como la atención que se les da en la comunicación, a través de Internet, con colegas, amigos y familiares. De los valores a los que los estudiantes prestan especial atención, se destacan: respeto, igualdad, libertad, honestidad y amistad. De los contravalores enfatizados por los estudiantes se destacan desigualdad, deshonestidad, egoísmo, falta de respeto, inseguridad, irresponsabilidad, manipulación, opresión y violencia. En la comunicación a través de Internet, los estudiantes opinan que se promueven los valores y los contravalores referidos. En la comunicación con los colegas, amigos y familiares, los valores se consideran a menudo.

PALABRAS CLAVE
Valores Sociales; Contravalores; Internet; Educación Superior; Educación; Comunicación.

ABSTRACT
We live in a society interconnected and mediated by the Internet, which has assumed a paramount role within human relations, where we witness a progressive decay of social values both at school and in society. Therefore, considering the area of Higher Education, the need for nurturing values conducive to a better life in society is viewed as one of the substantial references for the construction and transmission of social values. This reflection is developed from data obtained by questionnaire to a sample of 255 undergraduates in the Education field, from two higher education institutions, a Spanish one and a Portuguese one. The aim was to assess the undergraduates’ perceptions on the promotion of values and counter-values over the Internet, as well as the consideration they give them while communicating online with colleagues, friends, and relatives. Among the values most remarked by students, the following stand out: respect, equality, freedom, honesty, and friendship. Among the counter-values emphasised by students, the authors highlight those of inequality, dishonesty, selfishness, disrespect, insecurity, irresponsibility, manipulation, oppression, and violence. The students believe that the abovementioned values and counter-values are promoted within online communication. Furthermore, such values are frequently taken into account when they communicate with colleagues, friends and relatives.

KEYWORDS
Social Values; Counter-values; the Internet; Higher Education; Education; Communication.
1. INTRODUCTION

This article falls within the issue associated with the perception on the promotion, identification and use of values within undergraduates’ online communication.

It is a duty of each teacher or educator to know their students, since only by knowing their students will they be able to meet their needs, goals and aspirations. As educational institutions have a key role in the development of the society they integrate, the challenge lies in attempting to know students better through the perception that they have regarding the existence of values and counter-values and the consideration they give them within their relationships with others, namely when communicating online, especially when communicating with colleagues, friends and relatives. This reflection is of the utmost importance since as highlighted by Matssura (2006), ethical reflection is a delicate exercise because it requires a sense of anticipation, it must not aim at describing values but at understanding how they can be transformed and how they can transform people.

Although the Internet is global, its users work individually and are affected by different cultural values (Bagchi, Kirs, & Choden, 2015).

The influence of the media and of the Internet on people’s culture, lifestyle and acquisition of values is clear. It permeates daily life and requires a critical analysis which avoids the escalation of misinterpretations and misunderstandings of messages emitted from such varied contexts (García-Ruíz, Ramírez, & Rodríguez, 2014).

In this line of thought, this work is presented after looking into undergraduates’ opinions on how they actually perceive the use and consumption of online information and on the values and counter-values immersed in the process.

1.1. VALUES IN SOCIETY

Given the current society, there is an imperative need to develop axioms and critical judgements cut off from the massive influence of screens, audio-visual contents, technologies and social networks. Such need is complex but paramount for the construction of citizenship based on dialogic and democratic principles.

The processes for learning and acquiring the values we live in, sometimes called invisible learning (Movarec & Cobo, 2011), are not only fed by face-to-face relationships but also by personal interactions via digital means, technologies and social networks which are changing our way of being, living and connecting in society (Castells, 2001; Martín-Barbero, 1999; O’Sullivan, 2003; Area & Ribeiro, 2012; Bauman, 2014; Fombona & Martín, 2016).

The new Generation Z, digital natives, millennials, or the on-off generation live this type of relationship from their early years, being the children and students of the network society, inhabitants of the digital environments (Deuze, 2011). They are now attending higher education and demand new skills and abilities that may cross borders, teaching and learning models that are adapted to their needs, immersed in a media ecosystem which requires new methodologic perspectives. At an individual level, several universities already incorporate innovating models that integrate the Internet and current technologies into the classroom (Adams-Becker et al., 2017). However, questioning measures of intervention, monitoring and education in the abovementio-
ned line of action requires previous research and studies which really reflect the perceptions of those students regarding the media and the technologic world they live in due to the Internet, since ‘there is an equal need to be capable of managing communication as far as ideology and values are concerned, since intentionally or unintentionally, explicitly or indirectly, every message in the media carries some values ideology’ (Figueras-Maz, Ferrés, & Mateus, 2018).

The importance of the Internet within society has increased sharply, as observed in various studies, namely in the study conducted by the European Union Statistics Office [Eurostat] (2016) on the access and use of the Internet in the European Union (EU), where over 80% of the Europeans ranging from 16 to 74 years old use the Internet by means of diverse equipment, namely mobile phones or smartphones (79%), laptops or netbooks (64%), desktop computers (54%), and tablets (44%). As far as Portugal is concerned and with regard to Internet access, 68% access at least once a week and 60% access it daily. As for Spain, 76% access the Internet at least once a week and 67% access it daily. Both Portugal and Spain are below the European mean of 79% and 71%, respectively. However, when analysing the age group between 16 and 24 years old, the numbers show that in Portugal, over 95% use the Internet regularly (Pordata, 2017).

Likewise, the data published in 2017 by the OECD (OECD, 2017) revealed that the amount of Internet users in Portugal is of 77.9% and the number of registered Facebook accounts is 5.8 million, for a population of 10.3 million. In Spain, the percentage of Internet users is 92.6% and the number of Facebook subscribers is 23 million, for a population of 46.4 million.

Although it is possible to identify, with a certain level of certainty, the social networks most used in each moment worldwide, their characterisation is always incomplete, not only due to the dynamism of their potentialities and aims of use, but also to the wide diversity of audiences and the interests permanently involved.

In any country, people may have contrasting perspectives over the Internet. This is clear from daily conversations as well as from debates over issues such as online content and privacy regulation. It does not necessarily mean that some people are right and others wrong, but that groups of individuals are susceptible of having different values, attitudes and beliefs regarding the Internet, that is, online debates can be moulded by different Internet cultures (Dutton & Blank, 2015).

Given the increase of Internet use, especially by higher education students, there is an increasingly necessary deeper understanding of ICT individual use in the presence of diverse cultures, values and counter-values.

Schwartz (1994) defines values as transversal goals, which serve as principles guiding a person or a social entity’s life, and whose importance varies according to social and cultural contexts. According to the same author, implicit to the definition of values as goals, these serve the interests of some social entity, motivate the direction and the emotional intensity of an action, work as patterns to evaluate and justify an action, and are acquired through socialisation or through individual learning experiences.

Values have represented a central concept within social sciences since their birth, they are used to characterise cultural groups, societies and individuals, to detect changes over time, and to explain motivational bases for attitudes and behaviours (Schwartz, 2012).
In 2012, Schwartz et al. added to the ten basic goals defined by Schwartz (2006) the motivational components, which are defined as follows:

- Self-direction – Freedom of thought and action
- Stimulation – Excitement, novelty and challenge
- Hedonism - Pleasure
- Achievement – Success according to social patterns
- Power – Social recognition, wealth and power through control over people and resources
- Security – Stability of society in general
- Conformity – Compliance with rules, laws and formal duties
- Tradition – Respect, commitment and acceptance of cultural, family or religious traditions
- Benevolence – Preservation and enhancement of the welfare of the people whom one is in frequent personal contact
- Universalism - Understanding, appreciation, tolerance, and protection of people and nature.

Moral values favour the humanisation process, but their absence jeopardises intrinsically such humanisation, which is why moral values are prescriptive or compulsory for all (Gil, 1998).

When we think of values, we think of what is important to us in life. Each one of us possesses various values (e.g. achievement, security, benevolence) with various levels of importance. One particular value may be highly important to one person but irrelevant to another (Schwartz, 2012).

The value is a moral imperative which leads to action, which does not only reveal what needs to be done but also our preference. According to Rokeach (1979), values are basic conceptions of what is desirable within a community and within each individual. As ideals, values represent criteria or norms which guide not only actions but also judgements, choices, attitudes, assessments, arguments, exhortations, rationalisations, and even causal attributions.

Resweber (2002) defines value as an image of what is desirable, in the sense that it encompasses each individual’s aspiration and representation of themselves and of the object of desire.

Schwartz (2006) built the Schwartz Value Survey, in which data from a sample of 67 countries was used to sustain the theoretical structure referring the general underlying motivations which can be in the basis of the organisation of any system of values. However, people can vary substantially with regard to the importance they give to the values they relate to the ten basic values. Despite this, it was found that the structure of motivational oppositions and compatibilities organising them is apparently unaltered, thus enabling the study of systems of values as a whole, contrarily to the impracticable task of studying each value in isolation.

Therefore, values influence our attitudes, perceptions and attributions, our actions and our words, in a nutshell, our social experience.

1.2. DEMOCRATIC AND PARTICIPATORY CITIZENSHIP: DIGITAL LITERACY PROCESSES AND VALUES WITHIN HIGHER EDUCATION
The processes of digital literacy and education for the media may become indisputable elements in each person’s vital processes (Frau-Meigs & Torrent, 2009). Therefore, if the Internet is, lives and influences interpersonal relationships and the acquisition of values, it is necessary to endow its users so as to make them aware and knowledgeable of the cultural and communicational environment they live in as well as of the symbolic environment created by others who are the mediators between reality and the person as well as between persons (Doval-Avendaño, Quintas, & Sotomayor, 2018).

Promoting students’ integration in society and contributing to the construction of a democratic citizenship, capable of critically and actively receiving, processing and producing digital and audio-visual contents, is the way to contribute to the individual’s full development in the several educational contexts and in higher education in particular (Rabasco & Liaño, 2011; García-Ruiz, Ramirez-Garcia, & Rodriguez-Rosell, 2014).

It is certain that ‘the Internet not only enables us to be just one click away from thousands of gigabytes of information on any topic, but also exposes us as persons to the rest of the world’ (Rius, Roca, & Marin, 2018). Such exposure to the Internet and to its circulating messages and information requires the education of active users (Sanchez & Aguaded, 2009), since the ability to communicate online does not imply a person’s responsible and civic participation, but the latter is necessary for the construction of a democratic and respectful society which may overcome the current barriers of a society experiencing a crisis of values (Berríos & Buxarrais, 2013; Arenas, 2015).

Within the context of higher education, there is a need for training that may lead to a citizenship that is critical and reflexive before the massive influence of contents edited, published and consumed online, where values and counter-values appear both explicit and implicitly. We must rethink the way contents are developed as well as the moral judgement and the personal and social values of university students and consequently, also of society (Ferrés & Piscitelli, 2012). There is a need for citizens to be responsible and act according to ethical principles that are meaningful and promote a democratic and participatory society (Gozálvez, 2013), as the stepping stone to each person’s moral and autonomous development, needed for the development of a plural, equitable and fair society (Caldeiro, 2014).

Therefore, ‘the time has come to conduct a reflection on the power or influence that the media has over citizenship’ (García-Ruiz, Gómez, & Vázquez, 2015), to understand how the values present in online digital relationships are presented and consumed, and how they are assimilated by people, especially by higher education students (Colina, 2012), who are being moulded as active citizens within society. Also, and consequently, it is necessary for higher education to educate students towards values, given its focus on the training of future professionals, despite the terminological and practical complexity implied (Abundis, 2012; Manzano, 2015).
2. AIMS

2.1. RESEARCH QUESTIONS

The research questions underlying this study were the following:

- What values do undergraduates advocate for living in society?
- Do Portuguese and Spanish students advocate similar values?
- Does online communication promote social values?
- What values do undergraduates use when communicating online with friends, colleagues, and relatives?
- What counter-values hinder life in society?
- Does online communication promote social counter-values?
- What consideration do undergraduates give to counter-values when communicating online with friends, colleagues, and relatives?

2.2. RESEARCH GOALS

In order to answer the abovementioned research questions, the following goals were set:

- Identify values undergraduates advocate for living in society;
- Assess whether Portuguese and Spanish students advocate similar values for living in society;
- Assess the promotion of social values in online communication;
- Determine the use of values by undergraduates when communicating online with colleagues, friends, and relatives;
- Identify counter-values undergraduates find hindering to life in society;
- Determine the consideration given to counter-values by undergraduates when communicating online with colleagues, friends, and relatives.

3. METHODOLOGY

3.1. POPULATION AND SAMPLE

The data for this research was obtained in the academic year of 2016/2017, from a sample of 255 undergraduates attending two higher education institutions, one in Portugal (53.7%) and the other in Spain (46.4%). The sample subjects attend bachelor degree courses of the 1st Cycle of Bologna, in the field of Education; 51 (20%) are male and 204 (80%) are female. The minimum age is 17 years old and the maximum is 56 years old, the age mean is 20.4, the median 19 and the mode 18 years old; standard deviation is 4.4. The respondents attend the 1st year of the degree course (67.5%), the 2nd year (29.8%), and the 3rd year (2.7%).
3.2. STUDY CHARACTERISATION

The study can be considered exploratory, mixed, assuming features close to quantitative research as well as others close to qualitative research, namely interpretive and descriptive approaches. The study assumes descriptive features since no procedures were developed of statistic inference associated with the manipulation of independent variables and with the analysis of their influence over dependent variables, but particular emphasis was given to the description of observations related to the values of the variables under study.

The data was obtained by conducting a questionnaire, validated by specialists in education area, containing both open and closed questions. This study has a strong interpretive component, since the data comes from open questions, thus implying a permanent interpretation of the subjects’ answers by the authors of the study so as to identify the analysis units, define categories, and integrate the recording units into the adequate categories. When defining the categories, there was a concern to be rigorous in the mediation process used, especially regarding exhaustiveness and exclusiveness, that is, all the opinions were considered in the data analysis and the several categories are disjoint, making it impossible for recording units to belong to more than one category.

The data was treated by means of a classifying content analysis, according to the semantic sense of the opinions identified in the students’ answers.

According to Bardin (2015), content analysis is a set of techniques of analysis of communications which uses systematic and objective procedures of description of the messages content. The same author defines recording units as units of meaning to be encoded, corresponding to the content segment to be considered as a basic unit, aiming the categorisation and frequency of occurrence of that same basic unit.

Normally, when the data comes from open questions, the analysis unit corresponds to each meaningful statement identified in the answers, and the recording unit corresponds to each of the encoded analysis units. This is followed by the respective categorisation and integration of the recording units into the respective categories. After the categories have been defined, one table is presented for each question, showing both the categories and the respective representativeness in terms of absolute frequency and relative frequency. The grouping criteria for defining the categories can be: semantic (meaning), syntactic (syntax), and expressive (significant) (Bardin, 2015). In this study, focus was laid on the semantic meaning of the expressions. For the same author, the recording unit is the unit of meaning to be encoded and corresponds to the content segment to be considered as a basic unit, aiming at categorisation, counting and frequency.

Among the procedures associated with data analysis, the authors highlight reading all the answers to each question, defining one analysis unit for the subjects’ answers to each question, identifying and encoding the recording units, and subsequently, by semantic approximation, regrouping the recording units into categories.

After integrating the recording units into categories, frequency tables were built which show the categories as well as the number of units integrating them and the respective percentage according to the whole of the recording units identified. This is followed by a brief descriptive analysis of the information contained in the figures and tables.
Hereafter is the presentation, analysis and discussion of the results obtained.

4. RESULTS

The results are organised in three main topics, designated as follows: Values the undergraduates advocate for living in society; Values the undergraduates use when communicating online with colleagues, friends and relatives; Counter-values hindering to life in society. With regard to the first topic, a global analysis is presented of the values for living in society highlighted by the whole of the sample, followed by a brief appraisal of the data concerning the two subsets of the sample, namely the set composed of the Portuguese students and that composed of the Spanish students. The second topic focuses on assessing the perception of students on the promotion of social values via the Internet and the consideration they give them when communicating online with colleagues, friends and relatives. In the third topic, students’ perceptions are assessed with regard to the counter-values which hinder life in society as well as the consideration they give to such counter-values when communicating online with colleagues, friends and relatives.

These topics are developed in the following sections.

4.1. VALUES ADVOCATED BY STUDENTS FOR LIVING IN SOCIETY

In order to obtain students’ perceptions regarding the values they advocate for living in society, the authors analysed the sample subjects’ answers to the following question: ‘Write down the values you advocate for living in society.’ The 255 respondents gave 863 opinions, in which 52 different values were identified, with percentages associated with the values identified varying from 0.1% to 2.3%. Figure 1, presented below, represents a chart displaying the 10 values corresponding to the highest percentages of occurrences within the total of the opinions expressed by the sample subjects.

Figure 1: Values advocated by undergraduates for living in society (863 opinions)

![Graph showing the values advocated by undergraduates for living in society](source: own elaboration)
The values of respect, equality, freedom, honesty, solidarity, friendship, responsibility, cooperation, empathy and justice, represented in Figure 1, were referred by percentages of occurrences ranging from 2% to 25%.

The values whose occurrences ranged between 1% and 2% were: companionship, sincerity, love, security, tolerance, and humbleness.

The values referred the least frequently by the students, under 1% of frequency, were: communication, trust, peace, education, understanding, assertiveness, family, fraternity, loyalty, aid, civility, generosity, acceptance, amiability, conviviality, harmony, mutual aid, conflict resolution, joy, coherence, diversity, happiness, flexibility, logics, patience, participation, sharing, forgiveness, conducive to change, simplicity, bravery, life, team work, appreciation, and truth.

Although the sample is composed of higher education students all training to be teachers, the authors tried to look into possible differences among the values advocated since the subjects attend two different institutions located in different, however close, countries. No statistically significant differences were sought, but only trends which may open new research projects in the domain of social values.

Thus, among the 255 sample undergraduates, 137 are Portuguese and 118 are Spanish, and they expressed 438 and 425 opinions, respectively, which leads to the conclusion that each Portuguese student emitted an average of 3.2 opinions, whereas each Spanish student emitted an average of 3.6 opinions. Within the Portuguese students’ opinions, 33 values were identified against 39 values found in the Spanish students’ opinions. Therefore, the Spanish students emitted a higher average of opinions and consequently, a higher number of values than the Portuguese subjects.

Among the common values mentioned by the undergraduates from both institutions, the authors highlight the following: respect, equality, honesty, freedom, friendship, solidarity, responsibility, cooperation, security, peace, sincerity, understanding, education, justice, tolerance, companionship, trust, empathy, humbleness, and loyalty.

The following values, among others, were put forward only by the Spanish subjects: love, family, aid, generosity, amiability, joy, coherence, happiness, and flexibility. Among the values referred only by the Portuguese students, the authors stress: fraternity, civility, harmony, mutual aid, forgiveness, simplicity, appreciation, and truth.

Therefore, the results show that several values are advocated only by the subjects from one of the institutions and that many values are common to the students from both institutions, among which the most representative are: respect, equality, freedom, friendship, and solidarity.

In Figure 2, the values advocated by the students of both institutions are presented in a descending order.

The frequency and priorities given to values by the undergraduates attending the Spanish and the Portuguese institution are usually different; however, respect and equality are among the most highlighted by the students from both institutions.
4.2. PROMOTION OF SOCIAL VALUES VIA THE INTERNET AND THEIR USE WHEN COMMUNICATING ONLINE WITH COLLEAGUES, FRIENDS AND RELATIVES

Assuming that values are greatly important in social relations, and that the Internet currently constitutes the main means of communication, it was our concern to determine whether the sample subjects of this research think that the Internet promotes social values, as well as to analyse the importance they give to values when communicating online with their closest ones, that is, their colleagues, friends and relatives.

In order to assess students’ perceptions regarding the promotion of values on the Internet, the answers to the following question were analysed: ‘Do you think that Internet use promotes the values of: a) friendship, b) cooperation, c) creativity, d) honesty, e) equality, f) freedom, g) respect, h) responsibility, i) solidarity, and j) others. Which?’

The results are presented in Table 1.
By observing Table 1, and taking into account the percentages of answers associated with ‘many times’ and ‘always’, the majority of subjects, over 60%, consider that the use of the Internet promotes the values of: friendship, cooperation, creativity, freedom, and solidarity. On the other hand, the percentages obtained for ‘few times’ and ‘never’ show that over 60% believe that the Internet does not promote the values of honesty and respect.

The option ‘others’ obtained a very low number of answers, among which the following stand out: empathy, love, commitment, and loyalty.

The importance given to values by students when communicating online with their colleagues, friends and relatives was determined from the answers given to the following three questions, ‘When using the Internet to communicate with colleagues/friends/relatives, do you consider the values: a) friendship, b) cooperation, c) creativity, d) honesty, e) equality, f) freedom, g) respect, h) responsibility, i) solidarity, and j) others. Which?’ Note that this expression synthesises three different questions: one regarding colleagues, another concerning friends, and another about relatives. The results, expressed in percentages, are presented in Table 2.
The results presented in Table 2 indicate that students give significant consideration to values when communicating with colleagues, friends and relatives, given the high percentages of answers for the options ‘many times’ and ‘always’.

It is also noteworthy that besides the specified values, under 5% of the subjects put forward other values, among which the authors stress: love, companionship, understanding, empathy, gratitude, justice, loyalty, sociability, sincerity, and tolerance, when communicating with colleagues; amiability, love, trust, understanding, empathy, humour, loyalty, friendliness, and sincerity, when communicating with friends; and amiability, love, trust, kindness, tolerance, justice, sincerity, empathy, loyalty, and understanding, when communicating with relatives.

Aiming to look into possible statistically significant differences between the importance given to values when communicating online with colleagues, friends, or relatives, the decision was made to proceed to convention, thus enabling the transformation of qualitative data into quantitative data. Therefore, each option of answer was given the following correspondence: No response (NR) – 0, Never (N) – 1, Few times (FT) – 2, Many times (MT) – 3, Always (A) – 4.

By using this convention, the data can be treated admitting a scale of 0 to 4 points, where 0 (zero) represents the minimum and 4 the maximum. Thus, it is possible to calculate the mean of the scores given to values within the various options of answer.

Given the presented convention, the results regarding the consideration given to values by students when communicating online with colleagues, friends and relatives were translated into means of scores obtained and are presented in Table 3.

<table>
<thead>
<tr>
<th>Values</th>
<th>Colleagues</th>
<th></th>
<th></th>
<th></th>
<th>Friends</th>
<th></th>
<th></th>
<th></th>
<th>Relatives</th>
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<tbody>
<tr>
<td></td>
<td>N</td>
<td>FT</td>
<td>MT</td>
<td>A</td>
<td>NR</td>
<td>N</td>
<td>FT</td>
<td>MT</td>
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<td>NR</td>
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<td>38.8</td>
<td>54.5</td>
<td>0.0</td>
<td>0.4</td>
<td>0.4</td>
<td>16.5</td>
<td>82.4</td>
<td>0.4</td>
<td>1.6</td>
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<td>40.4</td>
<td>49.8</td>
<td>1.2</td>
<td>0.8</td>
<td>4.7</td>
<td>31.4</td>
<td>62.0</td>
<td>1.2</td>
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<td>Creativity</td>
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<td>18.8</td>
<td>47.1</td>
<td>32.5</td>
<td>1.2</td>
<td>2.0</td>
<td>16.1</td>
<td>34.5</td>
<td>46.3</td>
<td>1.2</td>
<td>5.1</td>
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<td>38.0</td>
<td>52.2</td>
<td>0.8</td>
<td>0.8</td>
<td>1.6</td>
<td>26.3</td>
<td>71.0</td>
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<td>54.1</td>
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<td>0.8</td>
<td>1.6</td>
<td>24.7</td>
<td>72.2</td>
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<td>56.1</td>
<td>0.8</td>
<td>0.8</td>
<td>0.4</td>
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<td>36.5</td>
<td>51.0</td>
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<td>3.5</td>
<td>27.8</td>
<td>66.7</td>
<td>1.2</td>
<td>0.4</td>
</tr>
</tbody>
</table>

Caption: N – Never; FT – Few times, MT – Many times, A – Always, NR – No Response

Source: own elaboration
Table 3: Consideration given to values on the Internet, when communicating with colleagues/friends/relatives (n=255)

<table>
<thead>
<tr>
<th>Values</th>
<th>Colleagues (means)</th>
<th>Friends (means)</th>
<th>Relatives (means)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friendship</td>
<td>3.48</td>
<td>3.80</td>
<td>3.56</td>
</tr>
<tr>
<td>Cooperation</td>
<td>3.38</td>
<td>3.52</td>
<td>3.53</td>
</tr>
<tr>
<td>Creativity</td>
<td>3.09</td>
<td>3.23</td>
<td>3.12</td>
</tr>
<tr>
<td>Honesty</td>
<td>3.41</td>
<td>3.67</td>
<td>3.64</td>
</tr>
<tr>
<td>Equality</td>
<td>3.47</td>
<td>3.67</td>
<td>3.60</td>
</tr>
<tr>
<td>Freedom</td>
<td>3.46</td>
<td>3.70</td>
<td>3.63</td>
</tr>
<tr>
<td>Respect</td>
<td>3.65</td>
<td>3.71</td>
<td>3.78</td>
</tr>
<tr>
<td>Responsibility</td>
<td>3.48</td>
<td>3.56</td>
<td>3.66</td>
</tr>
<tr>
<td>Solidarity</td>
<td>3.33</td>
<td>3.58</td>
<td>3.60</td>
</tr>
</tbody>
</table>

Convention: No response – 0, Never – 1; Few times -2; Many times -3, Always - 4

Source: own elaboration

The observation of Table 3 evidences that in the 0-4 scale, the means are very high and quite close for each of the values, which is why the authors did not proceed to the statistical analysis to assess the statistical significance of the differences in online communication with colleagues, friends or relatives.

In order to facilitate the interpretation of the data, the percentages corresponding to ‘many times’ and ‘always’ were added for each of the values regarding online communication with colleagues, friends and relatives. Such results are displayed in Table 4.

Table 4: Percentages of the consideration given to values when communicating online with colleagues/friends/relatives regarding the options Many Times and Always (n=255)

<table>
<thead>
<tr>
<th>Values</th>
<th>Colleagues MT+A (%)</th>
<th>Friends MT+A (%)</th>
<th>Relatives MT+A (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friendships</td>
<td>93.3</td>
<td>98.9</td>
<td>91.0</td>
</tr>
<tr>
<td>Cooperation</td>
<td>90.2</td>
<td>93.4</td>
<td>92.9</td>
</tr>
<tr>
<td>Creativity</td>
<td>79.6</td>
<td>80.8</td>
<td>75.3</td>
</tr>
<tr>
<td>Honesty</td>
<td>90.2</td>
<td>97.3</td>
<td>95.7</td>
</tr>
<tr>
<td>Equality</td>
<td>94.5</td>
<td>96.9</td>
<td>94.1</td>
</tr>
<tr>
<td>Freedom</td>
<td>92.2</td>
<td>98.4</td>
<td>95.3</td>
</tr>
<tr>
<td>Respect</td>
<td>96.1</td>
<td>96.4</td>
<td>98.8</td>
</tr>
<tr>
<td>Responsibility</td>
<td>93.7</td>
<td>93.7</td>
<td>95.7</td>
</tr>
<tr>
<td>Solidarity</td>
<td>87.5</td>
<td>94.5</td>
<td>93.7</td>
</tr>
</tbody>
</table>

Caption: MT – Many Times, A – Always

Source: own elaboration

As far as online communication with colleagues is concerned, the sum of the percentages regarding options ‘many times’ and ‘always’ shows that the percentages of the consideration given to values range from 79.6% for the value of creativity to 96.1% for the value of respect. In a
descending order of importance, the sample subjects consider the following values: respect, equality, responsibility, friendship, cooperation, honesty, freedom, solidarity, and creativity.

In the same line of reasoning, the results evidence that when communicating online with friends, the percentages of consideration given to values vary between 80.8% for creativity and 98.9% for friendship. In a descending order of importance, the values taken into account when communicating with friends are: friendship, freedom, honesty, equality, respect, solidarity, responsibility, cooperation, and creativity.

With regard to online communication with relatives, the sums of the percentages concerning the given options range from 75.3% for creativity to 98.8% for respect. The descending sequence of values considered important in online communication with relatives is as follows: respect, honesty, responsibility, freedom, equality, solidarity, cooperation, friendship, and creativity.

Note that the level of importance given to the same values when communicating online differs according to whether the subjects are communicating with colleagues, friends or relatives. The two values shown to be given consideration most frequently when communicating online are: respect and equality with colleagues, friendship and freedom with friends, and respect and honesty with relatives.

Related studies identifies the most important values in interaction with others: to be respected, safely (Costa, 2008), dialogue, solidarity, equality and participation (Novak, 2008). The importance of respect, equality and solidarity in communication are also valued with this study.

Pires (2012) developed a study about the most important qualities to students and it was identified responsibility (89%), be tolerant and respect others (88%), good manners (81%), worker (54.6%), determined and perseverance (49.6%), equality and not be selfish (49.4%). These results are in accordance with this study in the values of responsibility, respect others and equality.

Values and ICT use was also related in a multinational study in 25 European countries, that provides empirical evidence that individuals are guided by particular values (Choden, Bagchi, Udo, & Kirs, 2019).

4.3. COUNTER-VALUES HINDERING LIFE IN SOCIETY AND THE CONSIDERATION THEY ARE GIVEN IN ONLINE COMMUNICATION WITH COLLEAGUES, FRIENDS AND RELATIVES

In order to identify the counter-values considered by students to hinder life in society, the subjects were asked to answer the following question: ‘Write down the counter-values that hinder life in society.’

The answers given by the 255 sample subjects produced 696 expressions indicating 67 different counter-values. Among those 67 counter-values, the percentages of occurrences vary between 0.2% and 37.6%. Therefore, the counter-values which registered highest numbers of occurrences, presented in a descending order, were: selfishness, inequality, violence, disrespect, dishonesty, manipulation, oppression, insecurity, irresponsibility, jealousy, injustice, lying, intolerance, and racism.
Among others, and each one of them with percentages of occurrence below 2%, the authors highlight the counter-values of hatred, hypocrisy, aggressiveness, deceit, greed, xenophobia, indifference, and individualism.

Since the sample involves students from two institutions in two different countries, Figure 3 presents, in a descending order of frequency, the counter-values most emphasised in each of the countries.

**Figure 3: Values highlighted, in a descending order; Portuguese Institution; UC – Spanish Institution**

<table>
<thead>
<tr>
<th>Counter-values</th>
<th>Portuguese Institution</th>
<th>Spanish Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selfishness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Violence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disrespect</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inequality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manipulation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dishonesty</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insecurity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oppression</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Irresponsibility</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jealousy</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: own elaboration*

The identification of students’ perceptions on the promotion of counter-values via the Internet was conducted from the answers given to the question ‘Do you consider that Internet use promotes the counter-values of: a) inequality, b) dishonesty, c) selfishness, d) disrespect, e) insecurity, f) irresponsibility, g) manipulation, h) oppression, i) violence, and j) others. Which?’ The question admitted the options of answer ‘never’, ‘few times’, ‘many times’, and ‘always’.

The results of the answers given by the students are summarised in percentages in Table 5.

**Table 5: Promotion of counter-values on the Internet (n=255)**

<table>
<thead>
<tr>
<th>Counter-values</th>
<th>Never (%)</th>
<th>Few times (%)</th>
<th>Many times (%)</th>
<th>Always (%)</th>
<th>NR (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inequality</td>
<td>2.7</td>
<td>18.0</td>
<td>66.7</td>
<td>10.2</td>
<td>2.4</td>
</tr>
<tr>
<td>Dishonesty</td>
<td>1.6</td>
<td>18.0</td>
<td>69.8</td>
<td>7.8</td>
<td>2.7</td>
</tr>
<tr>
<td>Selfishness</td>
<td>1.6</td>
<td>14.5</td>
<td>68.6</td>
<td>11.8</td>
<td>3.5</td>
</tr>
<tr>
<td>Disrespect</td>
<td>1.6</td>
<td>12.9</td>
<td>67.8</td>
<td>16.5</td>
<td>1.2</td>
</tr>
<tr>
<td>Insecurity</td>
<td>1.6</td>
<td>14.9</td>
<td>63.5</td>
<td>16.9</td>
<td>3.1</td>
</tr>
<tr>
<td>Irresponsibility</td>
<td>2.4</td>
<td>18.4</td>
<td>64.7</td>
<td>12.5</td>
<td>2.0</td>
</tr>
<tr>
<td>Manipulation</td>
<td>2.7</td>
<td>10.6</td>
<td>67.5</td>
<td>18.0</td>
<td>1.2</td>
</tr>
<tr>
<td>Oppression</td>
<td>4.3</td>
<td>20.0</td>
<td>61.6</td>
<td>11.0</td>
<td>3.1</td>
</tr>
<tr>
<td>Violence</td>
<td>2.7</td>
<td>18.0</td>
<td>65.5</td>
<td>12.2</td>
<td>1.6</td>
</tr>
</tbody>
</table>

*Source: own elaboration*
The sum of the percentages associated with the options ‘never’ and ‘few times’ as well as that of the percentages concerning the options ‘many times’ and ‘always’ allow the conclusion that the majority of answers fall into the options ‘many times’ and ‘always’ for all the counter-values above-mentioned, since the minimum percentage obtained from the sum of these options is 72.6% in the option ‘oppression’, while the highest percentage from the sum regarding the options ‘never’ and ‘few times’ is 24.3% in the option ‘oppression’.

A very low number of answers fell into the option ‘others’, where some of the values mentioned were, among others: lying, injustice, hatred, jealousy, aggressiveness, and intolerance.

In light of this, the authors conclude that the majority of the students’ perceptions tend to the idea that the Internet promotes the following counter-values, among others: inequality, dishonesty, selfishness, disrespect, insecurity, irresponsibility, manipulation, oppression, and violence.

The consideration given to counter-values by students when communicating online with colleagues, friends and relatives was determined according to the answers given to the following three questions: ‘When communicating online with your colleagues/friends/relatives, do you identify the counter-values of: a) inequality, b) dishonesty, c) selfishness, d) disrespect, e) insecurity, f) irresponsibility, g) manipulation, h) oppression, i) violence, and j) others. Which?’ This expression synthesises three different questions, one regarding colleagues, another concerning friends, and another about relatives.

The results are presented in Table 6.

Table 6: Consideration given to counter-values when communicating online with colleagues/friends/relatives (n=255)

<table>
<thead>
<tr>
<th>Counter-values</th>
<th>Colleagues</th>
<th>Friends</th>
<th>Relatives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N+FT (%)</td>
<td>MT+A (%)</td>
<td>NR (%)</td>
</tr>
<tr>
<td>Inequality</td>
<td>80.0</td>
<td>18.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Dishonesty</td>
<td>76.9</td>
<td>20.0</td>
<td>3.1</td>
</tr>
<tr>
<td>Selfishness</td>
<td>68.2</td>
<td>28.2</td>
<td>3.5</td>
</tr>
<tr>
<td>Disrespect</td>
<td>77.6</td>
<td>20.4</td>
<td>2.0</td>
</tr>
<tr>
<td>Insecurity</td>
<td>74.9</td>
<td>21.2</td>
<td>3.9</td>
</tr>
<tr>
<td>Irresponsibility</td>
<td>72.2</td>
<td>25.5</td>
<td>2.4</td>
</tr>
<tr>
<td>Manipulation</td>
<td>77.3</td>
<td>20.0</td>
<td>2.7</td>
</tr>
<tr>
<td>Oppression</td>
<td>83.1</td>
<td>12.9</td>
<td>3.9</td>
</tr>
<tr>
<td>Violence</td>
<td>85.9</td>
<td>12.2</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Caption: N – Never, FT – Few times, MT – Many times, A – Always, NR – No response

Source: own elaboration

The data presented in Table 6 gives evidence that most students give low consideration to counter-values when communicating online with colleagues, friends and relatives. Considering the importance given to counter-values as low whenever the answers fell into the options ‘never’ and ‘few times’, it is observe that when communicating with colleagues, the percentage of answers associated with a low importance given to counter-values ranges from 68.2% for the counter-value ‘selfishness’ to 85.9% for the counter-value ‘violence’. As far as communication with friends is concerned, the percentages vary from 83.5% for ‘selfishness’ and ‘irresponsibility’ to 90.6% for
the counter-value ‘oppression’. Finally, with regard to communication with relatives, the percentages vary between 89.8% for ‘insecurity’ and 93.7% for ‘violence’.

The percentages displayed also show that the students give little consideration to counter-values when communicating online. Such low consideration varies among the values taken into account: inequality, dishonesty, selfishness, disrespect, insecurity, irresponsibility, manipulation, oppression, and violence. The lowest consideration is given to counter-values when communicating with relatives, followed by communication with friends and finally, by communication with colleagues.

The counter-value selfishness are on the top of the consideration of Portuguese and Spanish students. A related study identifies a correlation between the social media use increased with narcissist personality (Kara & Tekin, 2017).

5. CONCLUSIONS

This article reflects on the attention given to values and counter-values on the Internet by higher education students, who also happen to be future teachers, regarding their importance of such values and counter-values to life in society, their promotion and their consideration within the context of online communication with colleagues, friends, and relatives. The results of this study were obtained from data collected by a questionnaire conducted with a sample of 255 undergraduates attending a bachelor degree course in Education in two higher education institutions, one Portuguese and the other Spanish, in the academic year of 2016/2017.

The essential values for living in society that occurred in the answers with higher frequencies were: respect, equality, freedom, honesty, solidarity, friendship, responsibility, cooperation, empathy, and justice. Although with lower frequencies, the following values, among others, were also emphasised: companionship, sincerity, love, security, tolerance, humbleness, trust, peace, education, understanding, assertiveness, family, fraternity, loyalty, aid, civility, and generosity.

The majority of the subjects believe that Internet use promotes the values of friendship, cooperation, creativity, freedom, and solidarity.

When communicating online with colleagues, friends and relatives, the undergraduates give significant consideration to the values of friendship, cooperation, creativity, honesty, equality, freedom, respect, responsibility, and solidarity. Note that besides the specified values with a high frequency of answers, the respondents put forward other values, among which are those of love, companionship, understanding, empathy, gratitude, justice, loyalty, sincerity, and tolerance.

The level of importance given to the same values when communicating online is different according to whom they are communicating with: colleagues, friends, or relatives. The two values considered with the highest frequency when communicating with colleagues are those of respect and equality; when communicating with friends, the two main values are those of friendship and freedom; and when communicating with relatives, students give most emphasis to the values of respect and honesty.
The majority of the respondents have the perception that the Internet promotes the following counter-values, among others: inequality, dishonesty, selfishness, disrespect, insecurity, irresponsibility, manipulation, oppression, and violence.

Most students give little consideration to counter-values when communicating online with colleagues, friends, or relatives. The importance given varies among the counter-values analysed. The lowest consideration is given to counter-values by the students when communicating with relatives, followed by communication with friends, and finally, by communication with colleagues.

It is important to all educators and teachers to know youngsters, and especially to know the consideration they give to values and counter-values in their relationship with society, in general, and in their relationships with colleagues, friends and relatives, in particular, since only then it will be possible to bond with them and meet their needs and aspirations.
6. REFERENCES


Colina, L. (2012). La universidad en el contexto de los valores que la identifican. Opción, 28 (69), 546-560.


