**European Journal of Contemporary Education**

ELECTRONIC JOURNAL

## The Strategic Influence of Social Factors on Self-Perceived Happiness of Spanish University Students

Gema Lopez [a], [*], Celia Rangel [b], María Botey-Fullat [c], [d]

[a] Universidad Francisco de Vitoria, Madrid, Spain
[b] Universidad Complutense de Madrid, Madrid, Spain
[c] ESIC Business and Marketing School, Madrid, Spain
[d] ESIC University, Madrid, Spain

**Abstract**

The notion of happiness has been the subject of debate and study for centuries. It has been demonstrated that happiness has a significant influence on the individual achievements and professional goals, a fact that should be taken into consideration in all stages of education, including university studies. The aim of this study is to measure the individual level of happiness of undergraduate students and their relationships with specific aspects that can impact in their happiness, such as family, friends, the university and money. The study made use of the Oxford Happiness Questionnaire (OHQ), as well as items from the Multidimensional Inventory of Students Quality of Life (MIS-QOL), on a sample of 375 undergraduate students in Spain. Structural equation model (SEM) methodology was used to corroborate the significant personal and social causalities of happiness identified in previous studies. The results of the study were (i) the factor which most influences happiness is the perceived quality of relationships with family, followed by (ii) the perceived quality of relationships with friends, and (iii) university students who ascribe greater importance to money have lower levels of happiness. The conclusions support the implementation of practical applications that restore the humanistic spirit of university curricula.

**Keywords:** happiness, university, family, friends, money, OHQ, strategy.

## 1. Introduction

The individual happiness has been a subject of study in literature since the great philosophers of Ancient Greece to the present day (Sellés et al., 2018) given the evident interest in all human beings in achieving it (Vargas, Callata, 2021). Broadly speaking, for Plato, happiness was associated with goodness, in acting morally; for Socrates, happiness represented the ultimate good (Ortiz,

---
[*] Corresponding author
E-mail addresses: Gema.lopez@ufv.es (G. Lopez), cerangel@ucm.es (C. Rangel),
Maria.Botey@esic.university (M. Botey)

2019) while for Aristotle happiness was the supreme good that gives meaning to the individual (Vargas, Callata, 2021). Kant (1946) observed that people do not know how to be happy because happiness may be found in different ways. Alarcón (2006) defines happiness as the state of full subjective satisfaction of an individual.

The study of happiness continues to be a recurrent theme in current literature (McBride, 2010; Vargas, Callata, 2021). There are numerous studies which affirm that happiness depends on a number of factors conditioned by the individual circumstances of the person (Clemente et al., 2000), such as age, gender, place of origin, family, marital status education, health, religion, income or self-conception (Sellés et al., 2018; Ortiz, 2019). For example, many researchers affirm that those who are younger and those who are older consider themselves more happy (López, 2018; Benatuil, 2003); that women are more happy than men (Francis, 1999); that family satisfaction is associated with greater happiness (Rollán et al., 2005), thus, those who are married are more happy than those who are divorced, single or widowed (Grover, Helliwell, 2019); in developed countries, education level is associated with a greater perception of happiness (Argyle, 1999); it has also been found that income level does not have a direct influence on happiness providing one's basic necessities are met (Cuong, 2021). All of these factors can be grouped within two broad notions of happiness: eudaimonic, associated with wisdom, and hedonic, associated with the pleasures of life (Arias et al., 2016).

Apart from the definition, study and understanding of happiness there is also a great deal of interest in its measurement. Quantifying happiness helps give it a value which can be used to compare relevant factors in achieving it. There are a number of methods and systems to quantify happiness. Among the earliest, dating from 1985, is The Satisfaction with Life Scale (Diener et al., 1985) followed by The World Health Organisation Quality of Life Assessment (WHOQOL) (The Whoqol Group, 1998), The Subjective Happiness Scale (SHS) (Lyubomirsky, Lepper, 1999) and The Full Life Versus The Empty Life (Peterson et al., 2005), among others.

Today, happiness, understood as a mood or affective state, is generally considered in important factor for individuals to achieve their personal, professional or material goals (Salazar et al., 2016; De Pablos, González, 2012). The university experience is a key period in personal and professional development (Vargas, Callata, 2021), and it is necessary to understand the factors which may impact the happiness of university students (Bisquerra, 2005). This work aims to explore the emotional plane of university students in order to analyse the variables which influence their happiness and so suggest education policies that go beyond mere education or training for a future job.

According to González-Quiñones et al. (2020), harmonious family relationships reflect a trend similar to that of happiness, so family is a determining cause in the perception of happiness, a feeling considered as a health referent. Also, in Latin America, the relationship between family function an happiness coincides in several studies, an example being found by Arias et al. (2016) in Peru. In addition, Denegri et al. (2015) says another central element that makes adults satisfied with life is Friendship.

Numerous studies have been written about the relationship between money and happiness. Bearing in mind that Western society is based on the welfare society and that certain resources are essential for this, Muresan et al. (2020) finds that happiness increases with individual income up to a threshold of 27,913 euros per year in European countries, but not beyond this threshold. If one considers that the study presented here was carried out in Spain with a group of students with family incomes above the indicated threshold (since they are university students), a negative relationship between the importance given to money and happiness can be suggested.

All this leads to the following hypotheses:

H1: students' perception of their relationships with family and friends impacts their self-perceived happiness.

H2. the importance university students ascribe to money has a negative impact on their self-perceived happiness.

To test these hypotheses, this study begins with an analysis of research into happiness and, specifically, the aspects young people associate with happiness and its measurement. We will then explain the methodology used in the study, the instrument, the results and offer final conclusions.

## 2. Theoretical framework

There are a number of articles which analyse the possible relations between some of these factors (family, friends, university) and happiness. However, the novelty of this study lies in its analysis of the causal interrelation between different factors not only in terms of happiness but also between family, university and friends. Additionally, a separate analysis was made (as binary variables: 1 = it is important, 0= it is not important) of the impact on self-perceived happiness considering the importance students ascribe to money, family and friends, revealing how conceding a great deal of importance to money can have a negative impact on personal happiness.

### 2.1. Concepts associated with happiness according to young people

Young people have a hedonist concept of happiness, associating it with love, friendship, joy and the family (Sellés et al., 2018). Other aspects associated with the happiness of young people are the possibility to communicate their ideas and feelings (Sánchez de Gallardo, Pirela de Faría, 2017), belonging to organisations which favour social contacts (Taylor, 2007), or to have unique moments and experiences (Mogilner, Norton, 2016).

In the West, in countries such as the United States or the United Kingdom, young people associate happiness with material things; while in the East, for example in China, happiness is associated with spiritual or psychological aspects (Lu, Gilmour, 2004); while in Turkey, research shows positive association between personal growth and materialism, also affirming that materialism reduces feelings of wellbeing (Karabati, Cemalcilar, 2010). In the case of Spain, studies have found that young people associate happiness with marriage, to be studying, a certain level of income and to live independently (Ahn et al., 2012).

In the university context, various studies have found that the perception of happiness among students is associated with their emotional resources (Gutiérrez et al., 2013), especially their ties with family, friends and their partner (Mercado, 2014). Other studies associate student happiness with academic success (Vargas, Callata, 2021) and the prospect of completing their studies (Caballero, Sánchez, 2018). There is also research (Al-Naggar et al., 2010) which identifies money as principal source of happiness, followed by positive relationships with friends and family, as well as stability and good health. Regarding the link between money and happiness, there are studies (Cuong, 2021) that state that when people's basic needs are met, there is no directly proportional relationship between the two. Even more recent research in China shows no significant relationship for university students either (Zhou, Palaroan, 2023). In another analysis in China (Hu, 2023), a non-simple linear relationship between income and happiness was found, including for university students, while the negative influence that economic materialism has on the perception of self-perceived well-being and happiness has also been demonstrated (Ahmed et al., 2023). There are also experiments that reveal that when people find time to spend with friends and family and less time working, greater happiness results. Trying to make money involves working more and socializing less, which (although productive) does not increase happiness (Mogilner, 2010). Another study with university students who valued time over money showed they chose more intrinsically rewarding activities and felt happier a year after graduation. These results show that the tendency to value time over money predicts not only everyday consumer choices but also important life decisions (Whillans et al., 2019).

Other studies (Mangeloja, Hirvonen, 2007) have found that the most important aspects in the degree of happiness of university students are: social relations, resources and the educational environment, the achievement of personal goals and extracurricular activities. Another study, conducted with students throughout their university career, identified a pattern characterised by a high degree of positive affect ("chronic happiness") and the concurrence of brief episodes of negative affect (Barker et al., 2016). But the situation in other places highlights the importance of other aspects to be considered. In Pakistan, for example, where terrorism is a fact of daily life, university students feel motivated to study and they feel happy because of their positive academic environment, the behaviour of their teachers, new learning-teaching technologies and good university facilities. Findings also show that students are pleased with their learning facilities and look to education as a way to mitigate the effects of terrorism and have a positive influence on the psychology of the population (Shafiq et al., 2012).

Regarding the aspects that students value in the university experience there are a number of different perspectives, among them those aspects students associate with personal growth, such as: personal participation in the learning process, self-realisation, that is, the deployment of their personal skills and abilities, and social integration into the university community. A relation has

been detected between student self-realisation and their ambition to learn, determination, the coherence of their personal attitudes and living with purpose (Shutenko, 2015). In Argentina, a study found that the majority of students positively rated the educational practices outside the classroom, the development of innovative proposals for the presentation of curricular content and classes with invited specialists (Melgar, Elisondo, 2017). Similar conclusions were found in a study conducted in the UK, where students preferred interactive and group activities, identifying the qualities of a good teacher to be "ability to teach" followed by "accessibility" (Sander et al., 2010).

As for the motivations in choosing a university, a study in Malaysia found that students valued the aptness of the study program according to their personalities, professional opportunities and interest in the curriculum (Misran et al., 2012). Another study in the UK revealed that students from families with no history of university education have no interest in universities charging high fees (Dunnet et al., 2012). As in China, when the choice of a university is closely associated with the income level of their families. Data shows that the probability of entering the top universities is much higher for students from high-income families than those with low income (Sheng, 2016).

### 2.2. Measuring happiness
One of the earliest tools devised to measure happiness is The Satisfaction with Life Scale (SWLS) (Diener et al., 1985). The SWLS is limited in its focus for evaluating global life satisfaction and does not incorporate related notions of positive affect or loneliness. A later tool was The World Health Organisation Quality of Life Assessment (WHOQOL) (The Whoqol Group, 1998). The WHOQOL evaluates the self-perception of people about their lives in relation to the culture and value systems in which they live and their personal goals, expectations, standards and preoccupations. This tool offers a multidimensional score in 6 domains and 24 subdomains on quality of life. Another measurement tool is The Subjective Happiness Scale (SHS) (Lyubomirsky, Lepper, 1999) which uses a "subjectivist" approach to evaluate happiness. In 2002, the tool used in the present study, the OHQ (Hills, Argyle, 2002) was developed. This is a questionnaire of 24 items using a 6-point Likert-type scale. New versions of this questionnaire are also now available. Moeinaddini et al. (2020) proposed a new scoring system to measure personal happiness after observing that 16 of the 29 items of the OHQ are associated with deficiencies in personal happiness and therefore can be excluded from the model. An interesting approach for future research. Another measurement tool is The Full Life Versus The Empty Life (Peterson et al., 2005) with a three-dimensional approach which analyses three different forms of happiness related to pleasure, commitment and meaning. Other forms of measuring happiness are much simpler, using a single quantitative item (11-point scale, 0-10): "*Do you feel happy in general?*", used by Abdel-Khalek (2006). This author found that "*the single item had a good convergent validity because it was highly and positively correlated with optimism, hope, self-esteem, positive affect, extraversion, and self-ratings of both physical and mental health*".

In addition to these tools for the measurement of happiness there are others centred specifically on a concept intrinsically associated with happiness, that is, life satisfaction. Several authors have endeavoured to measure this aspect among young people. Huebner's (1991) Students' Life Satisfaction Scale (SLSS) is a self-reporting test of seven items designed for use with children between the ages of 8 to 18. Subsequent evolutions were The Multidimensional Students' Life Satisfaction Scale (MSLSS) (Huebner, 1994) and The Brief Multidimensional Students' Life Satisfaction Scale (BMSLSS) (Seligson et al., 2003). There are other versions for adults, The Positive and Negative Affect Scale (PANAS) (Watson et al., 1988), and for children The PANAS-C. (Laurent, 1999) which are brief and useful tools used to differentiate between anxiety and depression. A summary of some of these measurement tools and others oriented towards young people is provided in the compilation "*Youth life satisfaction measures: a review*" (Proctor et al., 2009). The present study provides a general description of each instrument and their normative samples, reliability and validity. These instruments are designed to determine how young people perceive their own lives and happiness.

The proposed subject of analysis is very broad and the search for related literature included each aspect. The principal instrument used in this study was The Oxford Happiness Questionnaire which has been adapted by a number of authors apart from the creators Hills and Argyle (2002) who used it as a compact scale for the measurement of psychological well-being. They were followed by other authors, such Kashdan (2004), also studying the assessment of subjective well-being; Cruise, *et al.* (2006), testing-retesting data over two weeks; Hadinezhad and Zaree (2009), who tested the reliability, validity, and normalisation of the Oxford Happiness Questionnaire;

Robbins *et al.* (2010) analysing undergraduate students in the topic happiness as stable extraversion; an adaptation of the Short Form of the Oxford Happiness Questionnaire into Turkish by Doğan and Çötok (2011) and Dogan and Sapmaz (2012); a Farsi version among college students (Mahmoud et al., 2013); applied to university students in Teheran (Dehshiri et al., 2016); a Indonesian version by Rahmawati *et al.* (2016); a transformation from an ordinal to an interval measure using Rasch analysis (Medvedev et al., 2017); applied to a Russian sample by Golubev and Dorosheva (2017); or Minaei and Hasani (2018), applying Rasch analysis to estimate and improve measurement quality of Oxford Happiness Questionnaire; the application among second year MBBS students (Kamthan et al., 2019); the Chinese version applied in Taiwanese Adolescents: Taiwan Birth Cohort Study (Lung, Shu, 2020) and the Portuguese sample (Galvão et al., 2020); the validation and adaptation of Tamil applicable to patients with type-2 diabetes by To et al. (2020); or more recently, applied to a sample of Iranian military (Mirzaee et al., 2021).

So far, all that literature is directly using the questionnaire, but there is much more indirect literature related to the topic, happiness assessment. Some examples are Steel, Schmidt and Shultz (2008), refining the relationship between personality and subjective well-being; studying college students and community adults (Wei et al., 2010); or children aged 8–12 years (Holder et al., 2010); the analysis of subjective well-being in adolescence (Rodríguez-Fernández et al., 2016); exploring constructs of well-being, happiness and quality of life by Medvedev and Landhuis (2018); studying the link between the teacher happiness and student attitudes by Moskowitz and Dewaele (2019) or in adolescents (Guerra-Bustamante et al., 2019); and analysing quality of life of university students during the COVID-19 pandemic (Abdullah et al., 2020).

Related to the other items used in our questionnaire: family, friends and university, the importance of the MIS-QOL instrument, defined by Szydło et al. (2021), should be highlighted. This study shows a new and broad approach, defining a whole set of constructs that measure the student's quality of life. It is a recent publication. But these themes are not new. They can be found in many articles, but the most recent are: the study of influential factors for happiness of adolescents who use community child centers (Park et al., 2017); the analysis of urban educated Bengali youth (Pramanik, Ray, 2018); the study in Ostrava that relates happiness with family and friends (Malcik, Miklosikova, 2019); and the one carried out in medical students (Daniel-González et al., 2021).

### 3. Methodology
### 3.1. Participants
The present study was carried out using a sample of 375 university undergraduate students, of whom 236 (62.9 %) were women and 139 (37.1 %) were men in several public and private universities in Madrid. Some 98 % of participants were 17 to 25 years of age and only 2 % were over the age of 25.

### 3.2. Ethics
The initial questionnaire was conducted as a Computerised Self-Administered Questionnaire (CSAQ) in which participants can give their answers directly. This technique adequately resolves the issue of missing answers because the computer does not allow participants to advance to the following group of questions if previous questions remain unanswered.

The research was performed in conformity with all ethical standards and participation in the project was entirely voluntary. Being a CSAQ conducted using Google Forms and Microsoft Forms, each participant had to explicitly agree to take part by marking the appropriate response. The questionnaire did not collect any email addresses or personal data which could serve to identify participants. Furthermore, each participant was informed of their right to abandon the research project at any time without any consequences. The questionnaire was based on a secure G-SUITE unit with access limited to the researchers in compliance with the Personal Data Protection Act.

### 3.3. Instruments
The procedure to create the questionnaire began by defining the objective. In this case, to measure the influence on the perceived happiness of undergraduate students of the importance and quality of relationships with family, friends, the university and money.

The next step, after the review of the literature, was the identification of the two instruments: the Oxford Happiness Questionnaire (OHQ), used to evaluate the perceived happiness of participants and the Inventory of Students Quality of Life (MIS-QOL), to evaluate perceived quality

of relationships with family, friends and the university. These items were included in the questionnaire and 8 additional items were added: age, gender, type of university, scores from the previous academic year, the importance ascribed to relationships with family, friends, the university and money in achieving happiness.

The scales used to create the questionnaire in this study had the following characteristics:

- The Oxford Happiness Questionnaire (OHQ) (Hills, Argyle, 2002) consists of 29 items scored using a 6-point Likert-type scale, from 'totally disagree' (1) to 'totally agree' (6). The original version of the OHQ had a Cronbach's alpha of 0.90. The Spanish version of the OHQ was developed from the original English scale (Tomás-Sábado et al., 2014). To calculate the Level of Happiness the scores from 1 to 6 (marked 'X'), were taken for the 12 items and the sum divided by 6, giving a possible result from 1 to 6, with higher scores corresponding to greater levels of subjective wellbeing. The mean score was approximately 4.30.

- The Multidimensional Inventory of Students Quality of Life (MIS-QOL) (Szydło et al., 2021) consists of 15 dimensions and 100 items scored using a 7-point Likert-type scale, from totally disagree (1) to totally agree (7). In the study by Szydło, the MIS-QOL had a Cronbach's alpha of 0.819, 0.873 and 0.706 respectively for the selected dimensions.

Given the age and activity of the participants (university students aged from 17 to 25), and the need to condense the questionnaire as much as possible, three dimensions were selected which had the greatest impact in the sample and in line with the aims of the study: family, friends and the university, each consisting of 6 items.

### 3.4. Procedures and stages of the method

Permission to allow students to participate in the study was granted by the research departments of each university. Participation in the study was entirely voluntary. Prior to administering the surveys all participants were fully informed of the purposes of the study.

As a first step, the Level of Happiness was evaluated using the Oxford Happiness Questionnaire (Spanish version by Tomás-Sábado et al., 2014). An inferential and descriptive analysis was made of the sample using SPSS 23.0, searching for relations between gender, age, the importance ascribed to family, friends, the university and money and level of happiness using a Chi-squared test.

The next step was to verify the reliability of the scale of the dimensions quality of family relationships, university and friends using the Cronbach's α coefficient for each of these dimensions. A factor analysis was also conducted to assess consistency and dimensionality of the questionnaire.

Once the questionnaire had been validated, the SEM methodology was applied using the AMOS 23.0 program and modelling a 'Path Diagram' in order to select the relevant relations between the factors and to rule out the hypotheses not supported by empirical evidence.

Models of structural equations are based on the correlations between variables which are symmetrical in the calculation. Thus, using the correlation identify a cause-effect relation also demonstrates the absence of cause and absence of effect; there is no asymmetrical analysis. However, the diagram produced is highly intuitive and easy to construct based on the theoretical suppositions of the problem.

### 3.5. Characteristics of the SEM methodology

The technique of analysis with structural equations combines factor analysis with linear regression to demonstrate the fit of the observed data with a hypothetical model expressed in a Path Diagram. As a result, the SEM models provide the linear correlation coefficients associated with each relation and a set of indexes that express the degree to which the data fits the proposed model, confirming or refuting its validity.

SEM models incorporate abstract constructs (latent or non-observable variables) and model the relations between multiple predictive variables (independent or exogenous) and criterion variables (dependent or endogenous). Variables may be independent in one relation and dependent in another within the same model.

SEM allows confirmatory modelling (generally based on a previous hypothesis as a causal model). It should be noted that correlations identify relationships but not the sense of causality; this could be a deficiency of the SEM method, so it is essential to analyse previous studies that can specify which elements are cause and which are effect. These models require variable to have certain prior conditions depending on the chosen method to calculate the estimators (non-

collinearity between variables, univariant normality of each variable and multivariant normality of the set of variables, etc.) The most commonly used methods are Maximum Likelihood and Least Squares; the latter method is more relaxed with regards to the normality of variables.

To obtain the model, a first phase of specification is carried out in which the researcher establishes a hypothetical relation between the latent and observed variables. The possible algebraic expressions that relate them are studied and the parameters and measurement errors are estimated (in this case using AMOS-SPSS V23). Finally, the goodness of fit is evaluated. In the case there is not a good fit, new specifications of the model are made (always with the corresponding justifications). When a model with a good fit is obtained the results can be interpreted.

There are various indicators which evaluate the goodness of fit, each measuring different aspects of the model: Absolute, Incremental and Parsimonious. The most used are indicated in the Table 1 below:

**Table 1.** Most frequently used indices of goodness of fit (Byrne, 2010)

| Classification | Fitting Index | Excellent Fit | Suitable Fit |
|---|---|---|---|
| Discrepancy rates | Chi-square ($\chi 2$) p-value df=gr.( degrees of freedom) | $0 <= \chi 2 <= 2df$ $0.05 < p <= 1.00$ | $2df < \chi 2 <= 3df$ $0.01 < p <= 0.05$ |
| Incremental adjustment goodness index | CFI (Comparative Fit Index) | $0.97 <= CFI <= 1.00$ | $0.95 <= CFI < 0.97$ |
| Index based on population discrepancy | RMSEA (Root Mean Square Error of Approximation) | $0 <= RMSEA <= 0.05$ | $0.05 < RMSEA <= 0.08$ |
| Residual Goodness-of-Fit Ratios | RMR (Root Mean Square Residual) | $0 <= RMR <= 0.08$ | $.08 < RMR <= 0.10$ |
| Overall Goodness of Fit Indices | GFI (Goodness of Fit Index) | $0.95 <= GFI <= 1.00$ | $0.90 <= GFI < 0.95$ |
| | AGFI (Adjusted Goodness of Fit Index) | $0.90 <= AGFI <= 1.0$ | $0.85 <= AGFI < 0.90$ |

## 4. Results
The following steps were taken to obtain the results:
- Description of the sample and checking representativity.
- Calculation of the level of happiness using the Oxford Happiness Questionnaire.
- Study of the significance of the distribution by quartile of each variable in relation to the level of happiness.
- Verification of the validity (Cronbach's alpha) and reliability (exploratory and confirmatory factor analysis with SEM) of the structure in the factors expressed by the MIS-QOL instrument.
- Analysis of the proposed Path Diagram using SEM according to the relations of dependence and proposed hypotheses.

### 4.1. Descriptive data and representativity of the sample
It was observed that, although a convenience sample was used (participating students voluntarily completed the test), the sample is well distributed (Table 2) in terms of the values for the variables as all presented a reasonably representative number of participants.

**Table 2.** Variables, possible values, frequencies and percentages of frequency

| | | Count | Column N, % |
|---|---|---|---|
| P1_Gender | Man | 139 | 37.1 |
| | Woman | 236 | 62.9 |
| P2_Age | 17-20 years | 188 | 50.1 |
| | 21-24 years | 170 | 45.3 |

| | | | |
|---|---|---|---|
| | 25 + years | 17 | 4.5 |
| P3_Academic year | First | 114 | 30.4 |
| | Second | 75 | 20.0 |
| | Third | 89 | 23.7 |
| | Fourth | 50 | 13.3 |
| | Fifth | 47 | 12.5 |
| P91_friends Are friends important to my happiness? | No | 68 | 18.1 |
| | Yes | 307 | 81.9 |
| P92_family   Is family important to my happiness? | No | 37 | 9.9 |
| | Yes | 338 | 90.1 |
| P94_university  Is the university important to my happiness? | No | 290 | 77.3 |
| | Yes | 85 | 22.7 |
| P96_money Is money important to my happiness? | No | 292 | 77.9 |
| | Yes | 83 | 22.1 |

The Level of Happiness variable was calculated according to the Oxford Happiness Questionnaire.

A Student's t-test was conducted for each of the variables to check the differences in the distribution of percentages in the different quartiles for the Level of Happiness variable. The results show a level of probability of 0.05 for the variables P92_family and P96_money (variables indicating the importance ascribed to family relationships and money in achieving happiness). The other variables were not found to be significant.

**Table 3.** Distribution of the frequency of the variables P92 and P93 by quartile of the variable P11 (Level of Happiness)

| Variable Name | Values | P11_Happiness Quartile | | | | | | | | Pearson Chi-Square Tests | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Quartile Happ1 | | Quartile Happ2 | | Quartile Happ3 | | Quartile Happ4 | | | |
| | | Count | Row N % | Count | Row N % | Count | Row N % | Count | Row N % | | |
| P92_ family | 0 | 17 | 45.9 % | 13 | 35.1 % | 3 | 8.1 % | 4 | 10.8 % | Chi-square | 17.493 |
| | 1 | 74 | 21.9 % | 83 | 24.6 % | 82 | 24.3 % | 99 | 29.3 % | Sig. | .001* |
| P96_ money | 0 | 64 | 21.9 % | 68 | 23.3 % | 70 | 24.0 % | 90 | 30.8 % | Chi-square | 12.155 |
| | 1 | 27 | 32.5 % | 28 | 33.7 % | 15 | 18.1 % | 13 | 15.7 % | Sig. | .007* |

Table 3 shows that the individuals who consider family important have high levels of happiness, with percentages of frequency (fourth quartile = 29.3 %) higher than for those who do not consider family important (fourth quartile = 10.8 %), that is, family-matters → more happiness.

In the case of the importance of money the results show the contrary. The individuals who consider money important have lower levels of happiness, with percentages of frequency (fourth quartile = 15.7 %) lower than for those who do not consider money important (fourth quartile = 30.8 %), that is, money-matter → less happiness.

**4.2. Scale suitability (reliability and validity)**

Prior to studying the model of relations the suitability (reliability of the scale and validity of the instrument) was checked for the dimensions indicated (quality of family relationships and the university).

Reliability: it was verified that the measurement instrument is precise and offers consistent results. The instrument was tested using Cronbach's alpha and results above 0.80 and below 0.95 are considered correct (Hulin et al., 2001).

In this case, some items showed a degree of discordance with the other items of the dimension, specifically items F1, FR3 and U2, the first two referring to the frequency of contact with family and friends and the third referring to group activities at the university. These three items may be distorted by issues such as the lack of mobility or gatherings due to COVID-19 restrictions. It was therefore decided to eliminate these three items. The Cronbach's alpha of the three dimensions without these items was: family = 0.850, friends = 0.811 and the university = 0.849. Thus, it can be affirmed that the sample is reliable as all factors are above 0.8.

Validity: this indicates the degree to which the test truly measures the constructions for which it was designed. The factor analysis was verified, checking that the grouping of elements in factors coincides with the constructions associated with the MIS-QOL instrument for the three dimensions consisting of 5, 5 and 6 items respectively (with the exclusion of the three items indicated above). A factor analysis using the principal components method and Varimax rotation showed three factors account for 60.1 % of total variance. Table 4 shows the composition of each of these factors. The KMO test (0.864) and Bartlett's sphericity test (chi squared 2666.035, p .000) show the viability of a factor analysis of the scale (Lloret et al., 2014).

**Table 4.** Breakdown of factors in Factor Analysis

| | Component | | |
|---|---|---|---|
| | Fac1_Quality Family | Fac2_Quality Friends | Fac3_Quality University |
| F2_The frequency of contact with your immediate family (telephone, Skype, gatherings, etc.) | 0.621 | | |
| F3_The level of family acceptance of your partner/lack of partner. | 0.708 | | |
| F4_The manner of taking decisions together in your family. | 0.822 | | |
| F5_The level of trust with your immediate family. | 0.864 | | |
| F6_Family support in difficult situations. | 0.817 | | |
| FR1_Network of contacts constructed through your friends. | | 0.772 | |
| FR2_The respect your friends have for your limits. | | 0.726 | |
| FR4_Number of friends. | | 0.757 | |
| FR5_The respect your friends have for your principles. | | 0.727 | |
| FR6_The frequency you have contact with your friends. | | 0.698 | |
| U1_The educational content is adapted to the needs of the job market. | | | 0.769 |
| U3_The transparency and content of your university's website. | | | 0.766 |
| U4_The opportunities to participate in activities outside of class. | | | 0.598 |
| U5_The academic level of your university. | | | 0.736 |
| U6_The teaching level of your university. | | | 0.846 |
| U7_The accessibility of professors at your university. | | | 0.714 |
| Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalisation. | | | |

a. Rotation converged in 5 iterations.

The confirmatory analysis was conducted with a SEM model of covariances. The results show covariance between dimensions of 0.42 and 0.43. The results for goodness of fit are good ($\chi 2$ = 133.33, p = 0.003, df = 93, CFI = 0.984, RMSEA = 0.035, RMR = 0.075, GFI = 0.958, AGFI=0.937), considering the margins indicated in Table 1; thus, the structure in three dimensions is correct.

### 4.3. Models of structural equations (Path Diagram of relations)

Once the constructs or dimensions were identified and validated according to the MIS-QOL instrument, a Path Diagram was created to describe the hypothetical model of relations between the dimensions and the level of happiness (Figure 1). According to this model, subjective happiness is predicted by the quality of relationships with family and friends and the university.

Certain conditions must be met for the SEM models, including the non-collinearity between variables, considering that all the bivariate correlations have a Pearson correlation coefficient below 0.5. Thus, the condition of non-collinearity is met. The researchers also verified that the coefficient of partial correlations between non-objective variables (the three dimensions and scores) was significantly equal to zero. This verifies there is no multi-collinearity between the dependent variables.

For this model it was decided to use the Generalised Least Squares method which is not sensitive to the lack of normality of the variables. Good results were found for the indicators of goodness of fit of the model ($\chi 2$ = 158.36, gl = 121, p-value = 0.013, GFI = 0.950, AGFI = 0,96, CFI = 0.923, RMSEA = 0.029, RMR = 0.096). Not included were the dichotomous variables P92, P93, P94 and P96 (importance ascribed to family, friends, the university and money), which required other methods (asymptotic distribution-free) which do not provide a sufficiently good fit. The estimators are all significant at 0.05 probability.

A simplified form of the Path Diagram (without a breakdown of dimensions in items and without error variables) is provided in Figure 1.
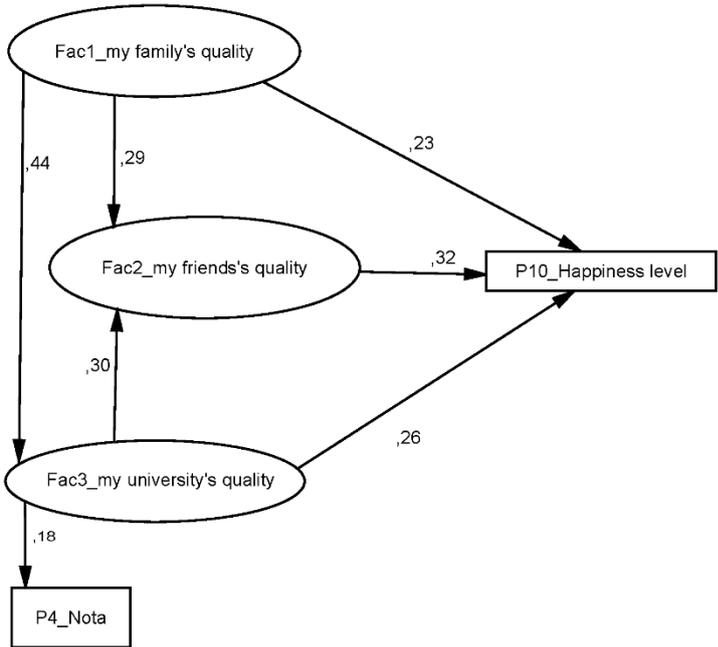


**Fig. 1.** Path Diagram, Least Squares method, Standardised Total Effects

The figure of the Path Diagram shows the standardized direct effects and by adding the indirect effects the Standardised Total Effects are obtained (Table 5).

From these figures and the levels of effect, both direct and indirect, the following results can be deduced:

- The factor which most impacts levels of perceived happiness among university students is the quality of their relationship with their family (Fac1->P10_ LEVELOFHAPPINESS, effect =

0.441, Table 5), followed by the perceived quality of their university, and their relationship with friends (effect = 0.352 and 0.322, respectively).

- The value that university students ascribe to their relationship with family impacts their perception of happiness (significant Student's t-test, Table 3), in that those who give greater importance to family have higher levels of happiness (Table 3).

- The perceived quality of the university impacts their academic performance (Fac3->P4_Score, effect = 0.184, Table 5).

- The value university students give to money inversely impacts their happiness, given that those who ascribe greater importance to money have lower levels of happiness (Table 3).

- The value that students give to their university, or their friends does not significantly impact their perception of happiness.

- The perceived quality of their relationships with friends influences their perception of their family and university.

**Table 5.** Standardised Total Effects

| ↓Receptive variable of the effect | Fac1_Quality Family | Fac2_Qualty Friends | Fac3_Quality University |
|---|---|---|---|
| Fac3_University | 0.441 | 0 | 0 |
| Fac2_QualityFriends | 0.426 | 0 | 0.299 |
| P4_Score | 0.081 | 0 | 0.184 |
| P10_LEVELOFHAPPINESS | 0.483 | 0.322 | 0.352 |

## 5. Discussion

It is critical that the various agents involved in university life are aware of the influence that the emotional level has on the happiness of university students. For this reason, it is essential to design educational strategies that conceive the student as an active agent in their education and where their emotional support network, such as family and friends, is integrated. While it is true that it is difficult to include families in university life, extracurricular activities or events organised by the university itself could help families to get involved so that they can experience the values and philosophy of each centre. As for the network of friends, the university period is usually a period when the circle of friends is widening. It is therefore necessary to weave a link between both circles through, once again, the extracurricular life of the universities, especially in more social and leisure events.

In addition, the perceived quality of the university beyond the different subjects studied and the activities of professors, also contributes to the reputation of the institution. Perhaps this research will help more universities to promote internal work with their stakeholders, and especially with students, to gain in-depth knowledge of their educational and emotional needs so that they can adapt and improve their educational and extracurricular activities.

On the other hand, the relationship detected between the perceived quality of the university and the academic results relates to the demands, effort and improvement expected of university students. This is basically a question of reciprocity: if students perceive that their educational institution strives to be a centre of excellence, in general terms, students will respond to be at the level of the place where they study. In many countries, the place of study can be a determining factor in the selection processes of companies. Therefore, universities and students should have a common goal of building the best university to study at. In fact, many university rankings are aware of this impact and hence their interest in measuring their evolution annually.

Unlike in previous educational stages, the pressure to find a job is one of the main concerns of university students. Moreover, in a context of international crisis marked by rising inflation and wage restraint in many countries, this has added to the pressure felt by university students. Therefore, it is not only a matter of concern to find a job, but a job that reflects in remuneration and status the time and money invested and the highly specialised training received, something that is not the case in many countries. Hence, the importance that university students place on money and what comes with it after their education has a negative influence on their happiness. Although it would not be feasible to regulate salaries according to education at an international level, it would be necessary to work towards a greater adaptation of university education to the needs of the labour market, so that there is a greater correlation between what students expect and the demands of companies.

### 6. Conclusion

The study of happiness and its measurement are currently an area of intense study, evidence of the interest of academics in further exploring these themes (McBride, 2010; Clemente et al., 2000; Sellés et al., 2018; Ortiz, 2019; Vargas, Callata, 2021), and given their influence on the achievement of personal goals, both internal and external (Salazar et al., 2016; De Pablos, González, 2012). It is important therefore to incorporate the most significant factors and variables which impact perceived happiness (Bisquerra, 2005; Palomera et al., 2017) in all stages of education including at university.

There are a number of factors which determine the perception of happiness among young people, especially family, friends and money (Sellés et al., 2018). Among university students, the quality of their university is also an important factor in their perceived happiness (Chang et al., 2005). These factors determined the choice and application of the methodology based on the OHQ expanded with some items from the MIS-QOL to *measure the impact, ascribed importance and quality of relationships with family, friends, the university and money on the part of university undergraduates.*

This study found that the perception of the quality of relationships with family and the university impacts the perception of relationships with friends. That is, if students have a high or positive perception of their family relations and their university, the perception of the quality of their relationships with friends is also high or positive. This result should be taken with caution since it is a novel finding that has not been directly analysed in other studies, and the significance of the regression does not guarantee causality.

Although university students are in adulthood, the affective foundations continue to be fundamental to their perception of happiness, such as support from family and friends. Thus, the first hypothesis of this work can be confirmed, that is, *students' perception of their relationships with family and friends impacts their self-perceived happiness.* It is important not only to provide a quality education but to address the emotional needs of students. Teachers play an essential role in providing students with support and accompaniment beyond their instrumental role in the classroom. Although universities have a number of positions which attend to students' needs and some universities have assigned tutors, each teacher should open new avenues of communication in order to connect with students. This implies going beyond tutorials and to incorporate into academic curricula courses on communication, conflict resolution, negotiation or artistic expression. The aim is to create more relaxed atmospheres where informal relationships can be established among classmates and with teachers developing more interpersonal support networks.

The numerous crises currently besetting our world, from COVID-19, to climate change, to the fallout from Brexit, are leading many to reconsider what is truly important to them. Perhaps this context is part of the validation of the second hypothesis: *the importance university students ascribe to money has a negative impact on their self-perceived happiness.* These results are in line with previous studies (Ahmed et al., 2023) which have found the negative influence of materialism on self-perceived well-being. Thus, in a context of global instability, with the addition of unstoppable technological change, we need highly ethical professionals who are socially responsible, with capacity for dialogue and empathy. Hence, the courses and content related to corporate social responsibility, debate, and ethics in general, without disregarding the accepted standards of ethics and good conduct of each profession, should be incorporated into the study plans of all university degrees.

In summary, it is necessary to drive further the humanistic spirit of university curricula, for which consideration of the implementation of the following practical applications is recommended:

- To impact perceived happiness, it would be important to emphasise emotional factors on a more individual level, such as personal conversations, extra-curricular activities, mentorship, etc. key aspects in all stages of education including at university.

- To improve connection with the students, seek new avenues of communication, such as monthly meetings, student specific newsletters/group chats on social media.

- Incorporate or enhance courses in the academic curricula in two areas: those that increase interpersonal skills, such as communication, conflict resolution, negotiation or artistic expression, as well as those that explore corporate social responsibility, debate, and ethics in general, without disregarding the accepted standards of ethics and good conduct of each profession.

- Encourage the recruitment and development of highly ethical professionals, who are socially responsible, with capacity for dialogue and empathy.

With regards to the limitations of this study, in terms of the profile of the sample, it would be instructive to conduct studies among university students at a European or international level. In educational terms, the results may point towards the need for a more humanistic orientation of university degree study plans, giving greater importance to factors which increase the happiness of university students and thus build a better society for all. Beyond providing a utilitarian education oriented towards employment, educational authorities should be reminded of the need to regard the university student as a whole person whose educational, ethical, social and affective needs go hand in hand.

## References

Abdel-Khalek, 2006 – *Abdel-Khalek, A.M.* (2006). Measuring happiness with a single-item scale. *Social Behavior and Personality: an international journal*. 34(2): 139-150. DOI: 10.2224/sbp.2006.34.2.139

Abdullah et al., 2020 – *Abdullah, M.F.I.L.B., Murad, N.S., Teoh, S.H., Mohamad, M.A.* (2020). Quality of life of university students during the COVID-19 pandemic: Assessing the level of quality of life and the associated factors after the end of movement lockdown. *Research Square*. DOI: 10.21203/rs.3.rs-104496/v2

Ahmed et al., 2023 – *Ahmed, M.A., Haq, M.A.U., Shafique, T., Akram,* B. (2023). Active mind, active learning: The role of materialism and psychological well-being for the determination of students' academic performance. *International Journal of Management in Education*. 17(1): 44. DOI: 10.1504/IJMIE.2023.127773

Ahn et al., 2012 – *Ahn, N., Morcillo, F. M., Juan, R. de.* (2012). La felicidad de los jóvenes [The happiness of the young]. *Papers: revista de sociología*. 2(97): 407-430. [Electronic resource]. URL: https://raco.cat/index.php/Papers/article/view/252290 [in Spain]

Alarcón, 2006 – *Alarcón, R.* (2006). Desarrollo de una escala factorial para medir la felicidad [Development of a factor scale to measure happiness]. *Revista Interamericana de Psicología.* 1(40): 95-102. [Electronic resource]. URL: https://www.redalyc.org/pdf/284/28440110.pdf [in Spain]

Al-Naggar et al., 2010 – *Al-Naggar, A.A., Al-Jashamy, K., Wy, L., Alsaror, M.I., Al-Naggar, R.A., Isa, Z.M.* (2010). Perceptions and opinion of happiness among university students in a Malaysian university. *ASEAN Journal of Psychiatry*. 11(2): 198-216. [in Spain]

Argyle, 1999 – *Argyle, M.* (1999). Causes and correlates of happiness. In Kahneman, D. Diener, E., Schwarz, N. (Eds.). *Foundations of hedonic psychology: Scientific perspectives on enjoyment and suffering*. 153-373. Russell Sage Foundation.

Arias et al., 2016 – *Arias, W. Caycho, T., Ventura, J.L., Maquera, C., Ramírez, M., Tamayo, X.* (2016). Análisis exploratorio de la escala de felicidad de Lima en universitarios de Arequipa [Exploratory analysis of the happiness scale of Lima in university students of Arequipa]. *Psicología. Avances de la disciplina*. 10(1): 11. [in Spain]

Barker et al., 2016 – *Barker, E.T., Howard, A.L., Galambos, N.L., Wrosch, C.* (2016). Tracking affect and academic success across university: Happy students benefit from bouts of negative mood. *Developmental Psychology*. 52(12): 2022-2030. DOI: 10.1037/dev0000231

Benatuil, 2003 – *Benatuil, D.* (2003). El bienestar psicológico en adolescentes desde una perspectiva cualitativa [Psychological well-being in adolescents from a qualitative perspective]. *Psicodebate*. 3: 43-58. DOI: 10.18682/pd.v3i0.502 [in Spain]

Bisquerra, 2005 – *Bisquerra, R.* (2005). Educación emocional y bienestar [Emotional education and well-being]. Praxis. [in Spain]

Byrne, 2010 – *Byrne, B.M.* (2010). Structural equation modelling with AMOS. Basic concepts, applications, and programming. New York: Taylor & Francis Group.

Caballero, Sánchez, 2018 – *Caballero, P.Á., Sánchez, S.* (2018). La felicidad en estudiantes universitarios. ¿Existen diferencias según género, edad o elección de estudios? [Happiness in university students. Are there differences according to gender, age or choice of studies?]. *Revista Electrónica Interuniversitaria de Formación del Profesorado*. 21(3): 1-18. DOI: 10.6018/reifop.21.3.336721 [in Spain]

Chang et al., 2005 – *Chang, G., Miller, P. W., Tcha, M.* (2005). Happiness In University Education. *Education*. 4(1): 20-45. DOI: 10.1016/S1477-3880(15)30139-0

Clemente et al., 2000 – *Clemente, A., Molero, R. J., González, F.* (2000). Estudio de la satisfacción personal según la edad de las personas [Study of personal satisfaction according to the age of the people]. *Anales de Psicología/Annals of Psychology.* 16(2): 189-198. [Electronic resource]. URL: https://revistas.um.es/analesps/article/view/29371 [in Spain]

Cruise et al., 2006 – *Cruise, S.M., Lewis, C.A., Guckin, C.Mc.* (2006). Internal consistency, reliability, and temporal stability of the Oxford happiness questionnaire short-form: Test-retest data over two weeks. *Social Behavior and Personality: an international journal.* 34(2): 123-126. DOI: 10.2224/sbp.2006.34.2.123

Cuong, 2021 – *Cuong, N.V.* (2021). Does money bring happiness? Evidence from an income shock for older people. *Finance Research Letters.* 39: 101605. DOI: 10.1016/j.frl.2020.101605

Daniel-González et al., 2021 – *Daniel-González, L., Moral-de la Rubia, J., Valle-de la O, A., Martínez-Martí, M. L., García-Cadena, C.H.* (2021). A predictive model of happiness among medical students. *Current Psychology.* DOI: 10.1007/s12144-021-01485-1

De Pablos, González, 2012 – *De Pablos, J., González, A.* (2012). El bienestar subjetivo y las emociones en la enseñanza [Subjective well-being and emotions in teaching]. *Revista Fuentes.* 12: 69-92. [Electronic resource]. URL: https://revistascientificas.us.es/index.php/fuentes/article/view/2468 [in Spain]

Dehshiri et al., 2016 – *Dehshiri, G., Balootbangan, A. A., Najafi, M., Moghadamzadeh, A.* (2016). Psychometric Properties of the Oxford Happiness Questionnaire Short Form in University Students. *Quarterly Journal of Educational Measurement and Evaluation Studies.* 5(12): 9-26. [Electronic resource]. URL: http://jresearch.sanjesh.org/article_20525.html?lang=en

Diener et al., 1985 – *Diener, E., Emmons R.A., Larsen, R.J., Griffin, S.* (1985). The Satisfaction with Life Scale. *Journal of Personality Assessment.* 49(1): 71-75. DOI: 10.1207/s15327752jpa4901_13

Denegri et al., 2015 – *Denegri, M., García, C., González, N.* (2015). Defining subjective well-being in Chilean young professional adults. A study with natural semantic networks. *CES Psicología.* 8(1): 77-97. [Electronic resource]. URL: http://www.scielo.org.co/scielo.php?script=sci_arttext&pid=S2011-30802015000100007&lng=en&tlng=es

Doğan, Çötok, 2011 – *Doğan, T., Çötok, N.A.* (2011). Adaptation of the Short Form of the Oxford Happiness Questionnaire into Turkish: A Validity and Reliability Study. *Türk Psikolojik Danışma ve Rehberlik Dergisi.* 4(36): 165-170. [Electronic resource]. URL: https://dergipark.org.tr/en/pub/tpdrd/issue/21456/229762

Dogan, Sapmaz, 2012 – *Dogan, T., Sapmaz, F.* (2012). Examination of Psychometric Properties of The Turkish Version Form of The Oxford Happiness Questionnaire in University Students. *Journal of Psychiatry and Neurological Sciences; Istanbul.* 25(4): 297-304. [Electronic resource]. URL: https://www.proquest.com/openview/8224eea52c2ac86971d953203aa75daa/1?pq-origsite=gscholar&cbl=237750

Dunnett et al., 2012 – *Dunnett, A., Moorhouse, J. Walsh, C., Barry, C.* (2012). Choosing a university: A conjoint analysis of the impact of higher fees on students applying for university in 2012. *Tertiary Education and Management.* 18(3): 199-220. DOI: 10.1080/13583883.2012.657228

Francis, 1999 – *Francis, L.J.* (1999). Happiness is a thing called stable extraversion: a further examination of relationship between the Oxford Happiness inventory and Eysenck´s dimensional model of personality and gender. *Personality and individual Differences.* 26(1): 5-11.

Galvão et al., 2020 – *Galvão, A., Jesus, S.N., Pinheiro, M., Viseu, J.* (2020). The dimensions of happiness within the Oxford happiness questionnaire: developing a valid multidimensional measurement instrument for a portuguese sample. *International Journal of Developmental and Educational Psychology. Revista Infad de Psicología. Crecimiento psicológico y afrontamiento de la madurez.* 2(1): DOI: 10.17060/ijodaep.2020.n1.v2.1871

Golubev, Dorosheva, 2017 – *Golubev, A.M., Dorosheva, E.A.* (2017). Approbation of "Oxford happiness questionnaire" on the Russian sample. *Psikhologicheskii Zhurnal.* 38(3): 108-118. DOI: 10.7868/S0205959217030096

González-Quiñones et al., 2020 – *González-Quiñones, J.C., Restrepo-Chavarriaga, G., Pinzón-Ramírez, J.A., Mejía de Díaz, M.A., Ayala-Méndez, C.* (2020). Percepción de felicidad relacionada con la familia a lo largo de la vida en Bogotá, Colombia [Perception of happiness related to family throughout life in Bogotá, Colombia]. *Revista de Salud Pública.* 21(2): 138-145. DOI: 10.15446/rsap.V21n2.72678 [in Spain]

Grover, Helliwell, 2019 – *Grover, S., Helliwell, J.F.* (2019). How's life at home? New evidence on marriage and the set point for happiness. *Journal of Happiness Studies*. 20(2): 373-390. DOI: 10.1007/s10902-017-9941-3

Guerra-Bustamante et al., 2019 – *Guerra-Bustamante, J., León-del-Barco, B., Yuste-Tosina, R., López-Ramos, V.M., Mendo-Lázaro, S.* (2019). Emotional Intelligence and Psychological Well-Being in Adolescents. *International Journal of Environmental Research and Public Health 2019*. 16(10): 1720. DOI: 10.3390/ijerph16101720

Gutiérrez et al., 2013 – *Gutiérrez, J.L., Aragón, S.R., Lagunes, I.R., López-Parra, M.S.* (2013). Escala de Felicidad en la Pareja: Desarrollo y Validación [Couple Happiness Scale: Development and Validation]. *Acta de Investigación Psicológica*. 3(3): 1280-1297. DOI: 10.1016/S2007-4719(13)70967-0 [in Spain]

Hadinezhad, Zaree, 2009 – *Hadinezhad, H., Zaree, F.* (2009). Reliability, validity, and normalization of the Oxford Happiness Questionnaire. *Psychological Research*. 12(1-2): 62-77. [Electronic resource]. URL: https://psycnet.apa.org/record/2010-01877-004

Hills, Argyle, 2002 – *Hills, P., Argyle, M.* (2002). The Oxford Happiness Questionnaire: a compact scale for the measurement of psychological well-being. *Personality and Individual Differences*. 33(7): 1073-1082. DOI: 10.1016/S0191-8869(01)00213-6

Holder et al., 2010 – *Holder, M.D., Coleman, B., Wallace, J.M.* (2010). Spirituality, Religiousness, and Happiness in Children Aged 8–12 Years. *Journal of Happiness Studies*. 11: 131-150. DOI: 10.1007/s10902-008-9126-1

Hu, 2023 – *Hu, J.* (2023). Research on the relationship between income and happiness: From the perspective of economics. *Frontiers in Business, Economics and Management*. 7(1): 193-195. DOI: 10.54097/fbem.v7i1.4125

Huebner, 1991 – *Huebner, E.S.* (1991). Further Validation of the Students' Life Satisfaction Scale: The Independence of Satisfaction and Affect Ratings. *Journal of Psychoeducational Assessment*. 9(4): 363-368. DOI: 10.1177/073428299100900408

Huebner, 1994 – *Huebner, E.S.* (1994). Preliminary development and validation of a multidimensional life satisfaction scale for children. *Psychological Assessment*. 6(2): 149-158. DOI: 10.1037/1040-3590.6.2.149

Hulin et al., 2001 – *Hulin, C., Netemeyer, R., Cudeck, R.* (2001). Can a reliability coefficient be too high? *Journal of Consumer Psychology*. 10(1): 55-58.

Kamthan et al., 2019 – *Kamthan, S., Sharma, S., Bansal, R., Pant, B., Saxena, P., Chansoria, S., Shukla, A.* (2019). Happiness among second year MBBS students and its correlates using Oxford Happiness Questionnaire. *Journal of Oral Biology and Craniofacial Research*. 9(2): 190-192. DOI: 10.1016/j.jobcr.2018.06.003

Kant, 1946 – *Kant, M.* (1946). Fundamentación de la metafísica de las costumbres [Foundation of the Metaphysics of Customs]. Espasa. [in Spain]

Karabati, Cemalcilar, 2010 – *Karabati, S., Cemalcilar, Z.* (2010). Values, materialism, and well-being: A study with Turkish university students. *Journal of Economic Psychology*. 31(4): 624-633. DOI: 10.1016/j.joep.2010.04.007

Kashdan, 2004 – *Kashdan, T.B.* (2004). The assessment of subjective well-being (issues raised by the Oxford Happiness Questionnaire). *Personality and Individual Differences*. 36(5): 1225-1232. DOI: 10.1016/S0191-8869(03)00213-7

Laurent et al., 1999 – *Laurent, J., Catanzaro, S.J., Joiner, T.E., Jr., Rudolph, K.D., Potter, K.I., Lambert, S., Osborne, L., Gathright, T.* (1999). A measure of positive and negative affect for children: Scale development and preliminary validation. *Psychological Assessment*. 11(3): 326-338. DOI: 10.1037/1040-3590.11.3.326

Lloret-Segura et al., 2014 – *Lloret-Segura, S., Ferreres-Traver, A., Hernández-Baeza, A., Tomás-Marco, I.* (2014). El análisis factorial exploratorio de los ítems: una guía práctica, revisada y actualizada [Item Exploratory Factor Analysis: A Practical Guide, Revised and Updated]. *Anales de Psicología/Annals of Psychology*. 30(3): 1151-1169. DOI: 10.6018/analesps.30.3.199361 [in Spain]

López, 2018 – *López, D.* (2018). Emoción y sentimientos. No somos seres racionales, somos seres emocionales que razonan [Emotion and feelings. We are not rational beings, we are emotional beings that reason]. Ariel. [in Spain]

Lu, Gilmour, 2004 – *Lu, L., Gilmour, R.* (2004). Culture, Self and Ways to Achieve SWB: A Cross-Cultural Analysis. *Journal of Psychology in Chinese Societies*. 5(1): 51-79.

Lung, Shu, 2020 – *Lung, F.W., Shu, B.C.* (2020). The Psychometric Properties of the Chinese Oxford Happiness Questionnaire in Taiwanese Adolescents: Taiwan Birth Cohort Study. *Community Mental Health Journal.* 56: 135-138. DOI: 10.1007/s10597-019-00472-y

Lyubomirsky, Lepper, 1999 – *Lyubomirsky, S., Lepper, H.S.* (1999). A Measure of Subjective Happiness: Preliminary Reliability and Construct Validation. *Social Indicators Research.* 46: 137-155. DOI: 10.1023/A:1006824100041

Mahmoud et al., 2013 – *Mahmoud, N., Gholamreza, D., Solmaz, D., Mansoureh, S., Nosrat, J.* (2013). Psychometric properties of Farsi version of the Oxford happiness questionnaire among college students. *Training Measurement, winter 2013.* 3(10): 55-73. [Electronic resource]. URL: https://www.sid.ir/en/journal/ViewPaper.aspx?ID=336048

Malcik, Miklosikova, 2019 – *Malcik, M., Miklosikova, M.* (2019). Study Results of University Students in the Context of Experiencing Positive Emotions, Satisfaction and Happiness. *International Journal of Emerging Technologies in Learning (iJET).* 14(23): 261-269. [Electronic resource]. URL: https://www.learntechlib.org/p/217250/

Mangeloja, Hirvonen, 2007 – *Mangeloja, E., Hirvonen, T.* (2007). What Makes University Students Happy? *International Review of Economics Education.* 6(2): 27-41. DOI: 10.1016/S1477-3880(15)30105-5

McBride, 2010 – *McBride, M.* (2010). Money, happiness, and aspirations: An experimental study. *Journal of Economic Behavior & Organization.* 74(3): 262-276. DOI: 10.1016/j.jebo.2010.03.002

Medvedev, Landhuis, 2018 – *Medvedev, O.N., Landhuis, C.E.* (2018). Exploring constructs of well-being, happiness and quality of life. *PeerJ.* 6: e4903. DOI: 10.7717/peerj.4903

Medvedev et al., 2017 – *Medvedev, O.N., Siegert, R.J., Mohamed, A.D., Shepherd, D, Landhuis, E., Krägeloh, C.U. (*2017). The Oxford Happiness Questionnaire: Transformation from an Ordinal to an Interval Measure Using Rasch Analysis. *Journal of Happiness Studies.* 18: 1425-1443. DOI: 10.1007/s10902-016-9784-3

Melgar, Elisondo, 2017 – *Melgar, M.F., Elisondo, R.M.* (2017). Metacognition and good practices in the university. What aspects do students value? *Innovación educative.* 17(74): 17-38. [Electronic resource]. URL: http://www.scielo.org.mx/scielo.php?pid=S1665-26732017000200017&script=sci_abstract&tl ng=en

Mercado, 2014 – *Mercado, M.* (2014). Concepto de felicidad en jóvenes [Concept of happiness in young people]. *Ajayu.* 12(1): 64-78. [in Spain]

Minaei, Hasini, 2018 – *Minaei, A., Hasani, M.* (2018). Applying Rasch analysis to estimate and improve measurement quality of Oxford Happiness Questionnaire (OHQ). *Quarterly of Educational Measurement.* 8(29): 67-92. DOI: 10.22054/JEM.2018.28248.1670

Mirzaee et al., 2021 – *Mirzaee, A., Nia, HS., Dowran, B., Pasandideh, A., Salimi, S.H.* (2021). Psychometric Properties of the Persian Version of the Oxford Happiness. *Journal of Military Medicine 2021.* 23(3): 246-254. DOI: 10.30491/JMM.23.3.246

Misran et al., 2012 – *Misran, N., Sahuri1, S.N.S., Arsad, N. Hussain, H., Zaki, W.M.D.W., Aziz, N.A.* (2012). Malaysian Matriculation Student's Factors in Choosing University and Undergraduate Program. *Asian Social Science.* 8(16): DOI: 10.5539/ass.v8n16p222

Moeinaddini et al., 2020 – *Moeinaddini, M., Asadi-Shekari, Z., Aghaabbasi, M., Saadi, I. Shah, M.Z., Cools, M.* (2020). Proposing a new score to measure personal happiness by identifying the contributing factors. *Measurement.* 151: 107115. DOI: 10.1016/j.measurement.2019.107115

Mogilner, Norton, 2016 – *Mogilner, C., Norton, M.I.* (2016). Time, money, and happiness. *Current Opinion in Psychology.* 10: 12-16. DOI: 10.1016/j.copsyc.2015.10.018

Mogilner, 2010 – *Mogilner, C.* (2010). The pursuit of happiness: Time, money, and social connection. *Psychological Science.* 21(9): 1348-1354. DOI: 10.1177/0956797610380696

Moskowitz, Dewaele, 2019 – *Moskowitz, S., Dewaele, J.M.* (2019). Is teacher happiness contagious? A study of the link between perceptions of language teacher happiness and student attitudes. *Innovation in Language Learning and Teaching.* 15(2): 117-130. DOI: 10.1080/17501229.2019.1707205

Muresan et al., 2020 – *Muresan, G.M., Ciumas, C., Achim, M.V.* (2020). Can Money Buy Happiness? Evidence for European Countries. *Applied Research Quality Life.* 15: 953-970. DOI: 10.1007/s11482-019-09714-3

Ortiz, 2019 – *Ortiz, A.* (2019). La felicidad de los jóvenes universitarios y no universitarios de la zona metropolitana de la ciudad de Pachuca, vista desde los entes que la producen

[The happiness of university and non-university youth in the metropolitan area of the city of Pachuca, as seen from the entities that produce it]. *RICSH Revista Iberoamericana de las Ciencias Sociales y Humanísticas*. 8(16): 288-324. DOI: 10.23913/ricsh.v8i16.185 [in Spain]

Palomera et al., 2017 – *Palomera, R., Fernández-Berrocal, P., Brackett, M.A.* (2017). La inteligencia emocional como una competencia básica en la formación inicial de los docentes: Algunas evidencias [Emotional intelligence as a basic competence in initial teacher training: Some evidence]. *Electronic Journal of Research in Education Psychology*. 6(15). DOI: 10.25115/ejrep.v6i15.1292 [in Spain]

Park et al., 2017 – *Park, Y.M., Kim, J.Y., Jo, E.J., Lee, J.H., Woo, K.M.* (2017). Influential Factors for Happiness of Adolescents Who Use Community Child Centers. *Journal of Korean Academy of Community Health Nursing*. 28(1): 34-43. DOI: 10.12799/jkachn.2017.28.1.34

Peterson et al., 2005 – *Peterson, C., Park, N., Seligman, M.E.P.* (2005). Orientations to happiness and life satisfaction: the full life versus the empty life. *Journal of Happiness Studies*. 6: 25-41. DOI: 10.1007/s10902-004-1278-z

Pramanik, Ray, 2018 – *Pramanik, S., Ray, D.* (2018). Subjective construal of happiness among urban educated Bengali youth: A preliminary study using grounded theory approach. *Indian Journal of Positive Psychology; Hisar*. 9(1): 78-82. DOI: 10.15614/ijpp.v9i01.n747

Proctor et al., 2009 – *Proctor, C. Linley, P.A., Maltby, J.* (2009). Youth life satisfaction measures: a review. *The Journal of Positive Psychology*. 4(2): 128-144. DOI: 10.1080/17439760802650816

Rahmawati et al., 2016 – *Rahmawati, E., Saragih, J.I., Adeline, N.* (2016). Psychometric Properties of Indonesian Version of the Oxford Happiness Questionnaire. *Proceedings of the 1st Public Health International Conference (PHICo 2016)*. 173-176. DOI: 10.2991/phico-16.2017.33

Robbins et al., 2010 – *Robbins, M., Francis, L. J., Edwards, B.* (2010). Happiness as Stable Extraversion: Internal Consistency Reliability and Construct Validity of the Oxford Happiness Questionnaire Among Undergraduate Students. *Current Psychology*. 29*: 89-94. DOI: 10.1007/s12144-010-9076-8

Rodríguez-Fernández et al., 2016 – *Rodríguez-Fernández, A., Ramos-Díaz, E., Ros, I., Fernández-Zabala, A., Revuelta, L.* (2016). Bienestar subjetivo en la adolescencia: el papel de la resiliencia, el autoconcepto y el apoyo social percibido. [Subjective well-being in adolescence: The role of resilience, self-concept and perceived social support]. *Suma Psicológica*. 23(1): 60-69. DOI: 10.1016/j.sumpsi.2016.02.002 [in Spain]

Salazar et al., 2016 – *Salazar, J.E.E., Lachuma, Ú.R., Flores, I.E.* (2016). Felicidad: Un estudio comparativo en estudiantes universitarios de Psicología y Administración de una Universidad Privada de Tarapoto [Happiness: A comparative study among university students of Psychology and Administration of a Private University of Tarapoto]. *Revista de Investigación Apuntes Psicológicos*. 1(1). [Electronic resource]. URL: https://revistas.upeu.edu.pe/index.php/ri_apsicologia/article/view/872 [in Spain]

Sánchez de Gallardo, Pirela de Faría, 2017 – *Sánchez de Gallardo, M., Pirela de Faría, L.* (2017). Efecto de una intervención psicológica en la felicidad de estudiantes universitarios. Un estudio experimental [Effect of a psychological intervention on the happiness of university students. an experimental study]. *Omnia*. 23(3): 76-94. [Electronic resource]. URL: https://www.redalyc.org/articulo.oa?id=73754947006 [in Spain]

Sander et al., 2010 – *Sander, P., Stevenson, K., King, M., Coates, D.* (2010). University Students' Expectations of Teaching. *Studies in Higher Education*. 25(3): 309-323. DOI: 10.1080/03075070050193433

Seligson et al., 2003 – *Seligson, J.L., Huebner, E.S., Valois, R.F.* (2003). Preliminary Validation of the Brief Multidimensional Students' Life Satisfaction Scale (BMSLSS). *Social Indicators Research*. 61*: 121-145. DOI: 10.1023/A:1021326822957

Sellés et al., 2018 – *Sellés, P., Lozano, B.S., García, J., Rosa, E.M.* (2018). La felicidad en jóvenes universitarios: análisis experiencial y conceptual e implicaciones educativas [Happiness in young university students: experiential and conceptual analysis and educational implications]. *Edetania. Estudios Y Propuestas Socioeducativos*. 53: 133-152. [Electronic resource]. URL: https://revistas.ucv.es/index.php/Edetania/article/view/76 [in Spain]

Shafiq et al., 2012 – *Shafiq, M., Butt, M. N., Shoaib, M.* (2012). What Makes University Students Happy: A Study of Terror Affected Area. *World Applied Sciences Journal*. 19(3): 309-313. DOI: 10.5829/idosi.wasj.2012.19.03.2109

Sheng, 2016 – *Sheng, X.* (2016). Cultural capital, family background and education: choosing university subjects in China. *British Journal of Sociology of Education.* 38(5): 721-737. DOI: 10.1080/01425692.2016.1158638

Shutenko, 2015 – *Shutenko, E.* (2015). Motivational and Conceptual Aspects of Students' Self-fulfillment in University Education. *Procedia – Social and Behavioral Sciences.* 214: 325-331. DOI: 10.1016/j.sbspro.2015.11.652.

Steel et al., 2008 – *Steel, P., Schmidt, J., Shultz, J.* (2008). Refining the relationship between personality and subjective well-being. *Psychological Bulletin. 134*(1): 138-161. DOI: 10.1037/0033-2909.134.1.138

Szydło et al., 2021 – *Szydło, R., Wi´sniewska, S., Cwiek, M.* (2021). Multidimensional Inventory of Students Quality of Life—MIS-QOL. *Sustainability 2021.* 13(1): 60. DOI: https://dx.doi.org/10.3390/su13010060

Taylor, 2007 – *Taylor, S.* (2007). Psicología de la salud [Health Psychology]. Mc-Graw-Hill Interamericana. [in Spain]

The Whoqol Group, 1998 – The Whoqol Group. The World Health Organization quality of life assessment (WHOQOL): Development and general psychometric properties. *Social Science & Medicine.* 1998. 46(12): 1569-1585. DOI: 10.1016/S0277-9536(98)00009-4

To et al., 2020 – *To, T.O.H.Q.A.* (2020). Validation and Cross-Cultural Adaptation of Tamil Translated Oxford Happiness Questionnaire Applicable to Patients With Type-2 Diabetes. *Journal of Natural Remedies.* 21(4): 184-194.

Tomás-Sábado et al., 2014 – *Tomás-Sábado, J., Edo-Gual, M., Aradilla-Herrero, A., Sorribes-López, J.V., Fernández-Najar, B., Montes-Hidalgo, J.* (2014). Preliminary psychometric properties of the Spanish form of the Oxford happiness questionnaire Short-Form (OHQ-SF). *Interpsiquis 2014* (XV Congreso virtual de psiquiatria.com). [Electronic resource]. URL: https://cutt.ly/bTw8wPh

Vargas, Callata, 2021 – *Vargas, K.R., Callata, Z.E.* (2021). La felicidad en tiempos de pandemia y educación virtual: Un estudio en universitarios del Altiplano [Happiness in times of pandemic and virtual education: A study among university students from the Altiplano]. *Comuni@cción: Revista de Investigación en Comunicación y Desarrollo.* 12(2): 111-120. DOI: 10.33595/2226-1478.12.2.493 [in Spain]

Watson et al., 1988 – *Watson, D., Clark, L. A., Tellegen, A.* (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology.* 54(6): 1063-1070. DOI: 10.1037/0022-3514.54.6.1063

Wei et al., 2010 – *Wei, M., Liao, K. Y. H., Ku, T.Y., Shaffer, P.A.* (2010). Attachment, Self-Compassion, Empathy, and Subjective Well-Being Among College Students and Community Adults. *Personality.* 79(1): 191-221. DOI: 10.1111/j.1467-6494.2010.00677.x

Whillans et al., 2019 – *Whillans, A., Macchia, L., Dunn, E.* (2019). Valuing time over money predicts happiness after a major life transition: A preregistered longitudinal study of graduating students. *Science advances.* 5(9): eaax2615. DOI: 10.1126/sciadv.aax2615

Zhou, Palaroan, 2023 – *Zhou, Q., Palaroan, R.* (2023). Life without money: Chinese college students view on the influence of money on the level of happiness. *GLS KALP – Journal of Multidisciplinary Studies.* 3(1): 9-22. DOI: 10.1371/journal.pone.0039211