Is there any relationship between unemployment in young graduates and psychological resources? An empirical research from the Conservation of Resources Theory

Mª Dolores Merino*, Jesús Privado & Rocío Arnaiz

Universidad Complutense de Madrid, Madrid, Spain

* Corresponding author. Universidad Complutense de Madrid. Facultad de Psicología. Departamento de Psicología Social, del Trabajo y Diferencial. Campus de Somosaguas, 28223 – Pozuelo de Alarcón, Madrid, Spain.

E-mail address: lolamerino@psi.ucm.es (M. D. Merino).

Telephone: +34913943174. *Fax:* +34913942820.

Abstract

The situation of crisis lived in the Western world since 2007 has left thousands of people unemployed. One of the countries most affected by unemployment is Spain and specially its young population (34.7%). Considering this context, we try to find out the role of psychological resources, well-being, distress and eustress, for graduate young employed and unemployed. We worked with a sample of 542 young graduates, of whom 48.3% were unemployed, and those employed held job positions related to their academic background. Our results suggest that: 1) it is somewhat likely for young recent graduates to find a job if they score high in optimism; 2) resilience, optimism, autonomy, self-efficacy, environmental mastery and overall life satisfaction are deteriorated in unemployment youth, while negative affect is increased by in this group; and 3) environmental mastery plays a fundamental role among young unemployed graduates, for its loss is related to distress while its gain is related to eustress. The results of this research are relevant with regards to the implementation of training programs that contribute to the improvement of the well-being and life quality of these unemployed individuals, therefore allowing them to be in a better disposition to find a job.

Keywords: psychological resources, unemployment of young graduates, Conservation of Resources Theory.

As a consequence of the economic crisis initiated in 2007 in the United States and Europe, a great number of people have been left unemployed, and among these, the younger sector of the population is the one facing more difficulties in accessing the labor market (Wanberg, 2012). One of the European countries most affected by unemployment is Spain. Regarding the data from the Centre for Sociological Research of July 2018 (www.cis.es), unemployment is the main existing problem for 64,3% of the Spanish population, and it has remained as the main concern since the economic crisis started. The situation is especially worrying for the young population. Unemployment rate for the second trimester of 2018 is 34,7% for individuals under 25 years of age, and to 20,57% for people between the ages of 25 and 29 (National Institute of Statistics, www.ine.es). In addition, young people are polarized into two segments, depending on their educational level. On one side, a group with a very low educational level, who completed Primary and/or Secondary education, on the other side, a highly-qualified group with University certification (García, 2011, 2014). Although unemployment affects the more qualified group less, 14,9% of young University graduates between 25 and 29 years of age is unemployed, (www.ine.es), slightly less than half of the University students access jobs in accordance with their academic training a year after graduating (48.5%)（www.mecd.gob.es). Therefore, and albeit with a difficult scenario, a number of young graduates find job positions related to their training soon after graduating. Independently of variables such as macroeconomic situation, labor market, type of degree, networking, or family support, which, obviously, play an important role in youth unemployment (Álvaro & Garrido, 2005; Felgueroso, 2012; Garrido, 2012; Moreno, 2013, 2015) we believe that individual differences, such, as psychological resources of those recently graduated, could play a determinant role in allowing these young graduates to find a job. Following the approach of the

Conservation of Resources Theory (COR Theory) proposed by Hobfoll (1989), this type of resources would be positively influential in job search and appraisal.

Conservation of Resources Theory

The COR Theory proposed by Hobfoll (1989, 2002, 2010) considers resources as either entities with value in themselves, or as means to reach a valued goal. They can be: 1) objects, like owning a house; 2) personal characteristics, either physical (e.g.: health), or psychological (e.g., optimism, self-esteem, etc.); 3) conditions, as being married or employed; and 4) energies, such as time, money or knowledge. Furthermore, resources contribute to our own identity, and consequently, differentiate us from others.

The fundamental principle of this theory is that people fight to maintain, protect, and build resources, as well-being (eustress) will depend on their gain, and stress (distress) will be subject to their loss. Distress, commonly known as stress, refers to the negative response against stressors that is translated into negative affect and a detriment to mental health. On the other hand, eustress is defined as the positive response to adversity, and it is portrayed in the presence of positive affect and well-being (McGowan, Gardner & Fletcher, 2006; Nelson & Simmon, 2003; Watson, Clark & Tellegen, 1988; Watson & Pennebaker, 1989). Psychological stress occurs as a response to an environment in which there is: 1) a threat of resource loss, such as suspicions about your company being restructured, this meaning that one's job might be at risk; 2) real loss of resources, for example, losing one's job; 3) absence of return of resources when other resources have been invested for that purpose, for instance, studying a University degree, which implies a great energy investment such as time, money, effort, etc., to achieve the goal of finding a job related to one's training, but not finding any after graduating.

According to Hobfoll (1989, 2002, 2010), people with a good amount of resources – psychological or not – will better face environmental stressors (e.g.: unemployment), and will also have more probabilities of coping with the situation and successfully getting out of it. In this sense, Schaufeli (1997) finds that employment among University graduates is predicted by the active and positive attitude when it comes to facing unemployment. This result is consistent with the one found in another research carried out with other groups of unemployed people, where reemployment was found more likely to happen for those individuals who were more optimistic at the beginning of the unemployment stage (Leana & Feldman, 1995; Wanberg, 1995), the reason being that more optimistic people tend to experience well-being in a more favourable way, and they better resist stress (Carver & Scheier, 1998). In this respect, a positive relationship between reemployment and psychological well-being has been found (d = 0.89) in a meta-analysis by McKee-Ryan, Song, Wanberg & Kinicki (2005) with a N = 1,911; and more recently, between reemployment, positive affect and life satisfaction (Ferreira et al., 2015).

Considering the previous research, we could ask ourselves: **which psychological resources make it more likely for young graduates to find a job that resembles their academic training immediately after finishing their studies?** We understand that this is a relevant question because: 1) there are barely any studies that have addressed this question; 2) according to the Barometer University-Society (Mayor et al., 2016), 80% of the students choose a career for preferential or vocational reasons, and so the idea that they prioritize the finding of a meaningful job for them is worth considering. In fact, what they value the most when it comes to finding a job is that it fits with their training; 3) their lack of experience, of networking and of knowledge about the labor market makes it harder for them to find a job (Morsy, 2012); and 4)

research points out that being unemployed shortly after graduating has consequences not only in the short run, but also in the long run, because these graduates have more probabilities of losing their job years later and they tend to earn less than those who became employed more easily (Kahn, 2010).

Moreover, we must consider that, although the percentage of University graduates who find a job in accordance with their training increases over time, it does not do so in a significant manner, thus we find that four years after graduating, only 55.5% of the graduates in 2012 work in job positions for which they have received training (www.mecd.gob.es). As stated by Hobfoll (1989, 2002, 2010), one of the causes of distress is the lack of payoff of resources after having invested in other resources for that purpose, and young graduates are a population who has invested numerous resources during their study years (e.g., money, effort, time, etc.), seeking future access to a job place related to their training level. Therefore, COR Theory predicts loss of resources and, in consequence, distress for unemployed graduates. Following the previous statements, it is worth asking: **which psychological resources differentiate young unemployed graduates from the employed ones?** And, **does unemployment affect this group's distress and eustress?** In relation to the first question, young graduates most often live with their parents – being the average emancipation age 28.9 years old, as reported by Eurostat (www.ec.europa.eu/eurostat). This group possesses social support for the job searching and bears no economic pressure – as opposed to older unemployed individuals (Álvaro & Garrido, 2005). Therefore, a decrement in these resources would not be expected to take place (Hobfoll, 2002), although a loss of other resources (i.e., psychological resources) might be experienced. For instance, some research has shown that unemployment brings about lack of both self-efficacy and environmental mastery (Eden & Aviram, 1993; McKee-

Ryan & Kinicky, 2002; Vinokur, Schul, Vuori & Price, 2000). With respect to the second question, Jahoda (1982) states that employment provides both manifest (e.g.: income, regulated activity, organization, social relationships) and latent (e.g.: psychological) benefits, while unemployment deteriorates well-being, increases stress and affects mental health. Consistent with this view, Paul and Moser (2009) found – in a meta-analysis with N = 40,985 – poorer mental health among the unemployed (d = 0.56), a similar result to that obtained in another meta-analysis (d = 0.57) with N = 21,735 (McKee-Ryan et al, 2005), and in other studies with unemployed individuals (Creed & Bartrum, 2008; Wiener, Oei & Creed, 1999). These results can be modulated by the cultural and socioeconomic conditions of the studied countries. For example, impact of macroeconomic conditions on the relation between unemployment and health has been analyzed, finding in Spain lower mental health levels among the unemployed during the economic crisis (Urbanos-Garrido & Lopez-Valcarcel, 2015), while the opposite was obtained in Sweden (Brydsten, Hammarström & San Sebastian, 2016). These discrepancies might be explained by the socio-cultural differences between both countries. Accordingly, Schaufeli (1997) found that unemployed graduates in The Netherlands did not experience either worsening of mental health nor higher distress, attributing these results to the social and cultural conditions of the country as the unemployed group was specially protected, and a proactive attitude towards job search was inoculated in them.

Furthermore, regarding the COR Theory, people strive to make the loss of resources as small as possible when they face an adverse environment – and hence to be in a better position to overcome the stress. When they are not facing any stressors, they fight to gain resources, thus allowing these reserves to compensate future adverse situations that might put their resources at risk. Therefore, individuals possessing a good

amount of resources will better cope with environmental stressors, and consequently, their mental health will be less affected. Conversely, those with poorer reserves will result to be more vulnerable and susceptible to distress (Hobfoll, 2002). As Huffman, Culbertson, Wayment and Irving (2015) pose, although loss of resources leads to stress, people can compensate that loss through other resources. Thus, for instance, after WWII research showed that resources such as sense of mastery and social support had been key factors to preserve mental health among the combatants (Caplan, 1964). In the event of catastrophes such as the terrorist attack on the Twin Towers in New York, resilience to the trauma and positive affect softened the stress in those involved in the tragedy (Fredrickson, Tugade, Waugh & Larkin, 2003). In a similar way, a relation between unemployment and distress has been found. However, it is not yet clear what mechanisms mediate between the two, nor which role do psychological resources play in that mediation (Huffman et al., 2015; Wanberg, 2012). Huffman et al. (2015) found that family support has a positive effect on the well-being of the unemployed, and this relationship is partially modulated by latent benefits – collective purpose, social contact, status, time structure and enforced activity – collected by Jahoda (1982). Creed and Bartum (2008) indicate that unemployed individuals perceive low sense of control over their lives, which leads them to distress – low levels of control are associated with high psychological distress – while high levels of control improve the appraisal and well-being. Therefore, we could ask ourselves: **which psychological resources predict distress among young unemployed graduates, and which ones predict well-being?** We believe that this is a matter of great relevance when it comes to being able to establish programs for improvement of resources among unemployed individuals that will allow them to achieve a better quality of life, mental health, stress-coping strategies and, consequently, to be in a better disposition for finding a job. In this regard, Matt,

Bellardita, Fischer and Silverman (2006) applied a program to unemployed people during three weeks to modify dysfunctional attributional styles and self-efficacy, which resulted in a decrement in psychological stress and an increase in psychological resources concerning job search.

Objectives

The present research has three goals that intend to answer the three main questions about the role psychological resources play in unemployment among young graduates, all of them within the context of the COR Theory developed by Hobfoll (1989, 2002, 2010). First, understanding which psychological resources make it more likely for young graduates to find a job related to the training they have received. For this purpose, we will try to figure out which psychological resources predict the success of a young graduate (having finished the degree within a maximum of four months) on becoming employed, in accordance with the training received. Second, learning which psychological resources distinguish young unemployed graduates from those employed, and analyzing whether unemployment affects distress and eustress. To that end, existing differences in psychological resources between employed and unemployed individuals will be studied, considering both recent graduates, and those who graduated more than four months prior. We will also test if these differences between young employed and unemployed are influenced by the type of university degree they have. Third, studying the loss of which resources predicts distress among young unemployed graduates, the gain of which resources predicts eustress.

Method

Participants

The sample was composed of 542 young graduates with a mean age of 25.04 years (*SD* = 2.31 years), individuals ranging from 21 to 30 years old. Women constituted 54.4% of the sample. Of the total sample, 29.2% had graduated in Social Sciences, 31.2% in Health Sciences, 19.6% in Humanities-Arts and 20.0% in Technical Studies. Most of them, (87%) had graduated between 2010 and 2016, the rest between 2002 and 2009. They had all graduated between 2002 and 2016. The unemployed individuals (48.3%) had spent an average of 11.81 months (*SD* = 16.21 months) in that situation, with a maximum of 94 months of unemployment. Those employed (51.75%) were involved in an activity related to the degree they had studied within an average of 11.44 months (*SD* = 10.84 months), ranging from 1 to 55 months. Most of these young individuals were living with their families (55.5%), with friends (17.6%), or with their partner (13.8%), only an 8.2% reporting to live alone.

Procedure

Data collection took place between the years 2014 and 2016. Researchers trained several evaluators in the administration of the instruments of measure used in the study, as well as in data collection. All participants read the instructions and filled in the measures in the presence of the evaluators and in one session. Only participants with a maximum of 30 years of age were evaluated, and considerations were taken to make the percentage of the employed and unemployed groups similar, as well as to contemplate people who had been enrolled in different careers, to obtain a more representative sample.

Measures

Psychological resources. The scale of *Positive Psychological Functioning (PPF)* by Merino and Privado (2015), composed of 33 items in a Likert format with 5 alternative responses was used. The scale's internal structure was analyzed by Confirmatory Factorial Analyse in a representative sample of Spanish population with 3000 participants. This analyse showed a jerarquic factorial structure in two levels with good fit to the data (RMSEA = .041; CFI = .918; NFI = .908; PNFI = .0784). More concretely, the 33 items were grouped in 11 psychological resources: autonomy, resilience, self-esteem, purpose in life, enjoyment, optimism, curiosity, creativity, humour, environmental mastery and vitality. These resources were grouped into a second order factor called Positive Psychological Functioning a measure for the eudaimonic well-being. Moreover, the scale convergent validity was studied using others similar measurements and obtaining good results. Subsequently, the scale was validated in other populations like Mexicans (Merino, Privado & Gracia, 2015).

As an additional measure of *Environmental Mastery*, we used the subscale included in the Psychological Well-Being Scale (Ryff, 1989) adapted by Díaz et al. (2006) to the Spanish population, since the equivalent PPF is not entirely adequate for a young population.

Self-efficacy. The Baessler and Schwarzer scale of 1996 adapted by Sanjuán Pérez and Bermúdez (2000), consisting of 10 items, was used and applied in a Likert type scale with 5 responses.

Subjective well-being. The *Satisfaction with Life Scale* (Diener, Emmonds, Larsen & Griffin, 1985), which emphasizes how happy or unhappy people perceive themselves to be – instead of objective circumstances surrounding their lives – was used. It contains 5 items, and follows a Likert type scale with 5 alternative responses.

The SWLS Spanish version was used (Garrido, Fernández, Villalba, Pérez & Fernández, 2010).

Distress and Eustress. The *Positive and Negative Affect PANAS* by Watson et al. (1988) was used. This scale is composed of 20 items, half of them measuring positive affect (eustress), and the other half measuring the negative affect (distress). The response format is a Likert type scale with 5 alternatives. For the purpose of this research PANAS Spanish version was used (Sandín et al., 1999).

Data analysis

First, the descriptive statistics of measures were calculated, as well as Cronbach's reliability index. Then, to achieve the first goal of the study, a binary logistic regression was performed, employing the different resources as predictors. The condition of being employed or unemployed at the time of evaluation, acted as the criterion variable. This analysis was done solely with those who had graduated in the same year they were evaluated, and each student was assessed within four months of graduation. To provide an answer for the second goal, an ANOVA of two independent factors for measures on psychological resources, distress, eustress, satisfaction with life and PPF was done to study possible differences between the employed and unemployed groups, and the type of studies completed (Social Sciences, Health Sciences, Humanities-Arts and Technical Studies). Finally, to meet the third aim of the study, linear regressions for distress and eustress were created, using psychological resources among young unemployed graduates as predictors. Age and sex were also used as predictors in order to analyze their possible influence on the results. All the analyses were carried out with the statistical package SPSS V. 18.

Results

Descriptive. In Table 1, the mean, standard deviation and reliability of each of the measures considered in this study are displayed. All the measures present reliability values around .70 – acceptable values in research (Abad, Olea, Ponsoda & García, 2011) – except for environmental mastery on the PPF scale. Thus, this scale was eliminated from the rest of the analysis. In any case, as explained in the section measures, this variable is measured through the Environmental Mastery Subscale included in the Psychological Well-Being Scale (Ryff, 1989) adapted by Díaz et al. (2006) to the Spanish population. This subscale is more adequate for the young population.

Please, insert Table 1 about here

Binary logistic regression. With the purpose of knowing which predictors forecast the fact that a person finds a job shortly after graduating, a binary logistic regression was conducted using the different resources as predictors. The forward inclusion procedure of variables was used. There were only 168 participants who met the inclusion criterion – having graduated the same year of the evaluation. The mean age was 23.27 years old (*SD* = 1.55 years), of which 54.2% were women. The obtained model could only include the optimism PPF as a predictor. This variable gets to explain a 5.8% of the individual differences between those who find a job right after graduating and those who do not (R^2 of Nagelkerke = .058). The model presents an adequate adjustment to the data ($\chi^2(6) = 7.73$, $p = .258$). The regression equation from the model was the following: Logit (Employed = 1) = -2.662 + 0.208*Optimism.

Both regression coefficients were statistically significant (β_0 = - 2.662, *Wald* (1) = 7.82, p = .005; β_1 = 0.208, *Wald* (1) = 6.87, p = .009). With the aim of interpreting the predictive variable in the model, we calculate $e^{\beta 1} = e^{0.208} = 1.231$, which indicates that employed individuals have an advantage of 1.231 in optimism when compared to the unemployed ones. In terms of probability: 1.231/ (1.231+1) = 0.5518, the probability of having more optimism is 55.18% among the employed individuals.

ANOVA of independent measures. We studied – within the entire sample – what were the differences in resources, subjective well-being, PPF, stress, and eustress between the employed and unemployed individuals, considering those who had just graduated and those who did so more than four months before the study. An ANOVA of independent measures was conducted using as factors: being or not employed and the type of studies completed (Social Sciences, Health Sciences, Humanities-Arts and Technical Studies). Table 2 shows the obtained results.

Please, insert Table 2 about here

Statistically significant differences between employed and unemployed reside only in resilience, optimism, autonomy, environmental mastery, self-efficacy, distress, and subjective well-being – all with higher scores for the employed group, except for negative affect. Moreover, the size effect ($\eta^2_{parcial}$) is small according to Cohen (1992)'s criteria (.01 is low, .06 is medium and .14 is large). Thus, employed people would present higher values in resilience, optimism, autonomy, environmental mastery, and subjective well-being, and lower values in distress. According to the type of career completed, statistically significant differences appear in: self-esteem, purpose in life, creativity, self-efficacy and eustress. In all cases with large effect sizes. In self-esteem,

there are differences between those who studied Social Sciences and Technical Studies in favor of the first (Bonferroni = 0.79, p = .026) and Technical Studies and Health Sciences in favor of the first (Bonferroni = 0.73, p = .048). In purpose in life, there are differences between Social Sciences and Humanities-Art with higher scores in Social Sciences (Bonferroni = 0.77, p = .018). In creativity, there are differences between Technical Studies and Social Sciences with higher scores in Technical Studies (Bonferrone = 0.70, p = .044). In self-efficacy, there are differences between Technical Studies and Humanities-Art in favor of the first (Bonferroni = 3.17, p = .007). Finally, in eustress, there are differences between Social Sciences and Humanities-Art with higher scores in the first (Bonferroni = 2.59, p = .002). In relation to the interaction between the two factors used (employed vs unemployed and type of studies completed) and the criteria variables, no effect was found.

Multiple linear regression. As a means of finding out which psychological resources predicted distress and eustress among the unemployed graduates at the time of the evaluation, two multiple linear regressions were performed – one for distress and the other for eustress as the criterion. Age and sex were also used as predictors in order to analyze their possible influence. The stepwise method was used. The evaluated sample was formed by 175 participants with a mean age of 24.41 years (*SD* = 2.10 years), of which 52% were women. The predictors found for eustress were environmental mastery, vitality, resilience, optimism, curiosity, and humour (see Table 3). The model composed of the six predictors can explain a 59.1% of the total variance (adjusted R^2 = .591, $F_{6,168}$ = 42.16, p < .001), although the most explanatory predictors are the first three. The regression model attained in standard scores was the following: $Z_{Eustress}$ = $0.254*Z_{Environmental\ Mastery} + 0.170*Z_{Vitality} + 0.197*Z_{Resilience} + 0.176*Z_{Optimism} + 0.119*Z_{Curiosity} + 0.127*Z_{Humour}$. Every regression coefficient resulted to be statistically

significant (see Table 3). Since neither age nor sex were included as predictors in the final model, it can be considered that these two variables did not influence the criterion considered.

Please, insert Table 3 about here

As for distress, only two predictors were found: environmental mastery, and optimism (see Table 3). This model explains a 21.3% of the total variance (*adjusted* R^2 = .213, $F_{2,172}$ = 28.66, $p < .001$). The regression model obtained in standard scores was the following: $Z_{Distress} = - 0.357*Z_{Environmental\ Mastery} - 0.210*Z_{Optimism}$, hence environmental mastery and optimism negatively predict negative affect. The regression coefficients were statistically significant (se Table 3). In this case, neither age nor sex managed to predict the criterion.

Therefore, in the case of eustress, it seems like environmental mastery, vitality, and resilience fundamentally predict the individual differences among the unemployed in a positive manner, while distress is negatively predicted primarily by environmental mastery and optimism.

Discussion

For this study, more than 500 young graduates from different branches (Social and Health Sciences, Humanities, Technical Studies and Arts) have been evaluated, 51.75% of whom were employed in an activity related to their training, and the rest being unemployed. The aim was to observe the role psychological resources, well-being, and affect play in the latter group.

First, we aimed at finding out the extent to which psychological resources could predict the employment of young graduates as far as four months after their graduation. The results suggest that more optimistic graduates have some more possibilities of finding a job shortly after the completion of their degree compared to the less optimistic individuals. More concretely, employed are 55.18% more optimistic than the unemployed ones. These results are concordant with other previous studies carried out with university graduates (Schaufeli, 1997), as well as with other unemployed individuals (Carver & Scheier, 1998; Leana & Feldman, 1995; Wanberg, 1995). Due to the kind of methodology used, it could be thought that less optimistic individuals are so because of the lack of employment. However, in Spain, where structural problems play an important role on unemployment (Álvaro & Garrido, 2005; Felgueroso, 2012; Garrido, 2012; Moreno, 2013, 2015) a four-month period for finding a job is not enough to modify a relatively stable variable like optimism. Although optimism could be dispositional or state, in this study we refer to it as the former, so, as the positive expectation about life and events, and, the generalized tendency to expect good things to happen (Scheier & Carver,1987). In the same line, as Chico (2002) points out, research indicates that optimism is positively related to positive coping strategies such as: planning, positive reinterpretation and personal growth, coping focused on the problem, and adaptive coping; it is negatively related to negative coping strategies such as: focusing on emotions, denial, behavioural and mental detachment, and non-adaptive coping. Thus, following the approach in Hobfoll's COR Theory (1989, 2002), optimistic people would more easily display an array of resources that would place them in a better disposition to move in a labour market as complex as the current one. Positive strategies activate you, they give a sense of control over what you do, while negative strategies block you and are associated with poor control over the situation.

That being said, we want to make it clear that it can't be inferred from this result that optimism has a causal effect over employment, since the methodology used does not allow to do so. Nevertheless, we can assert that there is an association between both variables, optimism versus employment-unemployment. In addition, the literature about this topic and the characteristics of the design used allow us to hypothesize that optimism acts as a predictor, while future research will have to use longitudinal designs in order to test this matter. Moreover, the relation between optimism and employment-unemployment, although modest, is quite interesting, because it reflects the presence of individual differences and the possibility of being able of intervening on them, and this is something impossible to do with the structural variables. In that regard, it could be of interest that universities provided the students in their last grade course, labour market coping workshops with a specific module for strengthening psychological resources. This could consist of analyzing and evaluating the student's resources and working on the development and strengthening of those resources in which they presented the greatest deficiencies, paying special attention to optimism.

The second goal of this research is to detect the differences in resources, subjective well-being, PPF, distress, and eustress, between employed and unemployed individuals. We find that unemployed graduates score significantly lower in resilience, optimism, autonomy, environmental mastery, self-efficacy, and global life satisfaction (subjective well-being), and show higher values of distress compared to those holding a job in accordance with their training. These results match those obtained in previous studies (Creed & Bartrum, 2008; Eden & Aviram, 1993; McKee-Ryan et al., 2005; McKee-Ryan & Kinicki, 2002; Paul & Moser, 2009; Vinokur et al., 2000; Wiener et al., 1999). The result is consistent with the COR Theory, which states that the lack of resources gained after the investment of resources for this precise purpose, brings about

more loss of resources and distress (Hobfoll, 1989). Considerations must be taken with the effect sizes, which are between medium and low, but not irrelevant (Wanberg, 2012). This is positive data that we believe is conditioned by some characteristics from the current Spanish society. The first one is the value attributed to the family, and the constant support source it provides. As Álvaro and Garrido (2005) remark, one of the characteristics that distinguish the context of unemployment for young people in Spain is the social and economic welfare that family provide. Considering this, family support would alleviate the loss of resources under Hobfoll's COR Theory (2002). According to Parke (2004), family constitutes the most important support system for the well-being and adjustment of the members that integrate it. In line with the data obtained from the CIS Barometer in June 2014 about *"Opinions and Attitudes towards the Family"*, 86.3% of the young population between 25 and 34 years old value the family as something very important in their lives, apart from the 97.3% who felt satisfied or very satisfied with their family relations (www.cis.es). In our study, most of them live with their families (55.5%), and it is conceivable that these individuals not only receive economic support, but also moral and emotional support in the face of coping with unemployment. In addition, by living with their parents they have no family burdens nor economic load, which are the two most relevant sources of distress among the unemployed (McKee-Ryan et al., 2005). The second factor is the unemployment rate among the young population in Spain, being so high that it is possible that a normalizing effect has occurred. As indicated by Schaufeli (1997), social acceptance of unemployment is higher as unemployment rate drastically increases. This normalization of unemployment allows unemployed individuals to attribute the cause of unemployment to external factors, away from their control (Paul & Moser, 2009; McKee-Ryan et al., 2005). These two variables – family support and normalization of

unemployment – would justify not only the smallest effect sizes found, but also the apparent absence of differences in a resource as essential to the self as self-esteem. In any case, the results provided by the literature regarding self-esteem are contradictory, perhaps because this is a reasonably stable variable that requires time to change (McKee-Ryan & Kinicki, 2002). In conclusion, the effect on psychological resources is relevant and it would be interesting to provide to the unemployed youth specific modules for the development and strengthening of psychological resources inside the context of job search workshops. On the other hand, in the comparison between type of studies completed and the criteria variables, we obtain differences some cases, specifically Technical Studies and Social Sciences, have more resources in comparison with Humanities-Art and Health Sciences. Finally, we do not find differences in the interaction between employment- unemployment and type of studies completed respect to the criterion variables, which means that the gain or the loss of resources in employment-unemployment situation is independent of the kind of studies completed. This is a result of interest and it worth of considering.

With the third goal, we wanted to understand the gain of which resources promoted eustress among the young unemployed graduates, and the loss of which led to distress. Our results give great relevance to environmental mastery, which holds a very important role as its loss predicts distress (21.8% of the variance), and its gain predicts eustress (39.7% of the variance). This outcome goes in line with the COR Theory. Not only does it predict that loss of resources leads to distress, but it also suggests that conservation of certain resources can protect us from environmental stressors such as unemployment (Hobfoll, 2002; Huffman et al., 2015). Several research studies are consistent with our results, and point to resources of control (e.g.: environmental mastery) as being beneficial for general stress coping, specifically with unemployment

(Creed & Bartrum, 2008; Hannan, O'Riain, & Whelan, 1997). In fact, low levels of environmental mastery would lead to helplessness, which would prove to be pernicious for unemployed individuals: 1) because of the negative consequences on mental health; and 2) for they would desist from job search (Goldsmith, Veum, & Darity, 1997). In the same line, McKee-Ryan & Kinicki (2002) and McKee-Ryan et al. (2005) pose that the perception of environmental control is positive for unemployed people, and it is positively associated with the probability of full-time permanent employment, while negatively related to depression and anxiety. Moreover, we also found that loss of optimism predicts – while in a much smaller degree – distress (3.2% of the variance), and eustress (2.3% of the variance). Additionally, we observe that vitality predicts 11.6% of the eustress among the unemployed. Although literature says nothing about this resource or its role in unemployment, to us it is very relevant because it brings energy and enthusiasm to the unemployed, necessary aspects to mobilize a person for job search. Finally, resilience predicts 4.6% of the eustress, a result that coincides with studies of previous catastrophes such as the terrorist attack on the Twin Towers, where this resource was found to alleviate distress (Fredrickson et al., 2003).

In conclusion, the results from this third aim indicate that unemployment is not experienced in the same way among young graduates. Knowledge the main role environmental mastery plays in the face of both distress and eustress is fundamental when it comes to implementing training programs that help improving the well-being and the quality of life in the unemployed, which would consequently allow them to hold a better position for finding a job. Literature about this issue finds that these types of programs significantly improve the probability of acquiring a job (Matt et al., 2006). Therefore, future research should work on this matter.

Limitations

One of the limitations of this study is the use of a cross-sectional methodology to study how unemployment affects loss of resources. It would be convenient to carry out a longitudinal design to see if the loss of resources is maintained over time – as others have suggested (Kahn, 2010) – or if it gets to a point where it stops being relevant. The problem with a cross-sectional methodology can arise from the assumption that unemployment causes both loss of psychological resources and discomfort, when one could argue the opposite scenario – lack of psychological resources and the presence of discomfort lead to unemployment. However, as Wanberg (2012) points out, unemployment tends to be the cause of discomfort and not the other way around. Moreover, in the meta-analysis carried out by Paul and Moser (2009), 27 studies corresponding to unemployed workers because of closed factories were identified. In this type of situation, unemployment is obviously not caused by the poor mental health of the worker. It was observed that, in situations as the one described, unemployement worsened the unemployed individual's mental health, hence it could be concluded that it was unemployment the one which caused distress and not conversely. In any case, it would be convenient that future research addresses this question by using a longitudinal methodology, specifically, and just as Garrido (1999) points out, the most adequate design would be the following:

> *Young participants in the sample are interviewed before and after leaving their study place to enter the job market. In this way, it is possible to determine if the observed differences among the employed and unemployed youth could be attributed to the job situation or if they were present before these individuals were incorporated into the job market* (p.132).

A quasi-experimental design could also be used, with two groups of unemployed individuals: one experimental and the other control. The experimental group would receive training in the psychological resources we have seen could play a role when it comes to finding a job, while the unemployed in the control group, of similar characteristics to the former (training, social class, age, sex, etc.) would not receive any training. Pre and post treatment measures of psychological resoruces would be taken, as well as the time needed for both groups to find a job.

In addition, it ought to be interesting to study what happens to the role of resources in people older than 30 years old. We have focused on young graduates, but it is worth wondering if the results could be replicated in unemployed individuals at an older age. It would also be pertinent to study which are the differences between graduates whose job positions do not match the academic training received, and what has been addressed in the present study. Ultimately, we have not analyze non-graduated people, for whom the resources probably differ from graduated individuals.

References

Abad, F. J., Olea, J., Ponsoda, V., & García, C. (2011). *Medición en ciencias sociales y de la salud.* Madrid: Síntesis.

Álvaro, J. L. & Garrido, A. (2005). Youth unemployment and job-seeking behaviour in Europe. In Bradley. H and Van Hoof, J. (Eds.), *Young people in Europe. Labour markets and citizenship* (pp. 81-98). Bristol: Policy Press.

Brydsten, A., Hammarström, A., & San Sebastian, M. (2016). The impact of economic recession on the association between youth unemployment and functional somatic symptoms in adulthood: a difference-in-difference analysis from Sweden. *BMC Public Health, 16*, 1-8.

Caplan, G. (1964). *Principles of preventative psychiatry*. New York: Basic Books

Carver, C. S., & Scheier, M. F. (1998). *On the self-regulation of behavior*. New York: Cambridge University Press.

Chico, E. (2002). Optimismo disposicional como predictor de estrategias de afrontamiento. *Psicothema, 14*(3), 544-550.

Cohen, J. (1992). A Power Primer. *Psychological Bulletin, 112*,1, 155-159.

Creed, P. A., & Bartrum, D. A. (2008). Personal Control as a Mediator and Moderator Between Life Strains and Psychological Well-Being in the Unemployed. *Journal of Applied Social Psychology, 38*, 460-481.

Díaz, D., Rodríguez-Carvajal, R., Blanco, A., Moreno-Jiménez, B., Gallardo, I., Valle, C., & van Dierendonck, D. (2006). Adaptación española de las escalas de bienestar psicológico de Ryff. *Psicothema, 18*, 572-577.

Diener, E., Emmons, R., Larsen, R.J., & Griffin, S, (1985). The satisfaction with life scale. *Journal of Personality Assessment, 49*, 71-75.

Eden, D., & Aviram, A. (1993). Self-efficacy training to speed reemployment: Helping people to help themselves. *Journal of applied Psychology, 78*(3), 352.

Felgueroso, F. (2012). *El empleo juvenil en España: Un problema estructural*. Círculo Cívico de Opinión.

Ferreira, J. A., Reitzle, M., Lee, B., Freitas, R. A., Santos, E. R., Alcoforado, L., & Vondracek, F. W. (2015). Configurations of unemployment, reemployment, and psychological well-being: A longitudinal study of unemployed individuals in Portugal. *Journal of Vocational Behavior, 91*, 54-64.

Fredrickson, B. L., Tugade, M. M., Waugh, C. E., & Larkin, G. R. (2003). What good are positive emotions in crisis? A prospective study of resilience and emotions following the terrorist attacks on the United States on September 11th, 2001. *Journal of personality and social psychology, 84*(2), 365.

García, J. R. (2011). *Desempleo juvenil en España. Causas y soluciones*. BBVA. 11/30 Documentos de trabajo.

García, J. R. (2014). El desempleo juvenil en España. Información Comercial Española, ICE. *Revista de economía, 881*, 11-28.

Garrido, A. (1999). Psicología Social del desempleo. In Álvaro, J.L., Garrido, A. and Torregrosa, J.R. (Coords.), *Psicología Social Aplicada* (pp. 122-153) Madrid: McGraw-Hill Interamericana de España.

Garrido, L. (2012). *Para un diagnóstico sobre la formación y el empleo de los jóvenes*. *Círculo Cívico de Opinión*: *Cuadernos*.

Garrido, R. M., Fernández, M. A., Villalba, E.B., Pérez, P.J., & Fernández, M. (2010). Evidencias de validez de la adaptación al español de la escala de satisfacción con la vida (SWLS) en una muestra de estudiantes universitarios. *Metodología de encuestas, 12*(1), 45-62.

Goldsmith, A. H., Veum, J. R., & Darity, W. (1997). Unemployment, joblessness, psychological well-being and self-esteem: Theory and evidence. *The Journal of Socio-Economics*, *26*(2), 133-158.

Hannan, D. F., O'Riain, S., & Whelan, C. T. (1997). Youth unemployment and psychological distress in the Republic of Ireland. *Journal of Adolescence*, *20*, 307-320.

Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, *44*(3), 513–524.

Hobfoll, S. E. (2002). Social and psychological resources and adaptation. *Review of General Psychology*, *6*(4), 307–324.

Hobfoll, S. E. (2010). Conservation of resource caravans and engaged settings. *Journal of Occupational and Organizational Psychology*, *84*, 116–122.

Huffman, A. H., Culbertson, S. S., Wayment, H. A., & Irving, L. H. (2015). Resource replacement and psychological well-being during unemployment: The role of family support. *Journal of Vocational Behavior, 89*, 74-82.

Jahoda, M. (1982). *Employment and unemployment: A social-psychological analysis.* London: Cambridge University.

Kahn, L. (2010). The Long-Term Labor Market Consequences of Graduating from College in a Bad Economy. *Labour Economics*, *17*(2), 303–16.

Leana, C. & Feldman, D. (1995). Finding new jobs after a plant closing: Antecedents and outcomes of the occurrence and quality of reemployment. *Human Relations*, *48*, 1381–1401.

Matt, G. E., Bellardita, L., Fischer, G., & Silverman, S. (2006). Psychological resources and mental health among the difficult-to-employ: Can a pre-employment training program make a difference? *Journal of Vocational Rehabilitation, 24*, 33-43.

Mayor, C, Seonane, C. Liares, J., Carrillo, J., García, J., Andradas, C., Álvarez, C., Álvarez, C., Sarasqueta, A., Ruíz-Gallardón, A, Becker, F., Leguina, J. (2016). *Barómetro 2016. Universidad-Sociedad*. Madrid: Consejo Social de la Universidad Complutense de Madrid

McGowan, J., Gardner, D., & Fletcher, R. (2006). Positive and negative affective outcomes of occupational stress. *New Zealand Journal of Psychology*, *35*(2), 92.

McKee-Ryan, F. M., & Kinicki, A. J. (2002). Coping with job loss: A life-facet perspective. *International review of industrial and organizational psychology*, *17*, 1-30.

McKee-Ryan, F. M., Song, Z., Wanberg, C. R., & Kinicki, A. J. (2005). Psychological and Physical Well-Being During Unemployment: A Meta-Analytic Study. *Journal of Applied Psychology, 90*, 53-76.

Merino, M. D., & Privado, J. (2015). Positive Psychological Functioning: Evidences for a new construct and its measurement. *Anales de Psicología, 33,* 211-218.

Merino, M. D., Privado, J. & Gracia, Z. (2015). Validación mexicana de la Escala de Funcionamiento Psicológico Positivo. Perspectivas en torno al estudio del bienestar y su medida. *Salud Mental, 38,* 109-115.

Moreno Mínguez, A. (2012). The late transition to adulthood in Spain in a comparative perspective: The incidence of structural factors. *Young: Nordic Journal of Youth Research, 20*(1), 19-48.

Moreno, A. (2015). La empleabilidad de los jóvenes en España: Explicando el elevado desempleo juvenil durante la recesión económica. *Revista Internacional de Investigación en Ciencias Sociales*, *11*,1, 3-20.

Morsy, H. (2012). Generación marcada. *Finanzas & Desarrollo*, *49*(1), 15-17.

Nelson, D. L., & Simmons, B. L. (2003). Health psychology and work stress: A more positive approach. *Handbook of occupational health psychology, 2*, 97-119.

Parke, R. D. (2004). Development in family. *Annual Review of Psychology*, *55*, 365-399.

Paul, K. I., & Moser, K. (2009). Unemployment impairs mental health: Meta-analyses. *Journal of Vocational Behavior, 74*, 264-282.

Ryff, C.D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology, 57*, 1069-1081.

Sandín, B., Chorot, P., Lostao, L., Joiner, T. E., Santed, M. A., & Valiente, R. M. (1999). Escalas PANAS de afecto positivo y negativo: validación factorial y convergencia transcultural. *Psicothema*, *11*(1), 37-51.

Sanjuán P., Pérez, A. M., & Bermúdez J. (2000). Escala de autoeficacia general: datos psicométricos de la adaptación para población española. *Psychothema, 12*, 509-513.

Schaufeli, W. B. (1997). Youth unemployment and mental health: some Dutch findings. *Journal of adolescence*, *20*(3), 281-292.

Urbanos-Garrido, R. M., & Lopez-Valcarcel, B. G. (2015). The influence of the economic crisis on the association between unemployment and health: an empirical analysis for Spain. *The European Journal of Health Economics, 16*, 175-184.

Vinokur, A. D., Schul, Y., Vuori, J., & Price, R. H. (2000). Two years after a job loss: long-term impact of the JOBS program on reemployment and mental health. *Journal of occupational health psychology*, *5*(1), 32.

Wanberg, C. R. (2012). The individual experience of unemployment. *Annual review of psychology*, *63*, 369-396.

Wanberg, C. (1995). A longitudinal study of the effects of unemployment and quality of reemployment. *Journal of Vocational Behavior*, *46*, 40–54.

Watson, D, Clarck, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal Personality Social Psychology, 54*, 1063-1070.

Watson, D., & Pennebaker, J. W. (1989). Health complaints, stress, and distress: exploring the central role of negative affectivity. *Psychological review*, *96*(2), 234.

Wiener, K. K. K., Oei, T. P. S., & Creed, P. A. (1999). Predicting Job Seeking Frequency and Psychological Well-Being in the Unemployed. *Journal of Employment Counseling, 36* (2), 67-81).

Table 1. Descriptive statistics and reliability for each of the measures used.

	N	**Mean**	***SD***	***α***
Self-esteem PPF	542	11.89	2.21	.806
Resilience PPF	542	12.06	1.97	.623
Curiosity PPF	542	12.04	2.07	.688
Optimism PPF	542	11.37	2.27	.702
Autonomy PPF	542	11.89	2.05	.663
Vitality PPF	542	11.45	2.26	.819
Environmental Mastery PPF	542	10.41	2.01	.346
Purpose in life PPF	542	12.46	2.04	.738
Humour PPF	542	12.35	2.19	.783
Enjoyment PPF	542	11.53	2.15	.706
Creativity PPF	542	11.34	2.03	.687
Environmental Mastery Ryff	356	22.64	3.63	.685
Self-efficacy	356	38.88	5.84	.896
Eustress (PANAS +)	542	36.91	5.72	.804
Distress (PANAS -)	542	22.56	6.83	.855
Subjective well-being	542	17.91	3.84	.861

Table 2. Results of the ANOVA for independent measures on employed and unemployed individuals and career completed, and of size effect ($\eta^2_{partial}$). In bold, the statistically significant differences at 5% have been indicated.

Measure	Main effect employed		Main effect career completed		Interaction effect	
	F	$\boldsymbol{\eta^2_{parcial}}$	***F***	$\boldsymbol{\eta^2_{parcial}}$	***F***	$\boldsymbol{\eta^2_{parcial}}$
Self-esteem PPF	$F_{1,525}$ = 0.66, p = .419	.001	**$F_{3,525}$ = 5.09, p .002**	**.028**	$F_{3,525}$ = 0.23, p = .874	.001
Resilience PPF	**$F_{1,525}$ = 6.99, p = .008**	**.013**	$F_{3,525}$ = 0.10, p .958	.001	$F_{3,525}$ = 0.81, p = .488	.005
Curiosity PPF	$F_{1,525}$ = 0.26, p = .614	.000	$F_{3,525}$ = 0.28, p .837	.002	$F_{3,525}$ = 0.91, p = .436	.005
Optimism PPF	**$F_{1,525}$ = 7.04, p = .008**	**.013**	$F_{3,525}$ = 1.92, p .126	.011	$F_{3,525}$ = 0.97, p = .406	.006
Autonomy PPF	**$F_{1,525}$ = 8.53, p = .004**	**.016**	$F_{3,525}$ = 1.47, p .222	.008	$F_{3,525}$ = 0.77, p = .507	.004
Vitality PPF	$F_{1,525}$ = 1.26, p = .263	.002	$F_{3,525}$ = 2.55, p .055	.014	$F_{3,525}$ = 0.28, p = .839	.002
Purpose in life PPF	$F_{1,525}$ = 3.10, p = .079	.006	**$F_{3,525}$ = 3.07, p .028**	**.017**	$F_{3,525}$ = 1.33, p = .263	.008
Humour PPF	$F_{1,525}$ = 0.97, p = .324	.002	$F_{3,525}$ = 1.32, p .268	.007	$F_{3,525}$ = 0.17, p = .166	.010
Enjoyment PPF	$F_{1,525}$ = 0.61, p = .434	.001	$F_{3,525}$ = 1.27, p .285	.007	$F_{3,525}$ = 0.72, p = .544	.004
Creativity PPF	$F_{1,525}$ = 0.27, p = .602	.001	**$F_{3,525}$ = 3.16, p .025**	**.018**	$F_{3,525}$ = 1.03, p = .378	.006
Environmental Mastery Ryff	**$F_{1,339}$ = 12.09, p = .001**	**.034**	$F_{3,339}$ = 1.76, p .154	.015	$F_{3,339}$ = 0.21, p = .891	.002

Self-efficacy	**$F_{1,339}$ = 3.95, p = .048**	**.012**	**$F_{3,339}$ = 3.88, p .009**	**.033**	$F_{3,339}$ = 0.18, p = .913	.002
Eustress (PANAS +)	$F_{1,525}$ = 1.01, p = .316	.002	**$F_{3,525}$ = 4.55, p .004**	**.025**	$F_{3,525}$ = 0.15, p = .931	.001
Distress (PANAS -)	**$F_{1,525}$ = 8.81, p = .003**	**.017**	$F_{3,525}$ = 1.86, p .136	.010	$F_{3,525}$ = 0.52, p = .667	.003
Subjective well-being	**$F_{1,525}$ = 11.49, p = .001**	**.021**	$F_{3,525}$ = 2.40, p .067	.014	$F_{3,525}$ = 0.77, p = .513	.004

Table 3. Results of the two linear regression models.

Criterion	Predictors	R^2	F of R^2	β of the regression coefficients	t of β
Eustress	Environmental mastery Ryff	.397	$F_{1,173} = 114.10$, $p < .001$	.254	$t_{173} = 3.99$, $p = <.001$
	Vitality PPF	.116	$F_{1,172} = 41.21$, $p < .001$	.170	$t_{172} = 2.48$, $p = .014$
	Resilience PPF	.046	$F_{1,171} = 17.93$, $p < .001$	.197	$t_{171} = 3.10$, $p = .002$
	Optimism PPF	.023	$F_{1,170} = 9.18$, $p = .003$	.176	$t_{170} = 2.54$, $p = .012$
	Curiosity PPF	.012	$F_{1,169} = 4.00$, $p = .027$	.119	$t_{169} = 2.16$, $p = .032$
	Humour PPF	.010	$F_{1,168} = 4.35$, $p = .039$	.127	$t_{168} = 2.09$, $p = .039$
Distress	Environmental mastery Ryff	.218	$F_{1,173} = 48.13$, $p < .001$	-.357	$t_{173} = -4.63$, $p < .001$
	Optimism PPF	.032	$F_{1,172} = 7.41$, $p = .007$	-.201	$t_{172} = -2.72$, $p = .007$