Spirituality and the Psychological Impact of Unemployment: Personality Characteristics, Loneliness and Depressive Symptomatology

George Kleftaras*, Evdokia Vasilou*

[a] Department of Special Education, University of Thessaly, Volos, Greece.

Abstract

The purpose of this research is to explore spirituality in relation to the negative impacts of unemployment, such as depressive symptomatology and loneliness in connection with the five factor personality model. In particular, we wanted to investigate whether the unemployed individuals with higher levels of spirituality have lower depressive symptomatology and loneliness, but also to examine how these variables are related to personality factors. Our sample consisted of 133 unemployed individuals who completed the NEO-Five Factor Inventory, the Assessment of Spirituality and Religious Sentiments (ASPIRES), the UCLA loneliness scale and the Questionnaire of self evaluated Depressive Symptomatology. The results showed that there was no significant association between depressive symptomatology and spirituality, while concerning loneliness and spirituality, a significant negative correlation was found, only in relation to the spirituality dimension of universality. Significant correlations were also shown between spirituality and personality factors, such as openness to experience and agreeableness, whilst significant correlations arose between personality factors and the three dimensions of spirituality. Finally, results are discussed.

Keywords: spirituality, unemployment, depression, loneliness, personality

Introduction

Nowadays, unemployment is becoming a serious social problem. This is an indisputable fact, if one takes into account the current economic, political and social conditions which have led to a huge increase in unemployment rates in most European countries, with Greece being one of the most affected countries from 2008 onwards (Madianos, Economou, Alexiou, & Stefanis, 2011). Job loss is a major problem to an individual, who, apart from having to deal with the failure to meet basic needs, has to face the complex effects on his/her physical and mental wellbeing (Smári, Arason, Hafsteinsson, & Ingimarsson, 1997). The above is demonstrated by the fact that the average of unemployed people who face psychological problems are more than double (34%), compared with those working (16%) (Paul & Moser, 2009).

In numerous surveys, financial distress and events, such as the loss of employment and property and general economic insecurity, are associated with increased levels of depressive symptomatology or depression (Lee et al., 2010; Madianos, Economou, Alexiou, & Stefanis, 2011). Depression is one of the most common disorders in the adult population, while according to the World Health Organization (WHO), it has been estimated that every year, worldwide, about 34 million depressed patients remain untreated (Richards, 2011). In literature, the reported
psychological effects of unemployment are mainly depressive symptoms, stress, anxiety, psychosomatic symptoms, low subjective well-being and low self-esteem (Paul & Moser, 2009), while the depressive symptomatology is perhaps the most studied consequence of unemployment (Murphy & Athanasou, 1999). In the case of an individual who faces job loss, unemployment appears to significantly increase his chances of experiencing symptoms of depression or a major depressive episode six months later, even if he had had no history of depressive episodes in the past (Jefferis et al., 2011; Paul & Moser, 2009). However, the depressive symptomatology decreases when the person returns to work, especially when the work is full-time and relatively permanent (Kim, Muntaner, Kim, Jeon, & Perry, 2013). Finally, it seems that while the rise of unemployment in a region adversely influences workers, it appears to positively affect the unemployed, as the impact of social stigma is reduced and social support increases, due to the fact that the unemployed individual is becoming a bigger part of the whole population (Clark, 2003).

A number of consequences, seemingly caused by unemployment are social isolation, loneliness and stigma, as a result of low economic status, loss of social status and the resulting low self-esteem (De Witte, Rothmann, & Jackson, 2012; Leeflang, Klein-Hesselink, & Spruit, 1992; McKee-Ryan, Song, Wanberg, & Kinicki, 2005). Loneliness does not necessarily mean being alone, as it may be independent of the presence of social relations. Loneliness means that someone’s existing relationships do not satisfy quantitative and mainly qualitative his/her needs. In other words, he/she doesn’t experience the feeling of fulfillment through his personal interactions (McWhirter, 1990). Job loss drives the person to the loss of social contacts, affects his/her identity, and causes feelings of shame for not meeting the social requirements (Ali, Fall, & Hoffman, 2013). This leads to a lack of resources and interest in socializing and to the isolation of the individual from social activities regarding his job (Jones, 1991). Apart from the indirect adverse effects of loneliness, there are direct consequences for the unemployed, such as depressive symptoms and physical symptoms, which show that the feeling of loneliness and the perceived degraded social position, can lead to a generalized poor health (Leeflang et al., 1992).

One factor in recent years that has been repeatedly associated with well-being and mental wellbeing is spirituality. This research field seems to be ruled by a number of difficulties that have to do mainly with the clarification of the two concepts of religiousness and spirituality (Dein, 2006). According to Piedmont (1999, 2001; Piedmont, Ciarrochi, Dy-Liacco, & Williams, 2009), spirituality is someone’s attempt to interpret and give meaning to existence, seeing life in a broader context. Spiritual transcendence is a wide field in which religiosity is included, in the sense that all religious traditions invite people to recognize their limitations and dimensions of human existence (Piedmont, Werdel, & Fernando, 2009). Of course, spirituality can exist completely independently of any religion, even for an atheist, who looks for the meaning and purpose of life outside of religion’s boundaries or any “God” (Bryant, 2007). It, therefore, appears that people with high levels of spirituality, experience less physical and depressive symptoms, less loneliness (Kirkpatrick, Shillito, & Kellas, 1999) and have higher levels of mental wellbeing (Lawler-Row & Elliott, 2009). In the field of mental health, depression, in relation to religion and spirituality, has been the subject of long lasting research, in which a negative correlation is shown by most researchers (Koenig, 2009). For people suffering from depression, it seems that spirituality helps them accept the disorder, gives them a sense of hope and meaning, while they offset the negative experiences, such as the feeling of disconnection to themselves, society and meaning in life (Sorajjakool, Aja, Chilson, Ramirez-Johnson, & Earll, 2008). It is supposed that spirituality has a positive effect, particularly in cognitive depressive symptoms, but not on physical ones (Koenig et al., 1995). The differences that seem to exist between individuals with high and low levels of religiosity/spirituality are not evident in healthy people, but for people who face problems, there is a strong negative correlation with depression. The above, demonstrates the possible regulatory role that religiousness/spirituality plays, in the ap-
pearance of depressive symptomatology (Smith, McCullough, & Poll, 2003; Wink, Dillon, & Larsen, 2005). Especially, the research literature with regards to the psychological effects of unemployment and spirituality is limited. However it seems that spirituality is a factor that mitigates the negative effects of unemployment on health and mental well-being (Muller, Creed, & Francis, 2004). In particular, prayer fulfillment seems to be positively associated with the psychological well-being of unemployed people, while spirituality in general, is associated with social support and a sense of collective purpose.

The personality characteristics appear to play an important role on how people respond to important events in their lives (Yap, Anusic, & Lucas, 2012), such as the loss of their job. Consequently, the way someone deals with a situation such as unemployment, is influenced by personality traits (Uysal & Pohlmeier, 2011). The most popular personality theory in recent years is the five factor personality model (Five Factor Theory). This model focuses on five specific factors that structure personality, which are: “extraversion”, “agreeableness”, “conscientiousness”, “neuroticism” and “openness to experience” (McCrae & Costa, 2008). This model describes the interaction of biology, the environment and culture, through which the development of habits, attitudes and values, that contribute to personality structure occurs (Allik & McCrae, 2002). Extraversion characterizes a person who tends to be sociable, energetic, ambitious, assertive and with a positive attitude, while someone who doesn’t share these traits, is described as: introvert, serious, reserved and as someone who tends to prefer a few close friends. Agreeableness is linked with the humanitarian aspects of the character and involves being cooperative and helpful with altruism and modesty: a person someone can trust. Someone with very low levels of agreeableness would be described as a person whose behavior entails hostility, indifference, antagonism and egotism. Conscientiousness is a factor that refers to a person who has the tendency to be: diligent, decisive, organized and disciplined, when trying to achieve specific goals. Individuals, who are high in neuroticism, are likely to be: sensitive, anxious and impulsive, susceptible to feelings of sadness and anger and experience negative emotions. Unlike someone with low neuroticism who can remain calm even in difficult conditions. Finally, openness to experience refers to individuals who tend to look for different experiences and have high levels of fantasy and aesthetics, creativity and curiosity. On the other hand, an individual who isn’t willing to be open to new experiences is described as a realistic, practical and traditional person (Krueger, Wilson, Shah, Tang, & Bennett, 2006; McCrae & John, 1992). When it comes to unemployment, which is directly linked to the deprivation of basic benefits, it seems that neuroticism plays a key but negative role in the in the recovery of the welfare of the people who lose these benefits (Creed & Evans, 2002). The data suggest that spirituality could be considered as the sixth factor of personality, as it seems to be a distinct and separate dimension, with adequate characteristics and so it can be categorized as a separate factor (Piedmont, 1999; Piedmont, Ciarrochi, et al., 2009; Rican & Janosova, 2010). In general, spirituality and religiosity appear to be associated with the positive factors of personality (Unterrainer, Ladenhauf, Moazed, Wallner-Liebmann, & Fink, 2010), although there is not complete agreement on the findings. Specifically, agreeableness and conscientiousness seem to be the dominant factors associated with spirituality, followed to a less extent by extraversion and openness to experience (MacDonald, 2000), for which there is no correlation with religiosity (Saroglou, 2002; Saroglou & Muñoz-Garcia, 2008). Even in people of different religious traditions, we see similarities in the high conscientiousness and agreeableness and low in neuroticism, something that does not apply to factors such as extraversion and openness to experience, where we see important differences (Johnstone et al., 2012). By defining the five factors of personality that correlate with spirituality, it seems that people who are cooperative and humanists as they approach life with organization and discipline, are closer to the concept of spirituality (Henningsgaard & Arnau, 2008; Löckenhoff, Ironson, O’Cleirigh, & Costa, 2009).
The purpose of this research is to investigate whether spirituality is a protective factor for the unemployed individuals from experiencing depressive symptoms and loneliness. Also, the aim is to explore, whether and in which way, spirituality is related to five factors of personality. As mentioned, some of the main negative consequences of unemployment are depression (Paul & Moser, 2009) and loneliness (De Witte et al., 2012). Correspondingly, research studies in different populations indicate that spirituality appears to be a protective factor against depression (Koenig, 2009) and loneliness (Momtaz, Hamid, Ibrahim, Yahaya, & Tyng Chai, 2011). However, the research literature is limited with regards to spirituality and its psychological impacts on unemployed individuals, especially in relation to loneliness, depression and personality factors. The hypotheses of the present study are the following:
a) the majority of the unemployed individuals have moderate or high depressive symptomatology, b) the unemployed individuals with high levels of spirituality have significantly lower levels of depressive symptomatology and loneliness, c) there is statistically significant negative correlations between spirituality and depression/loneliness, d) there is statistically significant positive correlations between spirituality and the personality factors of agreeableness and conscientiousness and e) loneliness and depression can be predicted by spirituality and personality factors.

**Method**

**Participants and Procedure**

The sample consisted of 133 unemployed individuals from the region of Magnesia, Central Greece (34 men and 99 women), aged between 19-63 years with an age average of 30.32 years. Details concerning demographics and information about unemployment status are shown in Table 1. The sample was collected from a private vocational training center in the city of Volos, where unemployed individuals come to get information, to apply or attend educational training programs related to unemployment. They were informed about the present research and participated voluntarily. A total of 143 questionnaires were collected, of which 10 were discarded, as a large number of questions had not been completed. The completion of the questionnaires lasted about 45 minutes on average.

Table 1

| Characteristic                      | N   | %    |
|------------------------------------|-----|------|
| **Educational level**              |     |      |
| Primary school                     | 6   | 4.5  |
| Middle school                      | 7   | 5.3  |
| Apprenticeship school              | 5   | 3.8  |
| High school                        | 25  | 18.8 |
| Evening school/technical high school | 23  | 17.3 |
| Vocational training institutes     | 19  | 14.3 |
| University                         | 48  | 36.1 |
| **Family Status**                  |     |      |
| Single                             | 92  | 69.2 |
| Married                            | 25  | 18.8 |
| Divorced                           | 12  | 9.0  |
| Widowed                            | 1   | 0.8  |
| Other                              | 3   | 2.3  |
| Characteristic                               | N   | %    |
|---------------------------------------------|-----|------|
| **Number of children**                      |     |      |
| None                                        | 102 | 76.7 |
| One                                         | 10  | 7.5  |
| Two                                         | 17  | 12.8 |
| Three                                       | 3   | 2.3  |
| Four or more                                | 1   | 0.8  |
| **Monthly family income**                   |     |      |
| Up to 500 euro                              | 61  | 45.9 |
| Up to 700 euro                              | 18  | 13.5 |
| Up to 1000 euro                             | 23  | 17.3 |
| More than 1000 euro                         | 31  | 23.3 |
| **Unemployment time**                       |     |      |
| Up to 6 months                              | 31  | 23.3 |
| From 6 months to 1 year                     | 36  | 27.1 |
| From 1 year to 2 years                      | 29  | 21.8 |
| More than 2 years                           | 37  | 27.8 |
| **Further unemployed members in family**    |     |      |
| None                                        | 41  | 30.8 |
| One                                         | 39  | 29.3 |
| Two                                         | 38  | 28.6 |
| More than 2                                 | 15  | 11.3 |
| **Job loss reason**                         |     |      |
| Dismissal                                   | 22  | 16.5 |
| End of contract                             | 44  | 33.1 |
| Not working (student)                       | 56  | 42.1 |
| Other                                       | 11  | 8.3  |
| **Occupation before unemployment**          |     |      |
| Unskilled worker                            | 19  | 14.3 |
| Small businessman                           | 7   | 5.3  |
| Scientist public or private employee        | 14  | 10.5 |
| employee technician                         | 19  | 14.3 |
| Scientist freelancer                         | 1   | 0.8  |
| Employee/bank clerk                         | 14  | 10.5 |
| Naval/Military                              | 1   | 0.8  |
| Home                                        | 7   | 5.3  |
| Not working (student)                       | 51  | 38.3 |

**Measures**

**NEO-Five Factor Inventory (NEO-FFI)**

The NEO-FFI is a brief subset of the full 240 question NEO-PI-R, created by Costa and McCrae (1992), to measure the five personality factors (extraversion, agreeableness, conscientiousness, neuroticism and openness to experience), and is a widely used tool. The questionnaire consists of 60 items, which occur in a 5 point Likert-type scale, ranging from 1 (strongly disagree) to 5 (strongly agree), while the results are grouped into separate scores for each of the five factors. Each factor consists of 12 items and people with a high score in one factor, are considered to possess this feature significantly. The factorial structure seems to be similar in analyses conducted...
with data from 7 countries and in 5 different languages (McCrae & Costa, 2004). The brief instrument has adequate internal reliability and correspondence with the full scale and thus, has been used widely for clinical and research purposes. Respective internal consistency alphas of .86, .77, .73, .68, and .81 were obtained for the NEO-FFI neuroticism, extraversion, openness, agreeableness, and conscientiousness scales, while three month test-retest correlations ranged from .75 to .83. The instrument has not been standardized in Greece, but was translated, adapted into Greek language and revised through back-translations by a team of three bilingual psychologists.

Assessment of Spirituality and Religious Sentiments (ASPIRES)

This questionnaire was designed by Piedmont (2004), for the measurement of spirituality and consists of two dimensions: a) feelings in relation to religion (12 items) and b) spiritual transcendence (23 items). Items are answered in a 5 Likert-point type scale, from "strongly agree" to "strongly disagree." In the present study, only the spiritual transcendence scale was used, which includes the following subscales: a) "prayer fulfillment", which measures the individual's ability to create a connection with a superior reality, through the process of prayer from which it receives satisfaction, b) "connectedness", which measures the feeling of belonging that is viewed as part of a panhuman, higher reality and c) "universality," which measures the feelings of a common goal of humanity towards life and existence. This questionnaire provides a total score on spiritual transcendence and separate individual scores for each of the three subscales. The alpha reliabilities for the scales were: .95 (prayer fulfillment), .82 (universality), .68 (connectedness), and .89 (total score). The ASPIRES subscales evidenced good convergent and discriminant validity, as well as incremental validity in predicting psychosocial criteria. This questionnaire is not standardized in Greece but was translated, adapted into Greek language and revised through back-translations by a team of three bilingual psychologists. Additionally it has been demonstrated to work in cross-cultural surveys where the target groups were Hindus, Muslims and Christians (Piedmont, 2007).

UCLA Loneliness Scale

This scale was created by Russell (1996) to measure feelings of loneliness and social isolation and consists of 20 items, 10 of which are expressed as positive and 10 as negative. The questions are based on an earlier study on how lonely people describe their feelings. Items are rated from: 1 (never) to 4 (frequently) and the total score is calculated by adding the scores after the reversal of negative formulated proposals and can range from 20 (low levels of loneliness) to 80 (high levels of loneliness) (Kafetsios, 2012). Results indicate the instrument's reliability (coefficient alpha ranging from .89 to .94) and test-retest reliability over a 1-year period (r = .73), but also the discriminant validity of the measure is supported by the association with other measures of loneliness (Russell, 1996). The scale measures the personal perception of loneliness and has been adapted, in Greek language on a sample of 232 subjects from the general population (Kafetsios, 2012). In the Greek sample, the scale has been proven to have a good validity and a good internal consistency and reliability (Cronbach's alpha = .87).

Questionnaire of Self-Evaluated Depressive Symptomatology (Questionnaire d’Auto-Evaluation de la Symptomatologie Dépressive [QD2])

The questionnaire was constructed by Pichot et al. (1984), to evaluate and measure depressive symptomatology in adults. The construction and the balance of this questionnaire was made in France and includes 52 self-reference statements that are answered with "right" or "wrong" in order to detect a range of emotional, cognitive and somatic depressive symptoms. The sum of "correct" answers is the score of the questionnaire, with the highest score indicating a more severe form of depression. The QD2 derived from analyzing the content of the four most common depression questionnaires: a) the Hopkins Symptoms Check List, b) the French version of Beck Depression Inventory, c) the depression scale of the Minnesota Multiphasic Personality Inventory", d) the Zung Self-Rating
Depression Scale. Studies show that it has a good cross validity, a good homogeneity and a good reliability ranging from .92 to .95 and satisfactory factorial structure, which revealed three basic dimensions: feelings of loss of general drive, anxiety and depressive-pessimistic mood (Kleftaras & Tzonichaki, 2012; Pichot et al., 1984; Tzonichaki & Kleftaras, 1998). It is appropriately translated and adjusted to the Greek language by a group of three bilingual psychologists.

Results

In order to verify the hypotheses of this study, a variety of statistical analyses were conducted, including: factor analysis, correlations and multiple regressions.

Since the validity of the measures used in the present research have not been studied in a Greek population, it was deemed necessary to study their factorial structure and reliability based on our sample. Principle-components factor analyses, using Varimax rotations, were conducted on all instruments. NEO-FFI revealed five primary factors that explained 35.45% of the total variance, while reliability coefficients (Cronbach’s alpha) were satisfactory for all subscales: neuroticism (α = .78), extraversion (α = .70), openness to experience (α = .60), agreeableness (α = .60) and conscientiousness (α = .78). Similarly, the spiritual transcendence scale contained three factors explaining 49.01% of variance. Cronbach’s alphas for prayer fulfillment, universality and connectedness, as found in the present study, were .91, .71 and .52 respectively. Concerning UCLA loneliness scale, factor analysis revealed three factors explaining 50.57% of variance, with a reliability coefficient (Cronbach’s α) of .88. In accordance with previous research findings (Russell, 1996), it appears that these three factors correspond: a) to an overall score of loneliness, b) to the negative expressions (indicating the presence of loneliness) and c) to positive expressions (indicating absence of loneliness). Finally, QD2 showed the three primary factors that were found in the study of Pichot et al. (1984), explaining 40.92% of the total variance, with a reliability coefficient of .95 (Cronbach’s α).

In order to confirm the hypothesis that the majority of the unemployed individuals of our sample have moderate or severe depressive symptomatology, the sample was divided according to the scores on the depression questionnaire into three groups, as indicated by Pichot and his colleagues (1984). The first group consisted of individuals with depression scores ranged from 0 to 15. The second group consisted of individuals whose scores were between 16 to 30, while scores of the third group were between 31 to 49. Differences among groups were statistically significant (Table 2). As the bulk of the sample (68 individuals), and in particular 51.1%, falls in the category of persons with moderate and high depressive symptomatology, our hypothesis is confirmed.

Table 2

| Depressive symptomatology | N   | %    | M    | SD  |
|---------------------------|-----|------|------|-----|
| Low                       | 65  | 48.8 | 7.00 | 4.63|
| Moderate                  | 41  | 30.8 | 22.59| 4.57|
| Severe                    | 27  | 20.3 | 38.33| 4.82|

Note. $F(2, 130) = 459.034, p < .001.$
In order to test if the unemployed individuals who have lost their job (dismissal, end of employment contract) have significantly higher levels of depressive symptoms than those who have never worked before (just finished their studies), we performed a one way ANOVA. The results showed statistically significant differences between groups, $F(3, 129) = 3.466, p = .018$. The first group (dismissed) consisted of 22 subjects (16.5%) and had a mean score of $M = 24.09$ ($SD = 12.15$), the second group (end of employment contract) consisted of 44 individuals (33.08%) with a mean score of $M = 20.2$ ($SD = 14.05$), the third group (just finished their studies) consisted of 56 subjects (42.1%) with a mean score of $M = 14.4$ ($SD = 11.41$) and the last group (other reason of unemployment) consisted of 11 persons (8.27%) with a mean score of $M = 17.73$ ($SD = 15.02$). Thus, we see that the higher levels of depressive symptoms are mostly common to the unemployed individuals that were fired and those who have lost their jobs due to a termination of the employment contract.

According to the unemployment policy of Greece, someone is considered as long-term unemployed if he/she is continuously unemployed for 1 year or more. In order to find out probable differences in the depression level of long-term and short-term unemployment, we divided the sample and compared the average of depressive symptomatology of long-term unemployment ($N = 66, M = 19.42, SD = 12.99$) with short-term unemployment ($N = 67, M = 16.93, SD = 13.2$). The results showed that there were no statistically significant differences between the averages of depressive symptomatology of long and short-term unemployment, $t(131) = 1.100, p = .274$, unlike other studies (Stankunas, Kalediene, Starkuviene, & Kapustinskiene, 2006).

Regarding the hypothesis that the unemployed individuals with higher levels of spirituality have significantly lower levels of depressive symptomatology and loneliness, we divided the sample into three groups using frequencies: a) low spirituality, $N = 42$ (score ranged from 39 to 72), b) moderate spirituality, $N = 46$ (score ranged from 73 to 82) and c) high spirituality, $N = 45$ (score ranged from 83 to 110). We compared the means between groups on depression and loneliness (one way ANOVA). Concerning depression, the results showed that the differences between groups were not significant, $F(2, 130) = 0.311, p = .733$. Similarly concerning loneliness, the results also showed that the differences between groups were not significant, $F(2, 130) = 2.223, p = .112$.

Regarding the correlation between spirituality and its three dimensions with depressive symptomatology, there were no significant correlations (Table 3). These results do not confirm our initial hypothesis, as well as, the majority of research findings on depression and spirituality (Dein, 2006; Koenig, 2009). However, a significant negative correlation was found between the dimension of universality and loneliness ($r = -.30, p < .001$) (Table 3).

| Spirituality               | Depressive symptomatology | Loneliness |
|----------------------------|----------------------------|------------|
| Spirituality (total score) | -.03                       | -.16       |
| Prayer fulfillment (subscale) | -.01                       | -.04       |
| Universality (subscale)   | -.15                       | -.30**     |
| Connectedness (subscale)  | .10                        | -.06       |

**$p < .01$.**

Furthermore, correlations between spirituality and the five personality factors show low positive but significant correlations between agreeableness and spirituality ($r = .18, p = .03$) and openness to experience and spirituality ($r = .29, p = .001$) (Table 4).
Table 4

Correlations Between Spirituality and the Five Personality Factors

| Personality factor            | Spirituality (total score) | Prayer fulfillment | Universality | Connectedness |
|------------------------------|-----------------------------|--------------------|--------------|---------------|
| Neuroticism                  | .03                         | -.04               | -.04         | .21*          |
| Extraversion                 | .14                         | -.02               | .23**        | .19*          |
| Openness to Experience       | .29**                       | .08                | .43**        | .21*          |
| Agreeableness                | .18*                        | .18*               | .20*         | -.03          |
| Consciousness                | .09                         | -.03               | .13          | .18*          |

*p < .05, **p < .01.

With regards to the relationship between the five personality factors and the dimensions of spirituality, several important correlations were obtained (Table 4). Specifically, neuroticism is positively related to connectedness ($r = .21, p = .01$), while extraversion appeared to be positively associated with universality ($r = .23, p = .007$) and connectedness ($r = .19, p = .029$). As to openness to experience it seemed to have a positive correlation with universality ($r = .43, p < .001$) and connectedness ($r = .21, p = .01$). Finally, there was a weak correlation between agreeableness and both prayer fulfillment ($r = .18, p = .04$) and universality ($r = .20, p = .02$); while consciousness showed a positive relation to connectedness ($r = .18, p = .04$).

To identify the predictor variables which most strongly influence depression, a stepwise multiple regression analysis was conducted, utilizing all five personality variables (neuroticism, extraversion, openness to experience, agreeableness, conscientiousness), as well as the three spirituality dimensions (prayer fulfillment, connectedness, universality) as independent ones while the depressive symptomatology was used as the dependent one. Regression analysis yielded an overall multiple correlation of .61, accounting for about 36.7% of the variance in predicting depressive symptomatology. According to these results, neuroticism was responsible for 32.8%, $F(1, 131) = 65.30, p < .001$, and extraversion for an additional 3.9% of the variance in predicting depression, $F(1, 130) = 9.06, p = .003$. An overview of the β-values, shows that only the above two independent variables contribute significantly to the prediction of depressive symptomatology (Table 5).

Table 5

Regression Analysis for the Prediction of Depressive Symptomatology

| Independent Variable | SE  | β    | t    | p   |
|----------------------|-----|------|------|-----|
| Neuroticism          | 0.129 | 0.496 | 6.679 | <.001 |
| Extraversion         | 0.171 | -0.224 | -3.011 | .003  |

To check the variables that predict loneliness, a stepwise multiple regression analysis was performed by using the five personality factors and the three spirituality dimensions as independent variables. Regression analysis yielded an overall multiple correlation of .58, accounting for about 31.5% of the variance in predicting loneliness. The independent variables that seemed to significantly predict loneliness were: firstly extraversion, accounting for 17.1% of variance, $F(1, 131) = 28.21, p < .001$, followed by agreeableness with 8.7%, $F(1, 130) = 16.40, p < .001$, universality with 2.05%, $F(1, 129) = 4.70, p = .032$, openness to experience with 2.03%, $F(1, 128) = 4.73, p = .031$, and finally the prayer fulfillment with 1.61%, $F(1, 127) = 4.01, p = .047$. According to the β-values, ex-
traversation, agreeableness, and universality are negatively associated with loneliness, while openness to experience and prayer fulfillment are positively associated (Table 6).

Table 6
Regression Analysis for the Prediction of Loneliness

| Independent Variable         | SE    | β      | t      | p     |
|-----------------------------|-------|--------|--------|-------|
| Extraversion                | 0.125 | -.338  | -4.447 | <.001 |
| Agreeableness               | 0.141 | -.284  | -3.826 | <.001 |
| Universality                | 0.220 | -.355  | -3.552 | .001  |
| Openness to Experience      | 0.126 | .208   | 2.537  | .012  |
| Prayer Fulfillment          | 0.110 | .179   | 2.004  | .047  |

Discussion

In the present study, most of the unemployed individuals of our sample (51.1%) have moderate to high depressive symptomatology, which in fact is confirmed by the literature; although the percentage of people with moderate and high depressive symptoms is marginally higher (Jefferis et al., 2011; Madianos et al., 2011; Lee et al., 2010; Paul & Moser, 2009). It is important, however, to consider that the present situation in Greece differs greatly from the one in other countries, due to the severe economic recession of the last 6 years. In fact, the unemployed individuals correspond to a large percentage of the general population, which could have a "positive" effect on them due to a reduction of social stigma (Clark, 2003). The unemployed individuals, who lost their job, have significantly higher levels of depressive symptomatology than those who have never worked before. That means that people who lose a job, especially those who are fired, experience a very big negative change as they lose crucial elements of their lives, – which is not the case for people who are looking for a job for first time. Even though the long-term unemployed individuals of the sample, have a somewhat higher levels of depressive symptomatology, they don’t present a statistically significant difference with the short-term unemployed individuals; something that contradicts the literature (Liwowsky et al., 2009; Stankunas et al., 2006). The above could be explained by the fact that regardless of the unemployment time, in the country, a large part of the population is without work, while it is particularly difficult for the unemployed to find work again. Also, the official unemployment time is illusory, because someone could be unemployed much time before he/she gets registered in the department of unemployed (OAED), or he/she can be officially registered, but work off-the-record, without being officially declared as an employee.

Spirituality, in most research findings, appears to be negatively associated with depression (Blazer, 2012; Dein, 2006; Koenig, 2009). However, in our study, this assumption was not confirmed. This could be explained by the fact that unemployed people in Greece face serious social and emotional problems, but mostly survival problems, that must be urgently addressed, given that their basic needs are not covered. Spirituality appears to act in a more general and long term way and therefore, the possibility of finding meaning in those problems through spirituality is likely to be unsuccessful. Also, the way in which spirituality affects depression is not clear, and in some cases, it seems to act as a regulatory factor, especially for people in stressful situations who have lost their meaning in life by directly suppressing depressive symptomatology (Berry & York, 2011; Smith et al., 2003). Moreover, it has been reported that the negative correlation between the two variables appear in cases of people who face problems,
and not in healthy people (Wink et al., 2005). The above could somehow explain the lack of relationship between spirituality and depression in our study. In fact, a large part of the sample (48.9%) does not fall into the category of people with significant depressive symptoms, while the average depressive symptomatology of the whole sample is just 18.17, which is not high (Pichot et al., 1984).

As for the relationship between loneliness and spirituality, data from international studies are sparse and those that do exist refer mainly to religiousness and loneliness, with a predominantly negative correlation (Kirkpatrick et al., 1999). Among the spirituality dimensions, only universality (the sense of a common goal of humanity towards life) is negatively correlated to loneliness, indicating that the higher an individual’s sense of universality, the less his/her feelings of loneliness and vice versa. The above seems logical, as a person with high levels of universality, believes and experiences humanity as a whole and sees the unified aspect of life.

With regards to personality and spirituality, our findings, in accordance with previous studies (MacDonald, 2000; Piedmont, 1999; Saroglou, 2002; Saroglou & Muñoz-Garcia, 2008; Unterrainer et al., 2010), indicate a number of positive correlations. Prayer fulfillment is positively correlated to agreeableness, which means that the higher an individual’s levels of agreeableness, the more fulfillment he/she experiences through prayer. Universality is positively associated with extraversion, openness to experience and agreeableness. Connectedness is positively correlated with neuroticism, extraversion, openness to experience and conscientiousness. These findings are consistent with the results of previous studies, except for neuroticism which is positively associated with connectedness, while in Piedmont (1999) study, there was no such a relationship. This association could be explained by the fact that, the unemployed individuals of our sample in the current economic recession, experience feelings of belonging to a large part of the Greek unemployed population. As a result, they share the same negative prospects and thus, experiencing negative emotions and a negative imprint of life and the future.

Furthermore, in order to identify the predictor variables, which most strongly influence depressive symptomatology and loneliness, multiple regression analysis showed that, collectively, all personality (neuroticism, extraversion, openness, agreeableness, conscientiousness), and spirituality (prayer fulfillment, universality, connectedness) variables account for about 36.7% of the variance in predicting depressive symptomatology and almost 31.5% of the variance in predicting loneliness. In agreement to previous studies (Bienvenu et al., 2004), the best predictors of depressive symptomatology, as expected, were neuroticism (positively related) and extraversion (negatively related). In fact, neuroticism is a factor that aggravates depressive symptomatology, while extraversion seems to be a protective factor against depression.

The best predictors of loneliness were extraversion, agreeableness, universality (negatively related), followed by openness to experience and prayer fulfillment (positively related). So, loneliness seems to decrease, as the levels of extraversion, agreeableness and universality increase and the levels of openness to experience and prayer fulfillment decrease. Extraversion and agreeableness are the most “positive” personality traits and conceptually, are completely opposed to the concept of loneliness. On the other hand, universality that corresponds to the feeling of a larger whole and a common goal of humanity towards life and existence in which the individual belongs, may result to feelings and desire for contact with other people and the rest of humanity; a fact that is inconsistent with feelings of loneliness. In contrast, when openness to experience (curiosity, enhanced imagination and tendency to try new things) increases, it seems that it has a negative effect on loneliness, while prayer fulfillment, a spirituality dimension referring to an individual’s attempt to communicate with something bigger, is mostly facilitated when someone is alone and possibly isolated.
However, the results of this research have some limitations that should be noted. The sample (133 individuals) is quite small and therefore, our conclusions cannot be generalized. Additionally, the term depression should be treated with attention when referred to the research, as the questionnaire used is self-referential, used for research purposes and counts depressive symptomatology and not clinically diagnosed depression. Also, for the other measures, it should be noted that despite the fact that we had good factorial structure and reliability, they are not standardized in the Greek population. Finally, it should be noted that our results are based on correlations between variables, rather than causal relationships and therefore, we cannot draw cause-effect conclusions from the results.

Finally, the main conclusion of this research is that the beneficial role of spirituality is difficult to emerge to people who fail to meet their basic primary needs due to unemployment. The above could be further investigated in a larger sample of an unemployed population in order to take into account the specific parameters of therapeutic interventions in this specific group. This knowledge could help counselors to incorporate these variables into their work with unemployed individuals, in the best possible way. Further researchers could investigate both the role of spirituality and religiosity in the unemployed in order to identify possible differences in the way that these concepts influence this population. Also, researchers could explore the role of spirituality to people who encounter difficulties to cover their priority needs in general, in order to identify effective therapeutic interventions for such specific populations.

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