

**PSYCHOLOGICAL SYMPTOMATOLOGY AND LONELINESS IN A
COLLEGE STUDENTS SAMPLE: WHAT NEW TRENDS CAN BE
DEVELOPED TO BETTER HELP THESE STUDENTS?**

Maria Luísa P. Soares¹
Carla Vale Lucas¹
Filipa Isabel Oliveira¹
Fátima Liliana Roque¹
Joana Cadima²

ABSTRACT

We explore psychological symptomatology of college students in Madeira University, Portugal and examine socio-demographic variables associated with psychological health. We intend to answer the questions: Does gender differ in terms of symptomatology? Which psychological symptomatology is more common? Is there a relation between severity of symptomatology and loneliness? We administered the Symptom Checklist-90-Revised and UCLA Loneliness Scale to 300 students, aged 18 to 52. Women reported higher levels of symptomatology. We also noted a positive correlation between symptomatology and loneliness, which could mean that the more severe are the psychological symptoms, lonelier student's feel. We aim to suggest interventions that best suit higher education purpose and students, promote their adjustment and well-being.

Keywords: College students, counselling services, psychopathology, loneliness.

**SINTOMATOLOGÍA PSICOLÓGICA Y LA SOLEDAD EN UNA MUESTRA
DE ESTUDIANTES UNIVERSITARIOS: ¿QUÉ NUEVAS TENDENCIAS SE
PUEDEN DESARROLLAR PARA AYUDAR MEJOR A ESTOS
ESTUDIANTES?**

RESUMEN

Se explora la sintomatología psicológica de los estudiantes universitarios de la Universidad de Madeira, Portugal y se analiza las variables sociodemográficas asociadas a la salud psicológica. Tenemos la intención de responder a las preguntas: ¿el género difiere en cuanto a la sintomatología? ¿Qué sintomatología psicológica es más común? ¿Existe una relación entre la severidad de la sintomatología y la soledad? Se administró el Symptom Checklist-90-Revisado y Escala de Soledad UCLA a 300 estudiantes, de entre 18 y 52. Las mujeres reportaron mayores niveles de sintomatología. También se observó una correlación positiva entre la sintomatología y la soledad, lo que podría significar que el más grave son los síntomas psicológicos, solitaria sensación del estudiante. Nuestro objetivo es proponer intervenciones que mejor se adapten a propósito de la educación superior y a los estudiantes y promover su adaptación y el bienestar.

Palabras clave: estudiantes universitarios, servicios de consejería, psicopatología, la soledad.

¹ University of Madeira

² University of Porto

Introduction

Students are challenged to establish new relationships (with colleagues and teachers), adapt themselves to new social and intellectual context; have success on their studies, as a way to attend to the expectancies that had been created with the entrance in university (Diniz, 2005). Bigger are the demands for students in the developmental stage called by Arnett (2000) “emerging adulthood”. Learning to adapt in the university environment appears together with the developmental pressures of late adolescence and young adulthood that emerge at this crucial stage. They are struggling for autonomy, establishment of personal identity, meaningful intimate relationships (Erikson, 1963) and also to address all vocational concerns. In fact, they are push to choose a career, embrace that choice, and for doing so they need to confront with old projects and manage some personal and contextual differences (Fernandes et al., 2004). Personal Construct Psychology theory (Kelly, 1955) focuses on the distinctive ways in which individuals construct and reconstruct the meanings of their lives. It underlines that the change is intrinsically associated with the survival of the self. Whereas some changes are easy to embrace, others raise the question about the resources to construct meaning, and consequently the notion of self. In some cases, psychological equilibrium may stay temporarily threatened, due to the lack of flexibility in the processes of constructing meaning. The entrance to university could be an opportunity to grow up if the limits of the system are flexible enough to engage the process of adaptation (Fernandes et al., 2004).

So, the transition into higher education could be a particularly stressful time, as students come to face diverse stressors. In fact, it may cause extreme distress or even lead to a psychological disorder. The onset of psychological distress often disrupts the completion of normal developmental and educational tasks, having a profound impact on all aspects of university life. According to Kessler, Foster, Saunders, and Stang (1995) 5% of college students tend to leave university before completing their studies due to psychiatric disorders. Many attempts have been carried out, to investigate the factors involved in a less or more successful transition to university, and many others to predict college adaptation and achievement (Lanthier & Windham, 2004). It was found that 50% of university students report depressive symptoms shortly after beginning their studies (Furr, Westefeld, McConnell & Jenkins, 2001). The American Psychiatric Association (1996) enlightens that the impact, severity and duration of the psychological distress, is not entirely predictable from the severity of the stressor, but also from individuals characteristics and vulnerabilities.

Lanthier and Windham (2004) indicate that when distress occurs in a supportive socioeconomic and cultural context, the higher education period is characterized by its dynamism, in which a range of life directions and roles might be explored before assuming adult responsibilities. They indicate that the higher the sense of purpose, the level of educational or occupational goals as well as the level of social integration and support, the greater the adjustment and the persistence in university.

It is not surprising, therefore, the increased concern on college student’s mental health (Morrison and Connor, 2005). The prevalence of psychological disorders among postsecondary students is important both to college and university administrators, mental health service providers, and researchers. Knowing the characteristics of students who are likely to experience psychological distress is a necessary first step for developing effective interventions (Brockelman, 2009). Although many researchers have examined, in general population, the associations between psychological health

and various socio-demographic factors like age, sex, socioeconomic status, and ethnicity, there is a small number of research involving these issues among college students (Burriss, Brechting, Salsman & Carlson, 2009).

Sharkin (1997) recommended the use of standardized instruments to provide direct evidence and the incidence of psychopathology over time and to determine which disorders are most likely to be seen at college counselling centers. On these grounds, an exploratory study has been conducted to assess college student's mental health at Madeira's University, in Portugal, Europe. Lack of findings in the context, a small island situated in the Atlantic ocean, considered a peripheral south region of Europe is the premise that motivated the development of this study. We aim to achieve two goals: a) provide a wider picture of psychological health in these students and in this context. Examine the incidence of mental health problems, the psychological symptoms that are more prevalent using standardized measures, as well as the potential influence of selected socio-demographic variables (e.g. gender, course, year, parent's education level, student's status, and others). These are questions that will follow the study: "Is there a relation between socio-demographic variables and psychological symptomatology?; Do men and women differ in terms of overall symptomatology?; Which psychological symptomatology are more common to find?; Is there a relation between the severity of symptomatology and the levels of loneliness?". The final goal, b) is to enlighten some aspects of mental health in college students, detect areas that seem problematic and prevent the establishment of mal-adaptative behaviours that threaten student's psychosocial health.

Method

Participants

Adults attending a public university ($N = 300$) participated in this study. This sample was one of convenience, constituted by groups (classes and their students) that agreed on participating in this study. More than half (63%, $n = 189$) were women, whereas 37% ($n = 111$) were men. Participants ranged in age from 18 to 52 years ($M = 24.5$, $SD = 7.77$). They were from different courses of Madeira's University, organized within different areas and different years. A big portion of the sample was constituted by first-year students (57%), whereas 26% were second year students; 10% were from the third year and only 4% were fourth year students. One big portion of these students were affiliated to Humanities and Social Sciences (48%); while 23% were from Natural Sciences and Mathematics; 23% of Business Studies and 6% of Arts and Design.

Around 65% reported their average grade, which was 13.2 based on the Portuguese 0-20 grade system, equivalent as C grade by the North America standards. Also, 30% of the students declared to be working students. The typical student is living with 2 family members and only 8% of them are living alone.

Measures

The questionnaire package comprised three measures: a brief personal profile with demographic information, SCL-90-R and "UCLA loneliness scale".

Demographic information questionnaire: Demographic information was collected, including gender, age, course and year of study, average grade, parent's educational status and occupation as well as family structure and living arrangements.

Student's psychological health status: This dimension was assessed by the Portuguese version of Symptom Checklist 90 Revised (SCL-90-R; Derogatis, 1977), translated and adapted by Baptista (1993). SCL-90-R is a 90-item 5-point scale self-report inventory distributed for nine subscales: Somatization, Obsessive-compulsive, Interpersonal sensitivity, Depression, Anxiety, Hostility, Phobic Anxiety, Paranoid Ideation, and Psychoticism. Higher scores on the SCL-90-R indicate greater psychological distress. The SCL-90-R also has three global indexes: the global severity index (GSI) measures the extent or depth of the individual's psychiatric disturbance; the positive symptom total (PST) counts the total number of questions rated above 1 point; and the positive symptom distress index (PSDI), which represents the intensity of symptoms. The reliability of all SCL-90-R subscales is satisfactory and validation tests have documented a high degree of convergent and concurrent validity of those subscales (Derogatis, 1977; 2002). In the current study, the Cronbach's alpha coefficient in all subscales varied between .74 and .85, a good internal consistency.

Students' Loneliness levels: Loneliness levels were assessed using a modified version of UCLA Loneliness Scale, developed and tested by Russel (1996) that was translated into Portuguese. UCLA's scale is a self-report measure of 20 symptoms and attitudes frequently seen in relation to lonely people, transformed into a 5-point scale. According to Morahan-Martin and Schumacher, (2003) the UCLA Loneliness Scale is well quoted in terms of validity and reliability. The UCLA Loneliness Scale has demonstrated excellent internal consistency (Cronbach's alpha = .90) and good convergent and discriminate validity (Russel, 1996). In the current study the Cronbach's alpha coefficient was of .90, which indicates a good internal consistency. Others studies were conducted among Portuguese population regarding UCLA scale (Neto, 1989; 1992), a proposed version of 18 items in a 4-point scale, and those studies showed, although good values, a lower Cronbach's alpha (.87). We used the more recent version of the scale (Russel, 1996).

Procedures

The recruiting procedures and the final questionnaire were reviewed and approved by the Dean of the University. Students were recruited during the classes with the permission of the teacher and all students completed a written informed consent form. The questionnaire was distributed to students and self-administered. All statistical analyses were performed using SPSS Statistics Program (version 17.0).

A descriptive analysis was conducted, by analysing all variables in terms of their means, ranges and standard deviations. The mean values of the SCL-90-R subscales were then compared to the ones achieved for Portuguese population (Baptista, 1993). Secondly, assumptions for the use of parametric tests were checked. Because many variables were not normally distributed, the nonparametric procedure of Spearman's rho was performed to test for significant correlations between selected demographic variables and psychopathology variables, as well as among the UCLA variables. Attending the use of a large sample, one-way between-groups multivariate analyses of variance (MANOVA) was performed to investigate sex differences in psychological symptomatology. The percentage of students with a score above 70 (two SDs above the mean) was then calculated, since this values represent a clinically significant indicator. We also used a t-test to analyse if there is a significant difference in the mean of GSI scores regarding gender.

Results

Descriptive Results

Table 1 summarizes means and standard deviations found at the subscales of SCL-90-R ($M = 7.02$, $SD = 4.99$).

Table 1
Means and standard deviations for SCL-90-R (N=300)

	Total		Women (n=189)		Men (n=111)	
	M	SD	M	SD	M	SD
Somatization	0.73	0.59	0.83	0.62	0.57	0.52
Anxiety	0.75	0.61	0.84	0.64	0.59	0.53
Phobic anxiety	0.56	0.54	0.62	0.58	0.46	0.47
Obsessive-compulsive	1.42	0.90	1.53	0.95	1.22	0.78
Depression	0.85	0.70	0.96	0.74	0.67	0.59
Interpersonal Sensitivity	0.83	0.64	0.90	0.66	0.71	0.59
Psychoticism	0.43	0.47	0.46	0.49	0.36	0.43
Paranoid Ideation	0.82	0.70	0.86	0.71	0.74	0.68
Hostility	0.63	0.60	0.65	0.57	0.59	0.64

It seems that there isn't a big incidence of clinical symptomatology. Nevertheless it was found that a considerable percentage of the sample was suffering from minor psychiatric symptoms. Thus, the subscales of anxiety, depression, obsessive-compulsive, somatization, interpersonal sensitivity and phobic anxiety stand with superior values (one SD above the mean). Just about 18% of the sample reflects manifestations of clinical depression. Symptoms of dysphoric mood and affect are probably presented as signs of withdrawal of life interest, lack of motivation, and loss of vital energy. Also, 18 % of the sample has anxiety values above the mean. Thus, it seems common to find between these students nervousness, tension, and trembling. Panic attacks, feelings of terror, apprehension, and fear, could appear within this population.

Something like 17% of the students present manifestations of phobic anxiety, characterized as a persistent and irrational fear response to a specific person, place, object, or situation. About 16% of the sample has values above the mean in the scales of obsessive-compulsive, somatization and interpersonal sensitivity. The obsessive-compulsive subscale includes symptoms that are often identified with the standard

clinical syndrome of the same name, characterized with focuses on thoughts, impulses, and actions that are experienced as unremitting and irresistible. Another subscale to note is somatization that reflects distress arising from perceptions of bodily dysfunction. Also the interpersonal sensitivity subscale that stands out, focuses on feelings of inadequacy and inferiority, particularly in comparison with other people. Self-depreciation, self-doubt, and marked discomfort during interpersonal interactions are characteristic manifestations of this syndrome and probably are common between these students. Approximately 13% shows paranoid ideation and hostility. The psychoticism percentage is 12%.

Within the SCL-90-R subscales it seems that there are superior values in the subscale of phobic anxiety (for women $M = 0.62$ and $M = 0.46$ for men) and the subscale of obsessive-compulsive (for women $M = 1.53$ and $M = 1.22$ for men) when compared to the means achieved in the study of Baptista (1993; phobic anxiety subscale $M = 0.48$ for girls and $M = 0.29$ for boys; obsessive-compulsive subscale: $M = 1.12$ for girls and $M = 0.98$ for boys). Also, it was found inferior values especially in the hostility scale.

Correlational Analyses

Preliminary assumption testing was conducted with no serious violations. However, many variables were not normally distributed. The nonparametric procedure Spearman's rho (see Table 2), showed no significant correlations between psychopathological variables and the selected variables: year of study, age, course and average grade. Nevertheless, modest negative associations with gender were found for six of the nine SCL-90-R clinical scales (somatization, anxiety, phobic anxiety, obsessive-compulsive, depression and interpersonal sensitivity) and the GSI at levels 1% and 5%. Attending to this, each gender was accounted in subsequent main analyses.

Table 2

Correlation coefficients between SCL-90-R and demographic variables

	SOM	ANX	PHOB	O-C	DEP	INTERP.	PSIC.	PAR.	HOS.	GSI
Gender	-.229**	-.196**	-.134**	-.154**	-.199**	-.147*	-.087	-.084	-.096	-.184**
Year of study	-.013	.067	-.008	.024	.084	.081	-.017	.072	.056	.085
Age	.028	.056	-.070	.014	.038	-.028	-.003	-.006	.052	.000

** $p < .01$

* $p < .05$

Group Differences in Symptomatology

A one-way between-groups multivariate analyses of variance (MANOVA) was performed to investigate sex differences in psychological symptomatology. There were found statistically significant differences between men and women on the combined dependent variables: $F(9, 290) = 2.5$, $p = .003$, Pillai's Trace = 0.08, partial eta squared = 0.08. When the result for the dependent variables was considered separately, the

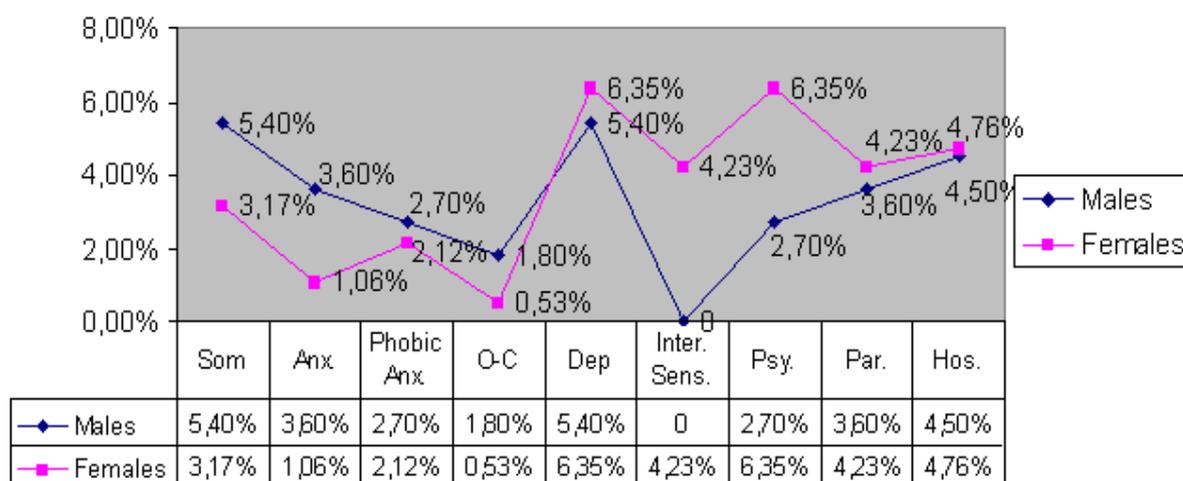
differences that reach statistical significance using Bonferroni adjusted alpha level of 0.006, were: somatization, $F(1, 298) = 14.29, p = .000$, partial eta squared = 0.05, anxiety, $F(1, 298) = 11.93, p = .001$, partial eta squared = 0.04, obsessive-compulsive, $F(1, 298) = 8.45, p = .004$, partial eta squared = 0.03, depression, $F(1, 298) = 12.16, p = .001$, partial eta squared = 0.04.

An examination of those mean scores indicated that women reported slightly higher levels of somatization, $M = 0.83$, anxiety, $M = 0.84$, obsessive-compulsive, $M = 1.53$, depression, $M = 0.96$, than men, $M = 0.57, 0.59, 1.22, 0.68$, respectively. The differences between men and women could appear before..

Comparing men and women with scores above 70 (two SDs above the mean) that are clinically significant in terms of a probable disorder, considering that normal T-score is $M = 50$ and $SD = 10$ (Degoratis, 2002), there is an overall low percentage for both genders, when we compare the results of men and women. What does it mean?? Is not too clear... The percentages of subjects in each sub-scale are presented below (see Figure 1).

Figure 1

Percentage of subjects with high scores ($T > 70$) on the SCL-90-R Scales



Severity of the symptomatology

The Global Severity Index (GSI) was analysed separately for other subscales, to measure the overall distress level and to compare it to the norms of the Portuguese validation. The mean global severity index score (GSI) of the SCL-90-R was 0.70 ($SD = 0.49$), which indicates a low severity of symptomatology. Results indicated that 17.3% ($n = 52$) of the sample presented values higher to the cut point of Portuguese population GSI ($GSI > 1.23$; Baptista, 1993). Also, an independent-samples t-test was conducted to compare the GSI scores for men and women. There was no significant difference in scores for men, $M = 0.58, SD = 0.04$ and women, $M = 0.51, SD = 0.04, t(267) = 3.41, p = .001$, and the magnitude of those differences in the mean was very small (eta squared = 0.04). Nevertheless, results indicated that 13.7% ($n = 26$) of the

women presented values superior to the cut point of Portuguese population GSI, $M = 0.87$, $SD = 0.50$, whereas regarding men, only 7.2% ($n = 8$) were superior, considering the values for the Portuguese population GSI ($M = 0.66$, $SD = 0.40$).

The PSDI (Positive symptom distress index) achieved by men ($PSDI = 1.42$) was in the mean expected for the Portuguese population, whereas the PSDI for women ($PSDI = 1.79$) was superior. These values represent the characteristic style of the subject for experiencing distress. This red part seems to be discussion, not results. Considering the PST (Positive symptom total index), values which contribute to analyse the amplitude of distress symptomatology, it seems like there isn't a very large distress symptomatology associated to them. The values achieved (for men $M = 32.18$, for women $M = 38.77$) were under the normal values expected for the Portuguese population ($PST = 40.32$, and 47.99 , respectively; Baptista, 1993) and it could probably mean that the subjects deny the symptoms or minimize them (Degoratis, 2002).

Discussion again

Symptomatology and Levels of Loneliness

SCL-90-R clinical scales, as a set of measures, as well GSI scores, were associated with one dimension also studied in this sample: loneliness. There was no correlation between UCLA Loneliness Scale and other socio-demographic variables.

Analysing the values of the loneliness scale ($M = 49.47$, $SD = 9.94$), we can argue that they represent some level of loneliness between college students. In fact, 14.67% of the sample presented relevant loneliness levels (1 SD above the mean) and 2.7% of the students presented extreme levels of loneliness (2 SD above the mean). On this ground one question arises, "May the results could be related with the symptomatic complaints presented by the subscales of UCLA and the severity of the symptomatology?" In fact, a positive and moderate association was observed between the UCLA and the subscales of SCL-90-R, $r_s = .52$) and the psychopathology indices (GSI), $r_s = .49$, at the level of 1% (see table 3). We can infer that there is a tendency to consider that the more college students feel lonely, the more symptomatology they present and the more severe it is.

Table 3
Correlation coefficients between UCLA, demographic variables and SCL-90-R variables

	<i>UCLA</i>
Gender	.086
Year of study	-.075
Age	.005
SCL-90-R	.515**
GSI	.494**

** $p < .01$

Discussion

An examination of socio-demographic variables associated with college students' psychological health was essential to develop effective interventions for the population, like Burris et al. (2009) and Brockelman (2009) said it would. The present findings indicated no relation between psychological symptomatology and socio-demographic variables, with the exception of gender. Gender was the main base to interpret the results and guide the trends to assess these students. There isn't a big severity of the symptomatology among the students (see GSI values).

The literature indicates that the academic adjustment is accompanied by higher levels of minor psychiatric morbidity (Kaltsouda & Papadioti-Athanasiou, 2007). This seems to be the case. There are so many social and cultural factors that could contribute to this: complexity of the contemporary world (financial constraints, growing competitiveness, and heightened aspirations for achievement and material security) and all other aspects of personal life (family dysfunction, poor interpersonal attachment), may account for some of that increase (Gallagher, Gill & Sysko, 2000; Royal College of Psychiatrists, 2003). All this minor changes in student's everyday life may result in difficulty to adjust to changing demands at university and needs of both self and others (cf. Personal Construct Psychology theory, Kelly, 1955).

In order to deal with these inconsistencies, students may respond with a somewhat increased severity of mental health problems. Note that, in general, within this population the clinical symptoms of depression, anxiety, phobic anxiety, obsessive-compulsive, somatization and interpersonal sensitivity are the ones more commonly found. This holds attention to possible pathologies that are extremely important to attend in future intervention, when promoting (in)formation about mental health problems. Due to the fact that the more college students feel lonely, the more symptomatology they present, and more severe it is, we need to attend their loneliness in future interventions.

Attending the importance of gender, statistical differences were found for some of the SCL-90-R scales. Women present slightly higher levels of somatic, anxious, obsessive-compulsive and depressive symptoms. The severity and amplitude of this symptomatology is small. Women seem to have the tendency to maximize their responses of distress (more intense), but also to minimize the symptoms/pathology. These results are very similar to those reported in literature, which consider women more likely to show increased evidence of emotional problems during the course of higher education (Fisher & Hood, 1987). Vaez and Laflamme, (2002) found that female college students reported greater psychosomatic symptomatology, reduced psychological wellbeing, and reduced perceived health status compared with male students. They also found that female students were significantly more likely to report seeking and receiving care for psychological problems.

The severity and amplitude of the symptomatology and distress presented by men is smaller. Men seem to have the tendency to minimize their responses of distress. Probably that could represent a relevant area to attend in intervention, although women are the most prone to seek and receive care, like Vaez and Laflamme (2002) underline. What trends can be develop to better assess and help these college students? The mission of university is to assist students in defining and accomplishing personal, academic, and career goals. For this reasons, mental health should be promoted in each higher education institute. In the context of Madeira's University, a recent university

that is growing in an Island now more globalised than ever, it is urgent to attend to an all new brunch of students needs, providing developmental, preventive and remedial counselling (CAS, 1999). Like Kitzrow (2003) points out, institutions need to adopt the attitude that student mental health is an important and legitimate concern, that is a responsibility of everyone involved in higher education.

Mental health has an impact in campus live, at individual level, interpersonal level and even at the institutional level. Depression, somatization, anxiety, obsessive-compulsive symptoms and others, can affect all aspects of the student's physical, emotional, cognitive, and interpersonal functioning (Kitzrow, 2003). Among the symptoms of depression we can found fatigue; low energy; sleep and eating problems; impaired concentration, memory, decision-making problems, motivation and self-esteem; loss of interest in normal activities; isolation and social withdrawal and, in some cases, suicidal or homicidal thoughts (APA, 1996). These mental health problems also may have a negative impact on academic performance, retention, and graduation rates.

Brackney and Karabenick, (1995) found that students with higher levels of psychological distress were characterized by higher test anxiety, lower academic self-efficacy, and less effective time management and use of study resources. Also, individuals with high levels of psychopathology have impaired information-processing skills, a critical component of academic performance and success (Kitzrow, 2003). Promoting health could be achieved with education about illness, prevention of illness using self-help and other measures, and the promotion of healthy lifestyles (Royal College of Psychiatrists, 2003). Many individuals hold negative perceptions about mental health problems and counselling and it's necessary to give accurate information about it. Considering the results achieved, it's important to demystify these questions among women and men.

It's also necessary to promote emotional literacy, like Royal College of Psychiatrists (2003) emphasised. The knowledge of the causes and characteristics of specific mental health problems, their identification and their management. To promote coping skills, the knowledge of personal limits, the monitorization of stressors, expectancies, and sudden changes of motivation and energy. On the context of university, it seems like a good attempt to embrace the developmental theory of Astin (1999) in terms of student's involvement. The greater the student's involvement in college, the greater will be the amount of student learning and personal development (Astin, 1999). It could prevent loneliness and its negative repercussions. Perceiving oneself as being independent, personal agent of their own acts, and being responsible is positively correlated with good levels of motivation and achievement (Brockelman, 2009). So it is necessary to teach and promote self-determination among students. Another priority is the development of counselling services, oriented in time, that give the support that students need in their academic and personal life.

One of the limitation of this study is the sample of students, which was one of convenience. Therefore this study may not be representative of all undergraduate college students of Madeira's University. Also the data was collected using self-report methods that can not be guaranteed and therefore limits generability. Another aspect refers to the fact that data achieved quickly turns out of time. Note that, although a relevant measure, the SCL-90-R gives us an overview of the subject's symptoms and their intensity at a specific point in time. Lastly, these data are cross sectional. Although it allows for descriptive and exploratory analyses, new theories cannot be inferred from the results of the study.

Mental health in college student is an important and understudied area of research and policy analysis that is now beginning to grow. Future studies could extend these analyses in several directions. It should include other factors than socio-demographic and also consider the unique or common stressors between singles groups in the population. Finally, they should not only focus on cross-sectional analysis of college student mental health, but extend it to determine how mental health needs, knowledge, and utilization changes over time in a dynamic environment, like Hyun, Quinn, Madon, & Lustig stated (2006).

The current study was designed to better determine the nature and strength of psychological distress among students of Madeira University. Gender was the only one to positively correlate with the psychological symptomatology. It's important to know that between college students, there is some minor psychiatric morbidity; that women reported overall slight higher levels of symptomatology and are the ones more open to seek and receive care for psychological problems. The higher the levels of loneliness, the higher the symptomatology and their severity. This enlightens the importance to attend to this variable, as it's of such importance in the context of academic adaptation.

References

- APA. (1996). *Manual de Diagnóstico e Estatística das Perturbações Mentais - DSM IV*. Lisboa: Climepsi Editores.
- Arnett, J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55, 469–480.
- Astin, A. (1999). Student Involvement: A Developmental Theory for Higher Education. *Journal of College Student Development*, 40, 5, 518-529.
- Baptista, A. (1993). *A génese da perturbação de pânico*. Tese de doutoramento não publicada, submetida no Instituto de Ciências Biomédicas Abel Salazar, Universidade do Porto.
- Brackney, B., & Karabenick, S. (1995). Psychopathology and academic performance: The role of motivation and learning strategies. *Journal of Counseling Psychology*, 42, 456–465.
- Brockelman, K. (2009). The Interrelationship of Self-Determination, Mental Illness, and Grades Among University Students. *Journal of College Student Development*, 50, 3, 271-286.
- Burris, J., Brechting, E., Salsman, J., & Carlson, C. (2009). Factors Associated With the Psychological Well-Being and Distress of University Students. *Journal of American College Health*, 57, 536-543.
- Council for the Advancement of Standards in Higher Education (CAS). (1999). *The role of counseling programs: CAS standards contextual statement*. Washington, DC: CAS.

- Derogatis, L. R. (1977) *SCL-90-R: Administration, Scoring & Procedures: Manual*. Baltimore, MD: Clinical Psychometric Research.
- Derogatis, L. R. (2002). *SCL-90-R. Cuestionario de 90 síntomas. Manual*. Madrid: TEA Ediciones.
- Diniz, A. (2005). *A Universidade e os seus estudantes: um enfoque psicológico*. Lisboa: ISPA.
- Erikson, E. (1963). *Childhood and society* (2nd ed.). New York: Norton.
- Fernandes, E., Maia, Â., Meireles, C., Rios, S., Silva, D., & Feixas, G. (2004). Dilemas implicativos e ajustamento psicológico: Um estudo com alunos recém chegados à Universidade do Minho. *International Journal of Clinical and Health Psychology*, 5, 285-304.
- Fisher, S. & Hood, B. (1987) Vulnerability factors in the transition to university. *British Journal of Psychology*, 78, 309–320.
- Furr, S.R., Westefeld, J.S., McConnell, G.N., & Jenkins, J.M. (2001). Suicide and depression among college students: A decade later. *Professional Psychology: Research and Practice*, 32, 97–100.
- Gallagher, R., Gill, A., & Sysko, H. (2000). *National survey of counselling center directors*. Alexandria, VA: International Association of Counseling Services.
- Hyun, J., Quinn, B., Madon, T., & Lustig, S. (2006). Graduate Student Mental Health: Needs Assessment and Utilization of Counseling Services. *Journal of College Student Development*, 47(3), 247-266.
- Kaltsouda, A., & Papadioti-Athanasίου, V. (2007). Student's psychosocial health and adjustment to the university of Ionnina. In T. Giovazolias, E. Karademas & A. Kalantzi-Azizi (Eds.), *Crossing internal and external borders: practices for an effective psychological counselling in the European Higher Education* (pp.81-90). Greece: Fedora-Psyche. Retrieved from fedora.plexus.leidenuniv.nl/index.php?option
- Kelly, G. A. (1955). *The psychology of personal constructs*. Nova Cork: Norton.
- Kessler, R., Foster, C., Saunders, W., & Stang, P. (1995). Social consequences of psychiatric disorders: Educational attainment. *American Journal of Psychiatry*, 152, 1026–1032.
- Kitzrow, M. (2003). The Mental Health Needs of Today's College Students: Challenges and Recommendations. *NASPA Journal*, 41, 1, 165-179.
- Lanthier, R., & Windham, C. (2004). Internet use and college adjustment: the moderating role of gender. *Computers in Human Behavior*, 20, 591-606.

- Morahan-Martin, J. & Schumacher, P. (2003). Loneliness and social uses of the Internet. *Computers in Human Behavior, 19*, 659-671.
- Morrison, R., & O'Connor, R. (2005). Predicting Psychological Distress in College Students: The Role of Rumination and Stress. *Journal of Clinical Psychology, 61*, 447-460.
- Neto, F. (1989). A escala da solidão da UCLA: adaptação portuguesa. *Psicologia Clínica, 2*, 65-79
- Neto, F. (1992). Loneliness among Portuguese Adolescents. *Social Behavior and Personality, 20*, 15-22.
- Royal College of Psychiatrists (2003). *The Mental Health of Students in Higher Education. Council Report CR112*. London: Royal College of Psychiatrists
- Russel, D. W. (1996). UCLA Loneliness Scale (Version3): Reliability, Validity and Factor Structure. *Journal of Personality Assessment, 66*, 1, 20-40.
- Sharkin, B. (1997). Increasing severity of presenting problems in college counseling centers: A closer look. *Journal of Counseling and Development, 75*, 275-281.
- Vaez M, Laflamme L. (2002) First-year university students' health status and socio-demographic determinants of their self-rated health. *Work, 19*, 71-80.

Endereço para correspondência:

Luísa Soares, Phd - CCAH
Unversidade da Madeira,
Campus Uiversitário da Peneda,
9000-158 Funchal
Portugal
E-mail: lsoares@uma.pt

Recebido em: 28/07/2012.
Aceito para publicação em: 09/01/2013.