HOW'S THE MENTAL HEALTH OF HIGHER EDUCATION STUDENTS IN PORTUGAL?*

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Abstract

The present study aims to characterize the mental health of higher education students in Portugal, by analysing differences based on socio-demographic variables and investigating the prevalence of depressive symptoms. The sample included 321 Portuguese students, from 1st to 6th year, filled the Behavioral Health Measure-20 (Kopka & Lowry, 1997) and the University Student Depression Inventory (Khwaja & Bryden, 2006). Results show that women were more affected by symptoms of anxiety and panic, but less by alcohol/compulsion. We also found statistically significant differences between 1st year and the following year students, as well as between those who moved away from home and those who didn’t. Depressive symptomatology above normal was found in 17% of the students. Data will be discussed in light of the existing literature. Implications for the counseling services, as well as for mental health promotion interventions are explored.

Introduction

Higher education student finds himself in a critical development period, of transition between adolescence and adulthood, also known as "emerging adulthood", a phase of life characterized by change and exploration in the identity domain (Arnett, 2000). Besides, when he goes to college, he gets confronted with a series of changes, like moving away from home, going a different city, the need of the construction of a new social network and the adaptation to new strategies of learning and evaluation systems (Ferraz & Pereira, 2002; RESAPES, 2002). Therefore, higher education attendance, although it is unquestionably a period of potential personal and social development (Tavares et al., 2007), it is also characterized by an enhanced vulnerability to stress and psychopathology (Dyson & Renk, 2006; Tinklin, Riddell, & Wilson, 2005).

Several investigations indicate that the levels of mental health of university students are worse than the general population ones (Adlaf, Glickman, Demers, & Newton-Taylor, 2001; Roberts, & Zelenyansky, 2002; Roberts, Gelding, Towell, & Weinreb, 1998; Stewart-Brown et al., 2000). Moreover, in the last years, many higher education institutions have noticed a rise not only in the prevalence, but also in the complexity and severity of problems presented by students attending counselling centers (Arasheh-Trechsel, 2002; Banton, Robertson, Tseng, Newton, & Banton, 2003; Caulfield, 2001; Erdur-Baker, Aterson, Drapper, & Barrow, 2006; Kazdin, & DiGeronimo, 2004; Kitzrow, 2003). Whether that data translates a real degradation in the mental health of students or not, is a controversial matter (Kettman et al., 2007; Plagge, Lapien, Heppner, Kilvingham, & Roethlke, 1998; Schwarz, 2006; Sharkin, & Coulter, 2005).

In point of fact, little is known about the depth of students' mental health reality. First of all, investigations have mainly focused on problems and symptoms like depression and suicide, ignoring positive aspects of mental health like well-being. However, these variables are also important since, even in the absence of psychopathology, subjects with lower levels of well-being aren’t so productive and may not function as well as those with higher well-being (Keyes, 2005, 2006). Second, most of the available data is regarding to merely students in counselling centers.

Therefore, it is necessary to broaden the study variables, starting to include positive aspects such as well-being and to expand the population to all students, instead of only those who seek psychological support. In this context, College Student Mental Health Survey (CSMHS) may be viewed as a first step towards a wider comprehension of the actual mental health state not only of the clinical, but also the non clinical population (Soel, & Sevig, 2006). Since that, have emerged all around he world contributions to the understanding of the status quo of higher education students' mental health, in countries like the United Kingdom (Bewick, Gill, Mulhem, Barkham, & Hill, 2008; Cooke, Bewick, Barkham, Bradley & Audin, 2008), Norway (Nordrum, Rustoen, & Rønnestad, 2008), Turkey (Bayram, & Bilge, 2008), Canada (Adlaf, Glickman, Demers, & Newton-Taylor, 2001), Japan (Watanabe, 1999) or China (Wong, Cheung, Chan, Ma, & Tang, 2006).

The consequences of mental health problems manifest themselves at different levels, not only individual, by affecting the physical, emotional, cognitive and academic

functioning (Andrews, & Wilding, 2004; Vaez, & Laflamme, 2008), but also at an interpersonal and even institutional level, because universities and other institutions get confronted with new challenges, to which they must answer adequately (Hyun, Quinn, Madon, & Lustig, 2006; Stanley, & Manthorne, 2001). Students’ mental health represents a neglected public health problem (Stewart-Brown et al, 2000), clearly in need of more data.

The present study constitutes an effort to enrich our knowledge about the status quo of mental health in higher education students in Portugal. More specifically, our goals are to: 1) characterize the mental health of students by describing differences in well-being, life functioning and symptoms, with respect to socio-demographic variables of, gender, age year of study and residence (dissociated or not); 2) to investigate the prevalence of depressive symptoms in the same population.

Methodology

Participants

321 students from several higher education institutions in Portugal participated in the present study. These students were attending the 1st to the 5th year of study in Engineering (34.6%), Natural Sciences (26.5%) and Humanities (38.9%) areas. 61.1% of the individuals were female and the remaining 38.9% male, with ages between 18 and 44 years old (M=20.82; SD=3.06). Only 34.7% continued living in their usual home, while 61.7% moved away and 4% haven’t answered that. 5% of students claimed that they were attending any kind of psychological support (counselling or psychotherapy) at the moment of data collection.

Instruments

Questionário de Saúde Comportamental-20 (QSC-20; Santos, Pereira, & Veiga, 2008) is a Portuguese adaptation of the Behavioral Health Measure-20 (Kopta, & Lowry, 2002). This self-report questionnaire employs a Likert type scale of 5 points, from 0 to 4. The results in any scale correspond to the mean of its items values. The higher the total, the better is the mental health level.

Total score of the 20 items gives us the Global Mental Health Index. Nevertheless, we may also consider 3 subscales: Well-being (3 items), which assesses psychological distress and well-being; Symptoms (13 items), which analyse the presence of emotional symptoms like anxiety and depression; Life Functioning (4 items), which explores the way the individual is dealing with different areas of his life, such as work/school, intimate relationships, social relationships. The psychometric properties of this instrument are good, as in the original version (total α=0.85 to 0.90), as in the Portuguese (total α=0.88).

The other measure utilized was Inventario da Depressão para Estudantes Universitários (IDEU; Santos, Pereira, & Veiga, 2008), which is the adaptation of University Student Depression Inventory (Khawaja, & Bryden, 2006). That is a self-report measure designed to assess depressive symptoms in higher education students. It is composed by 30 items that are grouped into three subscales: Lethargy (9 items); Cognitive-Emotional (14 items) and Academic Motivation (7 items). The format of the answer is 5 point Likert scale, in which 1 means “never” and 5 means “all the time”. Total scores are the sum of the values of all items and the higher it is, the more depressed is the student. Psychometric studies with the Portuguese version show adequate levels of internal consistency for the global scale (α=0.94) and the subscales (between 0.82 and 0.92).

Procedure

Instruments were applied in classroom, after getting teachers’ approval. Students participated voluntarily, giving verbally their informed consent. Anonymity and confidentiality were naturally guaranteed. Although MSC-20 has more scales, for this study we considered solely the following: General Mental Health; Well-being, Life Functioning; symptoms; Depression; Anxiety; Panic and Alcohol/Drug Use. Statistical analyses were executed with SPSS (Statistical Package for Social Sciences) software version 15.0.

Results

Mental Health and Gender

When we compared the mental health by gender, we verify that male individuals scored higher in almost all scales, indicating therefore better mental health than female. However, the only statistically significant differences were in anxiety (t=3.192;
and panic (t=4.304; p=0.000), where men seem to present fewer symptoms than women. Women had lower scores only in alcohol/drug consumption, (t=3.298; p=0.001) and in life functioning, although this last one was not significant (Table 1).

Table 1 – Comparison of mental health by gender (T test)

<table>
<thead>
<tr>
<th>Scale</th>
<th>Men (n=125)</th>
<th>Women (n=196)</th>
<th>T test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M (SD)</td>
<td>M (SD)</td>
<td></td>
</tr>
<tr>
<td>Global MH</td>
<td>2.93 (0.50)</td>
<td>2.88 (0.49)</td>
<td>0.866</td>
</tr>
<tr>
<td>Well-being</td>
<td>2.26 (0.77)</td>
<td>2.18 (0.72)</td>
<td>0.974</td>
</tr>
<tr>
<td>Life Functioning</td>
<td>2.63 (0.62)</td>
<td>2.76 (0.60)</td>
<td>-1.861</td>
</tr>
<tr>
<td>Symptoms</td>
<td>3.17 (0.53)</td>
<td>3.08 (0.51)</td>
<td>1.655</td>
</tr>
<tr>
<td>Depression</td>
<td>2.88 (0.59)</td>
<td>2.76 (0.64)</td>
<td>1.696</td>
</tr>
<tr>
<td>Anxiety</td>
<td>2.69 (0.79)</td>
<td>2.39 (0.74)</td>
<td>3.192</td>
</tr>
<tr>
<td>Panic</td>
<td>2.62 (0.79)</td>
<td>2.42 (0.86)</td>
<td>4.304</td>
</tr>
<tr>
<td>Alcohol/Drugs</td>
<td>3.70 (0.67)</td>
<td>3.80 (0.33)</td>
<td>-3.299</td>
</tr>
<tr>
<td>IDEU</td>
<td></td>
<td></td>
<td>0.901</td>
</tr>
<tr>
<td>Depression (IDEU)</td>
<td>67.79 (18.58)</td>
<td>66.73 (17.86)</td>
<td>1.037</td>
</tr>
</tbody>
</table>

Mental health, age and year of study

To analyse the association of mental health with age, we performed Spearman correlations between every scale and age. None of the correlations was statistically significant.

For year of study we used the same procedure. In this case, we found two significant correlations: a positive correlation of year with panic (r=0.137, p=0.14) and a negative with alcohol/drug use (r=-0.243; p=0.000). Since higher values in MSC-20 mean better mental health, the older the student, the less panic symptoms and the older the student, the more problems with alcohol/drug consumption.

When comparing first-year students with the other year students with a T-test, freshman seem to have better levels of general mental health, well-being and life functioning than students of the following years, although none of this differences was significant. Besides that, although the two groups have obtained equal mean in Symptoms, if we look closely, at each symptom separately, 1st year students have less problems with alcohol/drugs (t=3.964; p=0.000), but more symptoms of panic (t=2.841; p=0.005) and anxiety (t=-1.788; p=0.075 - not significant) (Table 2).

Table 2 – Comparison of mental health between 1st year and the following year

<table>
<thead>
<tr>
<th>Scale</th>
<th>1st year (n=185)</th>
<th>Remaining years (n=135)</th>
<th>T test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M (SD)</td>
<td>M (SD)</td>
<td></td>
</tr>
<tr>
<td>MSC-20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Global MH</td>
<td>2.91 (0.48)</td>
<td>2.89 (0.52)</td>
<td>0.426</td>
</tr>
<tr>
<td>Well-being</td>
<td>2.23 (0.71)</td>
<td>2.18 (0.79)</td>
<td>0.820</td>
</tr>
<tr>
<td>Life Functioning</td>
<td>2.74 (0.60)</td>
<td>2.88 (0.83)</td>
<td>1.184</td>
</tr>
<tr>
<td>Symptoms</td>
<td>3.12 (0.50)</td>
<td>3.12 (0.55)</td>
<td>-0.00</td>
</tr>
<tr>
<td>Depression</td>
<td>2.81 (0.59)</td>
<td>2.80 (0.67)</td>
<td>0.207</td>
</tr>
<tr>
<td>Anxiety</td>
<td>2.43 (0.81)</td>
<td>2.59 (0.73)</td>
<td>-1.788</td>
</tr>
<tr>
<td>Panic</td>
<td>2.47 (0.88)</td>
<td>2.74 (0.77)</td>
<td>-2.841</td>
</tr>
<tr>
<td>Alcohol/Drugs</td>
<td>3.83 (0.28)</td>
<td>3.69 (0.68)</td>
<td>3.984</td>
</tr>
<tr>
<td>IDEU</td>
<td></td>
<td></td>
<td>0.000</td>
</tr>
<tr>
<td>Depression (IDEU)</td>
<td>85.20 (17.57)</td>
<td>68.33 (17.05)</td>
<td>-1.509</td>
</tr>
</tbody>
</table>

Mental health and dislocation

Although the only statistically significant difference between the students that moved away from home and those who did not move, was in depression (t=-2.730; p=0.007 with QSC-20 and T=2.610, p=0.009 with IDEU), the first ones present lower means in every scale, except panic (where the means are equal). This suggests lower levels mental health of those who moved than their peers (Table 3).

Table 3 – Comparison of the mental health of dislocated and non dislocated students (T-test)

<table>
<thead>
<tr>
<th>Scale</th>
<th>Dislocated (n=118)</th>
<th>Non dislocated (n=118)</th>
<th>t-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M (SD)</td>
<td>M (SD)</td>
<td></td>
</tr>
<tr>
<td>MSC-20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Global MH</td>
<td>2.89 (0.50)</td>
<td>2.97 (0.47)</td>
<td>-1.471</td>
</tr>
<tr>
<td>Well-being</td>
<td>2.18 (0.77)</td>
<td>2.32 (0.71)</td>
<td>-1.377</td>
</tr>
<tr>
<td>Life Functioning</td>
<td>2.72 (0.80)</td>
<td>2.75 (0.61)</td>
<td>0.567</td>
</tr>
<tr>
<td>Symptoms</td>
<td>3.10 (0.60)</td>
<td>3.19 (0.50)</td>
<td>-1.480</td>
</tr>
<tr>
<td>Depression</td>
<td>2.76 (0.61)</td>
<td>2.96 (0.59)</td>
<td>-2.730</td>
</tr>
<tr>
<td>Anxiety</td>
<td>2.49 (0.78)</td>
<td>2.56 (0.76)</td>
<td>-0.728</td>
</tr>
<tr>
<td>Panic</td>
<td>2.60 (0.85)</td>
<td>2.60 (0.88)</td>
<td>0.056</td>
</tr>
<tr>
<td>Alcohol/Drugs</td>
<td>3.84 (0.49)</td>
<td>3.85 (0.48)</td>
<td>-0.124</td>
</tr>
<tr>
<td>IDEU</td>
<td>68.02 (17.26)</td>
<td>62.68 (17.08)</td>
<td>2.610</td>
</tr>
</tbody>
</table>

p=0.006
Prevalence of depressive symptoms

In what concerns to depression, using Inventario de Depressão de Estudantes Universitários, we found that 17% of students presented some degree of depressive symptomatology: 14% at mild and 3% at moderate or severe level. Those symptoms were primarily Lethargy (M=2.6), followed by Academic Motivation (M=2.3) and Cognitive Emotional (M=1.9). Only 12.7% of those students who had depressive symptomatology above normal were receiving any kind of psychological help.

Discussion

In general terms, our data suggests than men have slightly better mental health than women, even though few statistically differences were found between genders. In fact, other studies have also shown higher levels of psychological distress in women (Adleif et al., 2001; Nerdum et al., 2006). In our study, women were more vulnerable to anxiety and panic than men, what corroborates previous investigations (Bayram, & Bilge, 2008; Watanabe, 1998; Wong et al., 2006). In contrast, men presented more problems related to alcohol/drug consumption, what was also expected (Bewick et al., 2008b; Wagner, Stepniak, Zilberman, Barroso, & Andrade, 2007).

If we consider all the changes and the adaptation the student must go through when he goes to university, it is not surprising that he feels anxious. The first year of university seems to be a time of heightened anxiety and stress (Cooke et al., 2006; Pereira et al., 2009). Nevertheless, freshman showed higher levels of well-being and fewer problems with alcohol/drug consumption than their older peers. Although some data indicates that alcohol consumption levels diminish over the undergraduate studies (Bewick et al., 2008b), we must note that we didn't measure alcohol and drug consumption, but the perceptions of how these substances were affecting negatively the students' life.

While freshman are more vulnerable to anxiety, the students that had to leave their home seem to be more vulnerable to depression. This fact may be explained by the concept of homesickness, which can be characterized by symptoms of depression, may be a predictor of depression (Hafen, Reisbig, White, & Rush, 2008) and, from another point of view, may even be conceptualised, by some authors, as a reactive depression to leaving home (Baier, & Welsh, 1992).

Also, based on the depressive symptoms, we observed that only a very small percentage of students was receiving any kind of psychological support. It would be important to understand why aren't these students at risk searching for help.

The findings of this study must be viewed within the context of its limitations. First of all, they are primarily descriptive. Thus, further investigation to help us understand the connections between the variables would be convenient. Also, we only provide a snapshot about mental health of students in Portugal, so a longitudinal investigation would provide further data about the changes across time.

At this point we only provided some information about the prevalence of depressive symptoms, however we intend to present data about the other mental health aspects in the near future, based on cut-off points yet to be established.

By providing the examination of these variables, we hope that those who work to help students in counselling centers may be better informed about the needs of these individuals in order to help them decrease the levels of symptomatology and enhance well-being and a positive adjustment. More specifically university counselors and staff must be aware of a wide spectrum of mental health issues and must be attentive to vulnerable populations, such as freshman and dislocated students. Then, more initiatives directed to them should be promoted, such as workshops on students residences and even peer counselling, which would have less stigma associated to it than counselling provided by a professional (Pereira, 2005; Pereira et al., 2008).

Nevertheless, the focus of interventions should not only be in decreasing psychological distress, but also in strengthening of positive aspects such well-being, having in mind that by promoting mental health, they may be also promoting academic success. The health of students in higher education is unquestionably an important public health issue, but should never be a neglected problem. We hope that this study may be seen as a little step towards a deeply understanding of this issue.

References


RESAPES (2002). A situação dos serviços de conselhamento psicológico no ensino superior em Portugal (vol. 1 e 2). Lisboa: RESAPES.


