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Does the severity of psychopathology of Italian students receiving counseling services increase over time? A 5 year analysis and a comparison with a clinical and non-clinical sample

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Abstract

Psychological problems—from the most minor such as exams anxiety to the more severe such as personality disorders—are not rare in young adults. University Counseling Services often present the only opportunity for undergraduates to meet health professionals and to be confronted with their difficulties in a non-clinical setting or—in cases of more severe psychopathology—to be referred to mental health services. Recent research attests to the increasing severity of psychological problems among undergraduate and graduate university students. The question necessarily arises as to whether this trend is replicated in the general population being referred to mental health services and, if such is the case, whether there are differences between the two populations. This paper analyses the change in the severity of self-reported symptoms in a sample of 199 students attending a University Counseling Service over a course of 5 years (2010-2014). Clinical severity was assessed in both groups by Symptoms Check List 90-Revised [SCL90-R], Clinical Outcome in Routine Evaluation-Outcome Measure [CORE-OM] and Emotion Regulation Questionnaire scores [ERQ]. Results show a substantial stability in severity level across time and a comparison with an age-matched sample of patients referred to a public hospital clinical psychology service shows overlapping data with respect to disease severity level. As the mental health of university students is an important public health issue, the implications for the organization and structure of university counseling services and the connection with public mental health hospital centers are discussed.

Key Practitioner message:

- The severity of distress and symptoms in Italian students who access psychological counselling service remained stable across a 5-year period.
- The level of severity of distress and symptoms in students who access psychological counselling service was higher and similar to that of a mental health service.
- The results suggest to develop multilevel interventions to address the broader well-being needs of university students providing both low and high intensity interventions and develop a network with mental health services.

Keywords: university counseling, severity, psychopathology, clinical and non-clinical setting

Introduction

According to several data sources (Storrie et al., 2010; Ibraim et al., 2013; Garlow et al., 2008; Zivin et al., 2009) mental health problems are highly prevalent among graduate and undergraduate students. Studies on depression prevalence (Ibrahim et al., 2013) show that, between 1990 and 2010, 30.6% of students reported a significant level of depression without at the same time exemplifying a discernible trend.

Comorbidity between depression and heavy alcohol use is often found in college students, mainly during their first year, and it is related to negative health consequences arising from poor academic performance or premature termination of college (Geisner et al., 2012).

According to a recent wide study of 6.479 Australian university students (Stallman, 2010), the prevalence of mental health problems among such students was estimated to be around 19.2% while 67.4% of students reported sub-syndromic symptoms. Both rates were significantly higher than in the general population; it is speculated that the overall high prevalence of distress among students not seeking professional help may indicate that students expect and/or accept significant psychological distress as part of being a student (ibid.)

Previous works reported similar data for prevalence of severe distress among students (e.g. Eisenberg et al., 2007, found such distress in 15.3% of his sample) but did not assess the level of moderate to mild distress, that was associated with disability and lower academic achievement, and which had the potential of progressing to more severe forms of the condition (Kessler, Merikangas et al., 2003).

All the aforementioned data highlight that the mental health of university students is an important public health issue, having implications for academic performance; therefore, primary prevention must take into account not only the most severe sufferers, but also people showing moderate or sub-threshold symptoms.

Unfortunately, it is not easy to form a comprehensive picture of the distress levels and psychopathological symptoms in the university population. The reasons for this are two-fold: lack of a reliable and standardized set of assessment tools or screening instruments for mental illness in the research studies (e.g. Adlaf et al., 2001; Eisenberg et al., 2007); and, frequent absence of a comparative perspective involving the introduction of data from like populations (e.g. Stallman, 2010).

In the past 30 years, several studies have established significant changes in the nature and severity of symptoms in students seeking counseling intervention (O'Malley et al., 1990; Erdur-Baker et al., 2006; Sharkin, 1997; Pledge et al., 1998; Sharkin et al., 2005), but the findings are somewhat contradictory. Eighty-five percent of USA and Canada counseling centres report that college students are more psychologically disturbed than in the past and that counseling centre clinicians are treating an increased rate of severe psychological problems such as depression, substance abuse, eating disorders, sexual assaults, and suicidal ideation (Gallagher et al., 2000). Gallagher (2011) reported that 91% of counseling centre directors describe a dramatically rising curve of students with severe psychological problems seeking consultation. A study carried out by Benton et al., (2003) produced similar results: the number of students presenting with depression doubled in the time period 1988-2001; the number of students showing suicide tendencies tripled; and the number of students examined after a sexual assault quadrupled. By contrast, the numbers presenting with substance abuse or eating disorders showed no significant change over the 13 years of the study.

Nevertheless, others studies yielded totally opposite results. A study dating back 16 years found that there was little, if any, increase in the mental health problems of college students over a 6 to 8 year period (Cornish et al., 2000). More recently, Kettmann et al. (2007), covering the time span 1999-2005 and using a methodology based on multiple sources of information (students' self-report, counselors' report, diagnosis severity), failed to show a significant increasing trend in the severity of students' mental health problems.

Erdur-Baker et al. (2006), using data from two-large scale studies (clinical samples from 1991 and 1997), did find a slightly increasing trend in such problems; however they commented that if such trend were to continue over a longer period of time, it would "create a dilemma for

university counseling centres, which were originally chartered to deal with acute situational and developmental problems" (ibid., pp. 321).

A realistic and complete picture of the incidence, variability and severity of symptoms among students' accessing counseling services is the basic requirement for an adequate prevention of distress and psychopathology. Monitoring trends and changes in the quantity and quality of students' problems is helpful to identifying the needed changes in service's organization such as the types of interventions to be delivered and the resources to be allocated. Given that university counseling services have been described as brief treatment facilities (Benton et al., 2003), even small changes in the severity of problems that they treat can absorb a disproportionate amount of time and resources (Cornish et al., 2000).

Empirical research on the prevalence and severity of mental health problems among students seeking counseling services in Italy is very limited at the moment. Networks of university professionals have only recently begun to collaborate for the purpose of implementing counseling intervention effectiveness studies (Strepparava et al., 2015; Monti et al., 2014). A more penetrating and wide-ranging research effort is evidently required to achieve a more comprehensive picture.

In light of the lack of data on the prevalence and severity of conditions afflicting students in Italy and the international debate on the increase in severity of their psychopathology, our research had two aims. The first aim was to form a picture of the rate of change in distress levels and psychopathology among university students requiring consultation at the psychological counseling centre of our university over a 5 year period, mainly looking at the slope of changes—increasing or stable—with respect to symptom severity. The second aim was to make a comparison in distress levels and symptoms severity between the students and an age-matched sample of young adults attending at a mental hospital health service. A non-clinical sample of university students, neither requiring a consultation at the counseling service, nor choosing to avail of a hospital mental health service, was used as a control group for both analyses.

Methods

Since 2010, students seeking consultations at the university counseling service underwent a routine assessment to ascertain whether they should start treatment with counseling intervention, grounded on cognitive behavioral theory, or be referred to other mental health services, e.g. a hospital mental health service. From January 2010 to December 2014, 199 students were assessed, after having filled in the consent form, countersigned by the practitioner whom they would eventually work with.

Students were requested to participate voluntarily in the research and were informed that the choice not to give permission to use the data would not in any way influence the counseling intervention, given that the data obtained from the questionnaires were being used in the service for clinical purposes; however, all the students gave their permission.

The structure of counseling intervention has been described in detail elsewhere (Strepparava et al., 2015), but, briefly, it consists in maximum of 10 weekly or fortnightly sessions, each lasting 60 minutes Each session is focused on the use of self-observation techniques for both increasing in the students their awareness of their dysfunctional cognitive, behavioral and emotional schemes and allowing them to be exposed to a wider range of useful emotion regulation strategies.

Measures

The assessment of the severity of distress was done with three self-report instruments (SCL90-R, CORE-OM, ERQ) all with a validated Italian translation and with good reliability and validity. SCL 90 R (the Symptom Checklist 90 Revised, Derogatis, 1994; Italian validation, Prunas et al., 2011) is a common psychiatric self-report inventory containing 90 items, measuring the perceived severity of many psychopathological symptoms. Items are rated on a 5-point Likert scale ranging from 0 ("Not at all") to 4 ("Extremely"). We used the scores of the Global Symptoms Index and of the subscales.

CORE-OM (Clinical Outcomes in Routine Evaluation - Outcome Measure; Barkham et al., 2005, Evans et al., 2002; Italian validation, Palmieri et al., 2009) is a 34-item self-report measure that was used to assess the overall subjective level of psychological distress in the final week. The items are rated on a Likert scale ranging from 0 ("not at all") to 4 ("most or all the time"). It includes 4 subscales measuring symptoms, general daily functioning, overall subjective well-being and risk to self and others.

ERQ (Emotion regulation questionnaire, Italian validation, Balzarotti et al., 2010) is a 10-item self-report measure that consists of two scales measuring reappraisal and suppression. The items are rated on a Likert scale ranging from 1 ("completely disagree") to 7 ("completely agree").

SPSS 21.0 for Windows software was used for statistical analysis. Data were analysed by means of descriptive statistics, as well as chi square and multivariate analysis of variance (MANOVA) and non-parametric Kruskall Wallis test with post hoc comparisons. Results were expressed as mean values ± standard deviation; statistical significance was set at $p < 0.01$. Effect sizes were reported using Pearson's r index and a value smaller than 0.10 was considered a small effect, up to 0.30 a medium effect and a value of 0.50 or above a large effect (Cohen, 1992).

Results

Sample information

The sample consisted of 199 university students (68.3% female) from the Faculties of Educational Science (30.2%), Medicine (36.7%), Mathematics, Physics and Natural Sciences (31.7%) and Statistical Sciences (1.5%), with a mean age of 23.54 (s.d. 3.95) (counselling student group, CSG). All the students had Italian nationality and nobody belonged to an ethnic minority. Of all the subjects, 70.9% were still living with their parents, 10.6% were living with friends, 5.5% were living alone and the remaining 13% declared to be in other housing arrangements (e.g. with partner). Only 32.7% were engaged in a job. With respect to earlier interventions, 33.2% declared to have partaken in previous therapy or contact with a psychologist and 10.6% admitted to having taken prescribed psychotropic medication.

The two comparison groups consisted respectively of 43 patients from a hospital clinical psychology service (48.8% female) with a mean age of 24.77 (s.d. 3.85) (Mental Health Outpatient Group, MHOG) and 56 university students who had not before accessed the counseling service (79.4% female) with a mean age of 22.95 (s.d. 4.18) (non counseling student group, NCSG). The three groups did not differ with respect to age $(F(2)=2.633, p=0.074)$.

Change across 5 year period in the severity of conditions afflicting counseled students

The gender ratio remained fairly constant over the 5-year period considered. The mean percentage of female clients seen each year was 68.3%, with a range of 71.8% to 64.6% (chi square=2.824, p=0.588).

The same stability was also confirmed for the use of psychotropic medications (chi square=14.722, p=0.065) with 10.6% of students admitting to having used such medications (range 17.5-4.2%). A similar stability was reported for previous use of psychological therapies (chi square=10.842, p=0.211) with 33.2% of students admitting to having availed of such therapies (range 45.5-26.0%).

The main focus of the study was to test the hypothesis that there had been an increase in the severity of psychopathology in the counseled student population over the previous 5 years. This was addressed with a non-parametric Kruskall Wallis test (the ANOVA assumption was violated). Year of service was identified as the independent variable (2010–2014), and the severity indicators (CORE-OM risk subscales and total score, SCL-90-R Global Severity Index, ERQ suppression and reappraisal) functioned as dependent variables.

As shown in table 1, there were no significant changes in the variables considered—except reappraisal—and the severity of distress and symptoms remained stable across the period considered.

Insert table 1

Comparison with mental health outpatient group (MHOG) and non counseling student group (NCSG)

To test the hypothesis that the severity of the conditions affecting students receiving counseling services (CSG) differed significantly from that of students who did not access the service (NCSG) but was equivalent to that of clients/patients availing of mental health services (MHOG), we performed a non-parametric Kruskall Wallis test (the ANOVA assumption was violated) using groups as independent variables and the severity indicators used in the previous analysis as dependent variables.

Results showed a significant difference between the three groups for all the indicators considered with the exception of the ERQ reappraisal subscale that showed no divergence (see table 2). In particular, post hoc comparison highlighted that the students in the counseling sample (CSG) reported a higher level of psychological distress compared with the NCSG sample; however, the level was equivalent to that of the MHOG sample (see table 2). The only significant difference between CSG and MHOG was that the level of suppression was higher for MHOG. All differences had a low to medium size effect.

Insert table 2

Discussion

Results of this study challenge not only the literature on counseling centre psychologists' perception that there is a trend of increasing severity of psychopathology in students but also the replies to such findings (Jenks Kettmann et al., 2007). The study confirmed that in the Italian context—even if limited to one single centre—the severity level remained stable across a 5-year period. However, the comparison with a sample of age-matched mental health patients showed that, even though stable across time, the level of severity of distress and symptoms was higher and similar to that of a mental health service but significantly lower than a non-clinical sample of university students.

This latest result is similar to a previous study (Connell et al., 2007) that made a comparison between a sample of university counseling service users and another comparable sample extracted from "primary care" users, showing that the two groups did not differ significantly in symptoms manifestation but revealed a divergence in terms of general functioning.

Taken together, these results can help to stimulate a reflection not only on the aims and the organization of university counseling services but also on the broader implications for the purveyors of such services. A university counseling service is generally considered as "a front-line service to detect and manage at an early stage mental health issues in young adults helping them to manage difficult situations that may be either directly or indirectly related to academic career (such as exam-related anxiety, sleep disturbances, academic procrastination, relationship or family problems, etc.)" (Strepparava et al., 2015). Therefore, such service should take care mainly of low severity clinical conditions in a brief and structured way (Benton et al., 2003), while redirecting more severe and complex conditions to mental health services (such as clinical psychology service, psychiatric services etc.).

However, the results presented above show that the severity of the conditions afflicting graduate and undergraduate students was not milder than that for age-matched recipients of mental health services. On the contrary, the relative levels of distress and reported psychopathological symptoms, measured by the total score of CORE-OM and GSI of SCL-90-R were similar. A striking statistic was that only one-third of the students who accessed the service had undergone a previous psychological intervention; therefore, for the majority of the students, this was the first request for help for their difficulties.

This paper is the first Italian contribution that establishes findings on the stability of the severity of psychopathology in university students and on the similarity of such findings with respect to age-matched clients/patients of mental health services. However, the study presented some limitations related first of all to the small sample size, mainly for the two comparison groups; secondly, the clinical counseling group came from a single university in north Italy (a multicenter study could support the generalizability of these results to the wider Italian context). Other limitations related to certain methodological issues; for example, this study included only self-report measures of personal distress and considered neither the psychologist subjective measure of severity nor the psychologist diagnosis according to the DSM classification as suggested by Sharking (2004). From a clinical point of view, this study would surely benefit from a structured psycho-diagnostic assessment and from the integration of counselors' points of view.

Even with these limitations, this study contributes to address how important it is to establish a modular mental health service inside university campuses that provide early interventions to help

students reach their goals (or to uncover what their goals really are) thereby promoting the well-being of students and the promotion of positive mental health (low intensity interventions) (Hunt et al., 2010). The study also illustrates the need for more structured clinical interventions aimed at treating more severe clinical problems such as anxiety disorders, obsessive compulsive disorders, mood disorders and eating disorders (high intensity interventions). This proposal is supported by previous work (Stallman, 2010, p. 256) that underlines "the need for multilevel interventions to address the broader mental health needs of university students. Universal, selected, and targeted interventions are needed to enable students to reach their academic potential and career aspirations and to alter a trajectory for some away from serious mental illness".

The possibility of treating such problems in the university context should be exploited mainly because it helps to overcome students' fear of accessing mental health services because of the shame or stigma which is often connected with availing of such services (Komiya, et al., 2000; Surf and Lynch, 1999; Quinn et al., 2009). Secondly, given that students spend most of their time on the university campus and that the main consequences of psychological distress are related to academic performance and relationships with colleagues or teachers, the possibility of working inside the university context can facilitate the alleviation of these aspects of the problems.

Next to such structured counseling services that can prevent failures at an early stage of life, additional services require to be developed and expanded in anticipation of events that may lead to the development of chronic and more severe psychiatric disorders. Unique benefits will be provided by the development of a wide and articulated network with second line services such as psychiatric consultation or emergencies services for the appropriate management of suicidal ideation, post traumatic disorders or psychotic illnesses that usually require a longer and multidisciplinary intervention.

As suggested elsewhere (Erdur-Baker et al., 2006), counseling services must better define their professional resources and provide for the delivery of both generalist and adequately specialized treatments for the alleviation of more severe and chronic problems. This implies an adequate professional development focused also on risk management, substance abuse, and traumatic experiences.

Next to clinical counseling intervention (both individual or group), another important issue is the need to inform university personnel—mainly those who are interacting with students—about the complexity and severity of student distress and to help them develop adequate skills to address students who can benefit from an intervention by the counseling service.

Our findings are critically important particularly with respect to the present Italian regulatory framework concerning psychological interventions, psychotherapy and counseling.

While psychological interventions and psychotherapy are very well and comprehensively regulated by state laws in relation to both training and professional practice (see Maffei, Del Corno, Strepparava, 2015 for a wide analysis of regulation of psychotherapy in Italy), counseling activities and counselor training are not regulated at all. There are no state regulations, laws or decrees concerning this profession; training certification and competence definition is under the control of a diverse and fragmented net of professional associations. In Italy, counselors are trained only in private schools; there are no degree programs, either undergraduate or post-graduate, available in this discipline. The relationship between counseling and psychological intervention, the boundaries between the two professional activities, and the professional profiles of counselors are therefore far from being clearly defined. It is a vexatious topic, controversial and lively debated in Italy, in particular after the recent and controversial verdict of the national Court of Justice (TAR n. 13020/2015, November, 17, 2015), finding that counselors had no expertise in treating mental suffering or disorders and could not, therefore, claim the professional status of a psychologist. Therefore, our results, showing that the severity of psychopathology in university students is equivalent to that of age-matched recipients of mental health services, point to the need for a specific clinical expertise for those who work in the area of university counseling services.

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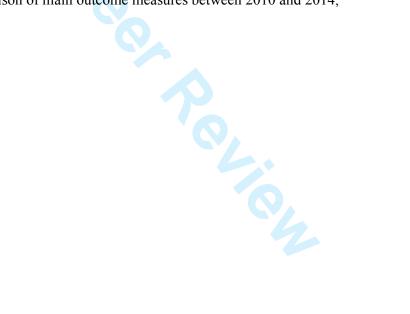
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	2010 N=39 (M±SD)	2011 N=40 (M±SD)	2012 N=22 (M±SD)	2013 N=49 (M±SD)	2014 N=44 (M±SD)	H (4)	Sig.
CORE TOT	1.319±0.552	1.460±0.641	1.487±0.616	1.549±0.632	1.487±0.746	2.776	0.477
CORE – Risk	0.120±0.255	0.227±0.330	0.182±0.291	0.242±0.434	0.380±0.615	3.508	0.596
SCL90-R – GSI	0.959±0.544	1.109±0.636	1.152±0.527	1.092±0.570	1.087±0.759	2.813	0.590
ERQ – Suppression	3.507±1.360	3.368±1.179	3.534±1.495	3.406±1.356	3.620±1.482	0.654	0.957
ERQ – Reappraisal	4.806±1.147	4.699±0.948	4.312±0.184	4.163±0.366	4.299±0.951	8.131	0.087

Table 1. Comparison of main outcome measures between 2010 and 2014;

Scale	CSG (N=194)	MHOG (N=43)	NCSG (N=63)	Test	Sig.	Effect size
CORE-OM mean total score	1.465 ± 0.646^a	1.508 ± 0.442^b	1.237 ± 0.367	H(2)=9.530	0.009	0.17
CORE-OM Risk subscale	0.247 ± 0.432^a	0.212 ± 0.488	0.062 ± 0.182	H(2)=14.60	0.001	0.18
SCL-90-R GSI	1.076 ± 0.622^a	1.164 ± 0.683^b	0.795 ± 0.562	F(2)=6.022	0.003	0.20
ERQ Suppression	3.487 ± 1.364^a	4.083 ± 0.937^b	3.095 ± 1.370	H(2)=15.342	0.000	0.22
ERQ Reappraisal	4.440 ± 1.149	4.528 ± 1.044	4.499 ± 1.214	F(2)=0.137	0.872	0.03

Table 2. Comparison at baseline between students availing of university counseling service, recipients of mental health services and non-clinical sample of students.

Post hoc comparison, we set level of significance at p<0.0167 using Bonferroni correction.

[a] Significant difference CSG–NCSG.

[b] Significant difference MHOG–NCSG.