

## Counseling in the face of crisis: supporting mental health in Tor Vergata University students during the Covid-19 era

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**Summary. Aims.** This study aims to present an overview of the clinical experience of the counseling service "Sportello Studenti". The service offers free diagnostic and therapeutic psychological assistance to all Tor Vergata University of Rome students. **Methods.** Preliminary findings on the prevalence of anxious, depressive, and prodromal symptoms in a subset of participants recruited during the initial three-year period of the service's operation (2019-2022) are presented. Beck's Depression Inventory II (BDI-II), Symptom Checklist-90-Revised (SCL-90-R), Prodromal Questionnaire 16 (PQ-16) and Aberrant Salience Inventory (ASI) have been used to investigate principle psychopathological dimensions. **Results.** 261 students aged 18 to 35 completed the assessment (180 female - 69%). Mild widespread depressive symptoms (35.5%) and mild to severe suicide ideation (5.1%) were highlighted. Ninety students (37.2%) result at a higher risk condition for psychosis. A significant statistical correlation between negative psychopathological indicators, such as suicidal thoughts and age, suggests that younger students exhibit higher susceptibility and vulnerability to mental health issues. **Discussion and conclusions.** The increasing prevalence of distress among young individuals represents an urgent public health concern that necessitates immediate intervention. It is crucial for countries to adopt a comprehensive approach to promoting psychological and mental health. University counseling services serve as an effective initial intervention to address the negative impact of mental illness on academic performance, social interactions, and emotional well-being in young individuals. They also play a pivotal role in the early identification of individuals at risk of developing severe psychiatric disorders. Sportello Studenti has proven to be a valuable initiative addressing the mental health needs of University of Tor Vergata students, underscoring the significance of promoting psychological well-being.

**Key words.** Counseling, Covid-19 pandemic, depressive symptoms, psychological support, university students.

*Il counseling in tempo di crisi: il sostegno alla salute mentale degli studenti dell'Università Tor Vergata nell'era del Covid-19.*

**Riassunto. Scopo.** L'obiettivo di questo studio è presentare una panoramica dell'esperienza clinica del servizio di counseling psicologico "Sportello Studenti". Il servizio offre un percorso diagnostico e di sostegno gratuito a tutti gli studenti dell'Università Tor Vergata di Roma. **Metodi.** Presentiamo i risultati relativi alla prevalenza di sintomi ansiosi, depressivi e prodromici nel campione reclutato durante i primi tre anni di attività del servizio (2019-2022). La Beck's Depression Inventory II (BDI-II), la Symptom Checklist-90-Revised (SCL-90-R), il Prodromal Questionnaire 16 (PQ-16) e l'Aberrant Salience Inventory (ASI) sono stati utilizzati per indagare le principali dimensioni psicopatologiche. **Risultati.** Duecentosessantuno studenti con un'età compresa tra i 18 e i 35 anni hanno completato la valutazione (180 donne). Dalle analisi effettuate emerge la presenza di una diffusa sintomatologia depressiva (35,5%) e ideazione suicidaria (5,1%). Novanta studenti (37,2%) presentano una condizione di aumentato rischio psicotico. Inoltre, una correlazione statisticamente significativa tra la presenza di ideazione suicidaria ed età suggerisce l'aumentata suscettibilità e vulnerabilità dei soggetti più giovani a problematiche di salute mentale. **Discussione e conclusioni.** L'aumento della prevalenza del distress psicologico tra i giovani rappresenta un problema di salute pubblica che necessita di interventi immediati. È fondamentale che i Paesi promuovano nuove strategie di tutela della salute mentale. I servizi di counseling universitari rappresentano un primo intervento efficace per affrontare l'impatto negativo della malattia mentale sul rendimento scolastico, sulle interazioni sociali e sul benessere emotivo dei giovani. Inoltre, svolgono un ruolo cruciale nell'identificazione precoce degli individui ad aumentato rischio di sviluppare gravi disturbi psichiatrici. Lo Sportello Studenti rappresenta una valida risposta ai bisogni di salute mentale degli studenti dell'Università di Tor Vergata, sottolineando l'importanza della promozione del benessere psicologico.

**Parole chiave.** Counseling, covid-19, sintomi depressivi, student universitari, supporto psicologico.

## Background

Over the past few years, mental health has gained significant attention in high-income countries, particularly among the younger population. The youth mental health crisis has prompted a call for urgent and comprehensive reforms in the USA. This plea comes in response to a 40% rise in high school students experiencing prolonged sadness or hopelessness between 2009 and 2019<sup>1,2</sup>. Furthermore, a global survey encompassing 64 countries revealed a decline in mental well-being among successive younger generations, a trend consistently observed across all surveyed nations<sup>3</sup>.

Before the pandemic, the university population aged 18 to 22 experienced an annual prevalence rate of 20.3% for mental disorders, indicating that approximately 1 out of 5 students were affected<sup>4</sup>. The prevalence of depressive symptoms among students reached 27.2% in Medicine faculties, with 11.1% expressing suicidal thoughts<sup>5</sup>.

The emergence of the Covid-19 pandemic and its associated effects, such as lockdowns, economic crises, and social unrest, caused a further sharp deterioration in the youth mental health<sup>3,6-8</sup>. The prevalence of loneliness among individuals in the European Union (EU) has doubled, reaching 26% in some regions<sup>9</sup>.

In 2022, the Institute of Economic and Social Research in Emilia-Romagna<sup>10</sup> surveyed over 10,000 university students in Italy, revealing that 91.3% experienced an upsurge in negative emotions following the pandemic. More than half of the participants (55.9%) expressed intense loneliness, while 46.2% expressed concerns about their future. Additionally, 43.9% worried about their employment prospects, 41.4% were anxious about the ability to pursue their interests, and 41.3% expressed concerns about achieving financial independence and autonomy.

The Italian Government took action (decree law 228/2021), allocating 10 million euros to provide economic assistance to individuals experiencing anxiety, stress, depression, and psychological fragility and those who could benefit from psychotherapy. The overwhelming number of applications received raised the funding to 25 million euros (decree law 115/2022, known as the Aiuti-bis decree). 180,000 requests (more than 60%) came from under-35.

Young adulthood represents a pivotal phase in personal growth and maturation, where individuals undergo crucial stages of personality development and identity formation<sup>11,12</sup>. This period is supposed to be marked by heightened productivity and substantial progress in various aspects of life. However, the emergence of psychiatric disorders during this phase can result in societal alienation, leading to profound

consequences in terms of social interactions, academic pursuits, and professional endeavors.

Two prominent trends can be observed during the last few years: a growing number of students actively seeking counseling services and an aggravating severity of the mental health challenges<sup>13</sup>. Nowadays, after the Covid-19 pandemic, young adults aged 18-24 are five times more likely to have mental health challenges compared to their grandparents' generation<sup>3</sup>.

Despite the prevalence of psychiatric disorders, less than a third of people who need support manage to receive adequate treatment<sup>14</sup>. The consequences of untreated mental illness are lower persistence and college completion rates, higher rates of substance use, and lower lifetime earning potential<sup>15</sup>.

There is, therefore, a clear need for research to develop and promote new early interventions to reduce the dramatic effects of mental illness on young people and society.

This study aims to provide an account of the clinical and research expertise of the "Sportello Studenti" counseling service at the Tor Vergata University of Rome. This service offers free diagnostic and therapeutic assistance to all students.

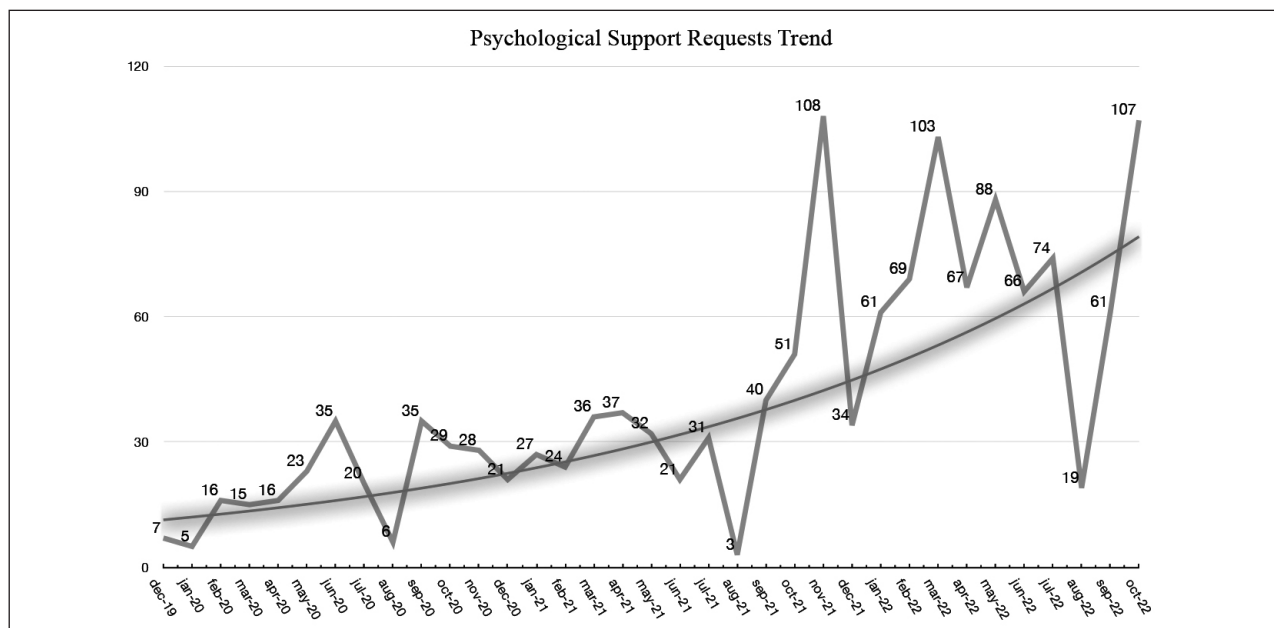
The paper will present preliminary findings, focusing on the prevalence of depressive and prodromal symptoms in a subset of participants recruited during the initial three-year period of the service's activity (2019-2022).

## Materials and methods

Starting from November 2019, the UOC of "Psichiatria e Psicologia Clinica" and the UOSD "Counseling Psicologico di supporto al benessere organizzativo e alle attività cliniche" of Policlinico Tor Vergata activated a free psychological counseling support service for University of Tor Vergata students, which has been called "Sportello Studenti". Between 2020 and 2022, the service received 1,868 requests, experiencing a vertical growth of 250% in the year 2022 compared to the previous two years (figure 1).

University students can access the service by directly requesting the dedicated e-mail address. An initial evaluation through a clinical and textual assessment interview is conducted, followed by six psychological support sessions lasting 50 minutes each. The psychiatry specialist evaluates the need for further therapeutic intervention. This may include outpatient or day hospital treatment, pharmacological therapy and/or a rehabilitation program, or psychotherapeutic treatment.

During the first interview, socio-demographic and anamnestic information are collected. Moreover, self-report questionnaires are administered to investigate principle psychopathological dimensions:



**Figure 1.** Trend of psychological support request received by the Sportello Studenti.

- Beck's Depression Inventory II (BDI-II)<sup>16</sup> to assess the severity of depressive symptoms in adults and adolescents;
- Symptom Checklist-90-Revised (SCL-90-R)<sup>17</sup>, useful to investigate general psychopathological symptoms and psychological distress;
- Prodromal Questionnaire 16 (PQ-16)<sup>18</sup> to screen the psychotic risk condition;
- Aberrant Salience Inventory (ASI)<sup>19</sup> to measure the experience of aberrant salience.

## Results

### SOCIO-DEMOGRAPHIC AND CLINICAL CHARACTERISTICS

Descriptive statistics (means and standard deviations) for continuous variables and absolute and relative frequencies for categorical variables were analyzed. The presence of missing values or outliers in the data was adequately checked. Conservative statistics have been preferred to reduce type 1 errors.

Two hundred sixty-one students aged 18 to 35 (average age 23.4) completed the initial assessment (180 females - 69%).

The student population comprises individuals from 32 distinct degree programs. The most significant proportion of participants belongs to the Faculty of Medicine, accounting for 32.2% of the total sample. Furthermore, the study included students from 21 different countries. It is worth noting that international students are less inclined to seek psychological support services<sup>20,21</sup>, highlighting the need to reconsider clinical, preventive, and aware-

ness models to better address their different needs and demands.

The diagnosis was made using the 7.0.2 version of the Mini International Neuropsychiatric Interview (MINI)<sup>22</sup> according to DSM-5<sup>23</sup> criteria and then grouped into five diagnostic macro-categories: anxiety disorder, mood disorder, psychotic spectrum disorder, personality disorder, and others. 34 (13%) students did not meet the criteria for any nosographic category, presenting existential distress and/or sub-threshold symptoms.

Out of the total, 148 students (56.7%) completed the prescribed counseling sessions, witnessing a notable improvement in their symptoms and without further interventions. A group of 65 students (24.9%) discontinued the treatment independently. Finally, 48 students (18.3%) required additional treatment involving structured psychotherapy or outpatient care.

A descriptive analysis of sociodemographic and clinical characteristics is shown in table 1.

### SELF-REPORTS TEST ANALYSIS

The examination of BDI-II total scores revealed an average score exceeding 17, indicating the presence of widespread depressive symptoms. 99 (39.9%) students scored between 0 and 13, showing no depressive symptoms. Additionally, 61 (24.6%) scored between 14 and 19, indicating mild depressive symptoms, while 55 (22.2%) scored between 20 and 28, suggesting moderate depressive symptoms. Lastly, 33 students (13.3%) scored equal to or greater than 29, indicating severe depressive symptoms. By ex-

**Table 1.** Sociodemographic and clinical characteristics.

	N	%	Mean (sd)
Sample	261	100 %	
Age			23.4 (± 2.83)
Gender			
F	180	69.0 %	
M	81	31.0 %	
Foreign students			
Yes	31	11.9 %	
No	230	88.1 %	
Family history of psychiatric disorders			
Yes	28	10.7 %	
No	233	89.3 %	
Previous psychopharmacological therapy			
Yes	9	3.4 %	
No	252	96.6 %	
Substance use			
Yes	21	8.0 %	
No	240	92.0 %	
Diagnosis			
Anxiety	92	35.2 %	
Psychosis	19	7.3 %	
Personality disorder	49	18.8 %	
Mood	60	23.0%	
No Diagnosis	34	13.0 %	
Other	7	2.7 %	
Clinical outcomes			
Counseling	148	56.7 %	
Outpatient service	21	8.0 %	
Psychotherapy	27	10.3 %	
Drop out	65	24.9 %	

amining BDI-II item 9 (“Suicide”) scores, 12 students (5.1%) scored two or higher, indicating the manifestation of suicidal thoughts.

One hundred and twelve students completed the SCL-90-R questionnaire. The mean total score was 90.13 (SD=51.59). Five dimensions resulted positive (obsessive-compulsive, interpersonal sensitivity, depression, anxiety, and paranoid ideation) with a mean index score >1. We also assessed sleep disturbances using items “Trouble falling asleep” (item 44), “Awakening in the early morning (item 64), “Sleep that is restless or disturbed” (item 66). Sleep mean index resulted >1.

Finally, we evaluated the Global Severity Index (GSI) and the Positive Symptom Distress Index (PSDI). The Global Severity Index (GSI) is the single best indicator of the current level or depth of an individual’s disorder. It combines information concerning the number of symptoms reported with the intensity of perceived distress. It is obtained by adding the scores of all 90 items and dividing by 90.

The Positive Symptom Distress Index (PSDI) reflects the average level of distress reported for the symptoms that are endorsed; as such, it can be interpreted as a measure of symptom intensity. It is obtained by summing the scores of all 90 items and dividing by the Positive Symptom Total (PST) score. The mean GSI was 1.08 (SD=0.05), and the PSDI was 1.84 (SD=0.51).

Based on the analysis of PQ-16 scores, 90 students (37.2%) obtained a score equal to or greater than 6, while 97 students (40.1%) scored similar to or greater than 8 on the Likert scale of distress. These scores indicate an elevated risk for a psychotic condition.

Additionally, 249 students completed the Aberrant Salience Inventory (ASI), yielding an average score of 12.8 (±6.38 DS). Among Italian students, aberrant salience is a commonly encountered phenomenon and serves as an effective screening tool for identifying at-risk youth prone to psychosis<sup>24</sup>.

There were no statistically significant differences found between genders in any of the explored psychopathological dimensions.

Self-report scores and inferential statistics are summarized in table 2.

**Table 2.** Self-report scores and inferential statistics.

	N	Mean	Median	SD	Minimum	Maximum
BDI-II Score	248	17.51	16.00	9.92	1.00	54.0
SCL-90-R Total Score	112	90.13	85.50	51.59	4.00	241
PQ-16 Total Score	242	4.97	4.00	3.51	0.00	16.0
PQ-16 Distress	242	7.31	6.00	6.53	0.00	31.0
ASI Score	249	12.76	13.00	6.38	0.00	29.0

*Continue*



Continue Table 2

Descriptive SCL-90-R Index						
				Mean	SD	
Somatization				0.759	51.59	
Obsessive-Compulsive				1.39	0.76	
Interpersonal Sensitivity				1.10	0.79	
Depression				1.39	0.79	
Anxiety				1.08	0.66	
Hostility				0.76	0.67	
Phobic Anxiety				0.56	0.64	
Paranoid Ideation				1.03	0.79	
Psychoticism				0.67	0.51	
Sleep				1.01	0.92	
GSI				1.08	0.05	
PSDI				1.84	0.51	
Correlation Matrix – BDI and PQ-16 Total scores						
				Age	PQ-16 Score	BDI Score
PQ-16 Score	Spearman’s rho			-0.140	-	
	p-value			0.029	-	
BDI Score	Spearman’s rho			-0.124	0.515	-
	p-value			0.051	< .001	-
Independent sample T-test						
				Statistic	df	p
Age	Student’s T			1.79	236	0.075
	Mann-Whitney U			748		0.008
	Group	N	Mean	Median	SD	SE
Age	No suicide ideation	226	23.5	23.0	2.84	0.189
	Presence of suicide ideation	12	22.0	21.0	3.64	1.05

## Discussion

The present study aims to investigate the psychological health conditions of university students during the Covid-19 pandemic. First and foremost, we want to highlight the significant increase in demand that our service has experienced during 2022 year. The demand for psychological support among younger generations is strictly rising all over the world, calling for comprehensive solutions encompassing freely accessible psychological assistance

services. The success of early intervention initiatives like Headspace in Australia and comparable international models has demonstrated that it is possible to diminish barriers to mental health care and improve access to professional services by establishing youth-friendly primary care-based mental health services<sup>25</sup>. We aim to expand our counseling service, ensuring a shorter waiting list while accommodating more students and reorganizing the service to promote and facilitate free access.

Secondly, our attention turns to the prevalence of depressive symptoms and suicidal ideation.

The prevalence of depression, anxiety, and suicidal thoughts among university students worldwide is alarming<sup>26</sup>. Given that depressive mood and suicidal thoughts are crucial prognostic factors, it is imperative to design customized interventions aimed at preventing and addressing emotional distress<sup>27</sup>. Based on a recent review, the prevalence of depressive symptoms among students widely varies, ranging from 1.4% to 73.5%, while suicidal ideation ranges from 4.9% to 35.6%<sup>5</sup>. In our study, the examination of the gathered BDI-II scores indicated that around 24% of the students displayed mild depressive symptoms. However, a critical finding was the identification of moderate to severe depressive symptoms in 88 students (35.5%). Among this group, 14 students (16.27%) necessitated additional treatment, which involved outpatient care incorporating psychopharmacological therapy, while 16 (18.6%) underwent psychotherapy.

Furthermore, based on SCL-90-R results, the prevalent challenges reported by the students primarily encompass obsessive-compulsive symptoms, interpersonal sensitivity, depression, anxiety, paranoid ideation and sleep. Upon comparing our findings with those of Zurlo et al.<sup>28</sup>, we note a significant alignment in terms of the most affected dimensions. However, it seems that the dimensions of somatization, phobic anxiety, hostility, and psychoticism had a diminished impact in our research. This discrepancy could be attributed to the smaller sample size and the three-year recruitment span of our study. The elevated GSI and PSDI scores reflects the help-seeking nature of our sample, composed by students actively seeking support, and the significant level of distress they have experienced.

PQ-16 scores are associated with the severity of both psychotic and general psychopathology, as well as the intensity of distress related to prodromal symptoms. The prevalence of psychotic-like experiences in our sample seems to be in line with the results obtained in studies on the help-seeker population<sup>29</sup>. Our results indicate significant statistical correlations between negative psychopathological indicators, such as the PQ-16 score and the presence of suicidal thoughts and age, suggesting that younger

students exhibit higher susceptibility and vulnerability to mental health issues.

Our study aligns with previous research regarding ASI scores, as the obtained results are similar<sup>30</sup>.

Substance abuse poses a significant health concern within the student population, leading to decreased academic performance, heightened risk of injuries and medical conditions, increased engagement in risky behaviors, and elevated mortality rates. Among our sample, 21 students (8.04%) reported drug use. However, this figure falls well below the actual prevalence of substance use among university students, estimated at approximately 26%<sup>31</sup>. The fear of stigma, judgment, or potential legal repercussions likely explains this finding. Implementing a more sensitive approach, such as conducting an anamnestic survey on substance use and the perception of associated risks during subsequent interviews following the initial assessment, could be a valuable future enhancement to the practices of the Sportello. This approach aims to improve data collection by creating a safe and trusting environment, allowing for more accurate and comprehensive information to be gathered.

Lastly, a notable finding is that approximately 25% of the students discontinued the counseling sessions before the intended completion. This percentage surpasses the international average of 16% reported in the literature<sup>32</sup>. However, a recent study by Buizza et al.<sup>33</sup> highlights that the premature termination of treatment in a university counseling service should not always be interpreted as a negative outcome. Various factors, such as a rapid reduction in the severity of psychological symptoms or the commencement of an overseas study program, may underlie this student's decision.

## Conclusions

The increasing prevalence of distress among young people represents an urgent public health concern that necessitates immediate intervention. The annual value of lost mental health in children and young people in Europe is estimated at EUR 50 billion<sup>34</sup>. Governments, policymakers, and society are currently confronted with the task of safeguarding and enhancing the mental well-being of young individuals. This entails urgently implementation of high-quality mental health care to mitigate known risk factors and detrimental trends contributing to the problem<sup>35</sup>. It is crucial for countries to embrace a comprehensive approach that integrates mental health promotion into all policies. This approach should prioritize areas such as promotion, prevention, early intervention, fighting stigma, and fostering social inclusion for individuals living with mental health issues<sup>36</sup>.

Counseling services serve as an effective initial intervention model to address the adverse impact of mental illness on young individuals' academic performance, social interactions, and emotional well-being. They also play a crucial role in early identifying subjects at a heightened risk of developing severe psychiatric disorders<sup>37-39</sup>. The experience of Sportello Studenti underscores the imperative need for establishing psychological support services, demonstrating its ability to effectively cater to student demands in a flexible and adaptable manner tailored to the university environment and the unique needs of the student population. Moreover, studies indicate that the efficacy of psychological interventions tends to amplify over time, resulting in substantial benefits for both students and society as a whole<sup>40</sup>.

The data collected over the past three years and the increasing demand for psychological support confirm a rising prevalence of psychological distress among the youth population and a growing recognition of the necessity for specialized assistance. Consequently, we firmly believe that promoting psychological well-being and providing support in navigating the challenges associated with this crucial phase of life extends beyond academic performance and are now imperative objectives that must be implemented soon.

*Conflict of interests:* the authors have no conflict of interests to declare.

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