



Student Counseling Centers in Europe: A Retrospective Analysis

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Objective: Tertiary education can be stressful for many young people, who consistently report high levels of distress. The issue has major implications for campus health services and mental health policymaking more widely. The present study proposes to map student counseling services in Europe.

Methods: The sample of institutions was sourced, using standardized data extraction, from the European Tertiary Education Register (ETER). Then, each institution's website was analyzed for information about the availability of student counseling centers and the services provided. Data extracted from the ETER database were: ETER ID, national identifier, institution name, English institution name, number of students, legal status (in English), institution category (in English), and institutional website. Data extracted from institutions' websites concerned the availability of students' psychological centers and the services provided. Analyses were carried out using the SPSS Statistics software package (IBM Corp., Armonk, NY, United States), version 26.

Results: Overall, it was found that most institutions do not provide mental health counseling services for their students. Institutions of medium dimensions showed a higher probability of reporting students' psychological centers than small institutions. Moreover, private institutions and public institutions were more likely to report having such centers, while private government-dependent institutions were less likely. Universities of applied sciences and universities were more likely to report having them, while other institutions were less likely. Regarding provision according to geographic area, compared to Northern Europe, every other European region was less likely to report featuring such centers. Most institutions reported offering counseling, career counseling, or not otherwise specified psychological services, but only a small number reported providing services such as psychotherapy, psychiatric services, or counseling for learning-specific disabilities.

Conclusion: It is critically important to catalog European data on student counseling centers and services, to encourage tertiary education institutions to invest in such services as key sites for mental health promotion. Indeed, professionally trained staff and the possibility of long-term treatment options would go a long way in supporting students who might not otherwise have access to treatment.

Keywords: emerging adulthood, Europe, mental health, students, student counseling centers

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INTRODUCTION

For many young people in their 20s, the transitional period between adolescence and adulthood is the age of tertiary education. Attending university or another higher education institution can be stressful for many of them, as it often implies several significant changes in their living conditions and lifestyles, and facing challenging tasks such as career choice, relocation, and academic demands (Credé and Niehorster, 2012; Schulenberg and Schoon, 2012; Arnett, 2016). Several prior studies have concluded that the tertiary education years represent a crucial period for the mental health of emerging adults (Ozer et al., 2019; Lei et al., 2021), who have been found to consistently report higher levels of distress than those reported by the general population (James et al., 2017; Tariku et al., 2017; Cvetkovski et al., 2019; Franzoi et al., 2021; Granieri et al., 2021). Such findings are of great concern for educational systems worldwide (Cvetkovski et al., 2018; Lo et al., 2020; Kalkbrenner et al., 2020). Correspondingly, psychological distress can interfere significantly with students' personal and academic lives, and particularly affects young people from lower socioeconomic backgrounds (Collins and Mowbray, 2005; Eisenberg et al., 2007; Fradelos et al., 2019).

The tertiary education years are characterized by many potential stressors, such as housing conditions and financial problems (Flett et al., 2009; Tosevski et al., 2010; Yasar and Turgut, 2020), and, for many students, this is their first experience away from their family, which may make adapting to a new social context even more difficult (Monti et al., 2013). Moreover, students often have to face increased study demands, and, therein, a greater pressure to succeed, feelings of inadequacy, competition with peers, and insecurity about the future (Macaskill, 2013; Krefß et al., 2015). Several studies point to high levels of depression, anxiety, and suicide risk in tertiary education students (Beiter et al., 2015; Rotenstein et al., 2016; Oyekcin et al., 2017; Poorolajal et al., 2017; Tang et al., 2018; Franzoi et al., 2020). Moreover, they can experience personal and relational problems that may indirectly affect their academic careers, often slowing down or even occasionally ending them, or preventing these students' social integration or academic engagement. Certainly, it is well known that students suffering higher levels of psychological distress also experience an increased risk of academic failure and dropping out (Jaisoorya et al., 2017; Ishii et al., 2018).

These data on students mental health and academic performances have major implications for campus health services and mental health policymaking more widely (Viñas Poch et al., 2004; Farrer et al., 2019), with student counseling centers found to provide a unique source of guidance and support for these young people (Gallagher, 2009; Buchanan et al., 2012). Counseling services have been established in several tertiary education institutions around the world (Kraft, 2009); in Europe, student counseling services are characterized by different approaches, but the most common clinical models comprise psychodynamic, cognitive-behavioral, and humanistic approaches (Rückert, 2015). Monti et al. (2014) observed that both psychodynamic and cognitive-behavioral interventions were effective in reducing psychological distress

among university students. In addition, since such counseling centers are located in a protected and familiar context for students, they feel better able to overcome the contextual, intrapersonal, and interpersonal issues that often prevent them from asking for psychological support.

The central role of student counseling centers is accentuated by previous data showing a progressive increase in the severity of the issues treated in such contexts (Storrie et al., 2010; Holm-Hadulla and Koutsoukou-Argyragi, 2015; Biasi et al., 2017). Furthermore, research has shown that these interventions maintain their effectiveness over time, with benefits for the students' long-term mental health as well as their academic career (Monti et al., 2016; Cerutti et al., 2020). Conversely, untreated psychological problems have been found to have a negative impact on academic performance, retention, and graduation rates, leading not only to academic consequences, such as dropping out of university, but also to more severe mental health problems such as suicidal behavior, drug addiction, and alcoholism (Monk, 2004; Koutra et al., 2010; Pillay, 2021).

Student counseling services have the dual task of both supporting young adults experiencing difficulties and also giving feedback to the academic establishment (Adamo et al., 2012). Moreover, while such counseling interventions are often aimed at tackling the ongoing issues that are affecting a distressed student's academic performance, they can also represent a first step for students with a stable psychopathology, allowing them access to mental health services or psychotherapeutic interventions (Biasi et al., 2017).

For these reasons, we think that a first comprehensive overview of data available online on student counseling services in Europe is of fundamental importance, as a first step to gain a better comprehension of the interventions provided, how these services are accessed, and the major issues affecting students' mental health. In the United States, since 1920, the American College Health Association has collected this type of information regarding students' health and wellbeing. Over 800 higher education institutions are members of the Association, representing the collective health and wellbeing needs of about 10 million college students.

However, as far as we know, there has to date been no similar research completed regarding the availability of student counseling services in European tertiary education institutions. We wondered if the differences regarding the provision of psychological services in European Tertiary Education are linked to socio-economic, legal or social and health organization issues.

Recent years have been characterized by a decreasing of funding for public services. In the higher education sector, institutions have to prove higher education to a growing population without an increasing in government funding. In particular, in the last half century, the private sector of higher education has grown very rapidly (Levy, 2012). Aspects distinguish the private sector from the public (i.e., the financial contribution, which must derive especially from private sources, contrary to the public sector and a stronger autonomy in relation to decisions on financial policy) may have a role in providing psychological services. Moreover, may be differences regarding the size of universities: it is

possible that smaller universities have less funds than larger ones. In the view of this considerations it would be interesting assessing whether these differences occur within each single European area. Thus, the present study is a retrospective analysis of data available online pertaining to student counseling centers in Europe. In particular, our concern is exploring (a) the presence or absence of students' psychological services in different European areas; (b) the presence or absence of students' psychological services in different geographical areas, according to an institution's dimension, legal status and category; (c) if institution's dimension, legal status, category, and the geographical area have effects on the likelihood that will have a student psychological center; and (d) the types of interventions that are provided in these centers.

MATERIALS AND METHODS

Data Collection

To assess the presence of students' psychological centers and the services provided by them across Europe, we used a two-step search strategy. First, we searched the European Tertiary Education Register (ETER) (eter-project.com) to identify tertiary education institutions throughout the European area, including the 28 member states of the European Union (EU) at the time of our search, candidate countries, and potential candidates, as well as other countries in the European geographical area as long as they were featured in the ETER. The search interrogated 2016 and 2017 data, the latest that were available at the time the search was completed (the last search for any updates was carried out on September 1, 2020). A unique database was then created that combined 2016 and 2017 data and eliminated any duplicates.

Next, we searched each of our sample institutions' websites to collect information about the availability of student counseling centers and the services provided. When available, we screened the English version of the websites; otherwise, we screened the national language's version. The website searches were performed by Authors [IF, MS, and GC]; each website available was independently accessed by two of them, and in cases of disagreement regarding data extraction from the websites the third author was consulted.

Data analysis was carried out by utilizing a standardized data extraction form. The following data were extracted from the ETER database: ETER ID, national identifier, institution name, English institution name, number of students, legal status (in English), institution category (in English), and institutional website. Data extracted from institutions' websites concerned the availability of students' psychological centers and the services provided. In particular, we coded through a dichotomic variable if each institution provided: unspecified psychological services, counseling services, psychotherapy services, psychiatric services, psychological services, career counseling, group counseling, counseling for disabled students, psychoeducational counseling, counseling for foreign students, sport psychology counseling, nutritional counseling, spiritual counseling, social counseling, health counseling, sexual counseling, counseling for learning specific difficulties, phone counseling and language counseling.

Then, we added a category to cover the subregions of the European area based on the classifications provided by the United Nations geoscheme for Europe: Eastern Europe, Northern Europe, Southern Europe, and Western Europe. Turkey and Cyprus, which are included in the ETER, but are grouped into Western Asia in the United Nations geoscheme, were coded in this study as Middle Eastern Europe. Moreover, we added a category to discriminate between small institutions (up to 10,000 students), medium institutions (from 10,000 to 20,000 students), large institutions (from 20,000 to 40,000 students), and very large institutions (more than 40,000 students), following the categories provided by the Italian Centre for Social Investment Studies.

The process of extracting data from the ETER database resulted in 2,985 institutions. **Table 1** shows the number of institutions mapped for every country and the countries included in every geographical area. Data will be presented as being grouped by geographical area.

Our database search obtained 553 tertiary education institutions in Northern Europe, 567 in Eastern Europe, 1,015 in Western Europe, 643 in Southern Europe, and 207 in Middle Eastern Europe, for a total of 2,985 institutions mapped.

Data Analysis

Data were coded and analyzed using the SPSS Statistics software package (IBM Corp., Armonk, NY, United States), version 26. The statistical significance was set at $p \leq 0.05$. We performed descriptive statistics on data collected for each country and each European area. Differences in the presence versus absence of students' psychological centers according to an institution's dimension, legal status and category in different geographical areas were assessed through Chi-square tests. A logistic regression was performed to ascertain the effects of an institution's dimension, legal status, category and geographical area on the likelihood that the institution would have a psychological center.

RESULTS

Institution Dimension

As detailed in **Table 2**, in Northern Europe, we mapped 368 (66.55%) small institutions, 103 (18.63%) medium institutions, 52 (9.40%) large institutions, and 2 (0.36%) very large institutions. In Eastern Europe, we found listings for 398 (70.19%) small institutions, 42 (7.41%) medium institutions, 24 (4.23%) large institutions, and 2 (0.35%) very large institutions. Regarding Western Europe, there were records for 530 (52.22%) small institutions, 87 (8.57%) medium institutions, 82 (8.08%) large institutions, and 19 (1.87%) very large institutions. In Southern Europe, there were 466 (72.47%) small institutions, 68 (10.58%) medium institutions, 53 (8.24%) large institutions, and 28 (4.35%) very large institutions, while in Middle Eastern Europe, we mapped 100 (48.31%) small institutions, 31 (14.98%) medium institutions, 35 (16.91%) large institutions, and 33 (15.94%) very large institutions.

Legal Statuses

As detailed in **Table 2**, in Northern Europe, we mapped 203 (36.84%) public institutions, 143 (25.95%) private institutions, and 205 (37.21%) private government-dependent institutions. In Eastern Europe, we found listings for 295 (52.12%) public institutions, 244 (43.11%) private institutions, and 17 (3.00%) private government-dependent institutions. Regarding Western Europe, there were records for 646 (64.47%) public institutions,

206 (20.56%) private institutions, and 87 (8.68%) private government-dependent institutions. In Southern Europe, there were 339 (55.57%) public institutions, 248 (40.66%) private institutions, and 22 (3.61%) private government-dependent institutions, while in Middle Eastern Europe, we mapped 118 (57.00%) public institutions and 89 (43.00%) private institutions.

TABLE 1 | Descriptive statistics of the institutions mapped in each country for every geographical area.

Geographical Area		N	%
Northern Europe	Denmark	34	6.0
	Estonia	25	4.4
	Finland	41	7.3
	Iceland	7	1.2
	Ireland	25	4.4
	Latvia	44	7.8
	Lithuania	43	7.6
	Norway	48	8.5
	Sweden	37	6.5
	United Kingdom	261	46.2
	<i>Total</i>	565	100
Eastern Europe	Bulgaria	52	8.9
	Czech Republic	67	11.5
	Hungary	54	9.2
	Poland	281	48.1
	Romania	98	16.8
	Slovakia	32	5.5
	<i>Total</i>	584	100
Western Europe	Austria	69	6.9
	Belgium	63	6.3
	France	379	37.7
	Germany	400	39.8
	Liechtenstein	1	0.1
	Luxembourg	2	0.2
	Netherlands	56	5.6
	Switzerland	35	3.5
	<i>Total</i>	1005	100
	Southern Europe	Albania	40
Croatia		37	5.7
Greece		47	7.3
Italy		215	33.4
Macedonia		16	2.5
Malta		2	0.3
Montenegro		10	1.6
Portugal		96	14.9
Serbia		47	7.3
Slovenia		52	8.1
Spain		82	12.7
<i>Total</i>		644	100
Middle-Eastern Europe		Cyprus	26
	Turkey	200	88.5
	<i>Total</i>	226	100
Total		3024	100

Institution Category

As also shown in **Table 2**, in Northern Europe, we mapped institution category for 233 (42.13%) universities, 131 (23.69%) universities of applied sciences, and 189 other types of institutions (34.18%). For Eastern Europe, we found 312 (55.12%) universities, 17 (3.00%) universities of applied sciences, and 228 (40.28%) other types of institutions. In respect of Western Europe, there were listed 454 (44.95%) universities, 359 (35.54%) universities of applied sciences, and 133 (13.17%) other types of institutions. In Southern Europe, we found records for 418 (68.52%) universities, 96 (15.74%) universities of applied sciences, and 94 (15.41%) other types of institutions. Lastly, in Middle Eastern Europe, there were 180 (86.96%) universities, 15 (7.25%) universities of applied sciences, and 12 (5.80%) other types of institutions.

Availability of Counseling Centers and Services

We found available online data for 2,919 (97.79%) of the 2,985 institutions that we mapped (**Table 3**). As indicated in **Table 4**, the majority of European institutions reported having psychological centers or providing associated students psychological services, $\chi^2 = 24.42$, $p < 0.001$. Nonetheless, there were statistically significant differences regarding the presence of such provision between the European geographical areas, $\chi^2 = 93.84$, $p < 0.001$. In particular, in Northern Europe, Western Europe and Middle-Eastern Europe, most of the institutions reported having a student psychological center (respectively, $\chi^2 = 69.77$, $p < 0.001$, $\chi^2 = 26.68$, $p < 0.001$, and $\chi^2 = 4.37$, $p = 0.037$). However, most of the Eastern institutions did not report such services on their websites ($\chi^2 = 15.08$, $p < 0.001$). In Southern Europe, there were equal numbers of institutions that reported and did not report the provision of student psychological services.

Presence of Students' Psychological Centers According to Institution Dimension and Geographical Area

Table 5 summarizes the presence of student counseling services in institutions with different dimensions for the 2,462 institutions with complete information pertaining to both student centers and dimension. Throughout Europe, the percentage of institutions reporting student counseling centers differs according to the institutions' various legal statuses ($\chi^2 = 242.68$, $p < 0.001$). In particular, the percentage of medium institutions ($\chi^2 = 91.82$, $p < 0.001$), large institutions ($\chi^2 = 84.49$, $p < 0.001$), and very large institutions ($\chi^2 = 14.94$, $p < 0.001$) reporting students' psychological services is higher than the total percentage for Europe, while the percentage of small institutions reporting

TABLE 2 | Institution legal status and institution category distribution in each geographical area.

		Legal Status									
		Public		Private		Private Government Dependent		ND		Tot	
		N	%	N	%	N	%	N	%	N	%
Geographical Area	Northern Europe	211	13.1%	144	15.0%	208	61.9%	2	1.7%	565	18.7%
	Eastern Europe	298	18.5%	258	26.8%	17	5.1%	11	9.2%	584	19.3%
	Western Europe	636	39.6%	208	21.6%	88	26.2%	73	61.3%	1005	33.2%
	Southern Europe	339	21.1%	249	25.9%	23	6.8%	33	27.7%	644	21.3%
	Middle-Eastern Europe	123	7.7%	103	10.7%	0	0.0%	0	0.0%	226	7.5%
Tot		1607	100.0%	962	100.0%	336	100.0%	119	100.0%	3024	100.0%

		Institution Category									
		University		University of applied sciences		Other		ND		Tot	
		N	%	N	%	N	%	N	%	N	%
Geographical Area	Northern Europe	233	14.4%	139	22.4%	193	28.3%	0	0.0%	565	18.7%
	Eastern Europe	316	19.6%	17	2.7%	241	35.4%	10	9.3%	584	19.3%
	Western Europe	454	28.1%	352	56.8%	134	19.7%	65	60.2%	1005	33.2%
	Southern Europe	420	26.0%	97	15.6%	94	13.8%	33	30.6%	644	21.3%
	Middle-Eastern Europe	192	11.9%	15	2.4%	19	2.8%	0	0.0%	226	7.5%
Tot		1615	100.0%	620	100.0%	681	100.0%	108	100.0%	3024	100.0%

TABLE 3 | Online data available for every institutions in different European geographical areas.

		Accessible information	Not accessible information	
		n (%)	n (%)	n (%)
Geographical Area	Northern Europe	555 (98.2)	10 (1.8)	565 (100)
	Eastern Europe	563 (96.4)	21 (3.6)	584 (100)
	Western Europe	1001 (99.6)	4 (0.4)	1005 (100)
	Southern Europe	613 (95.2)	31 (4.8)	644 (100)
	Middle-Eastern Europe	215 (55.1)	11 (4.9)	226 (100)
Tot		2947 (97.5)	77 (2.5)	3024 (100)

students psychological services is lower than the total percentage for Europe ($\chi^2 = 48.48, p < 0.001$).

Regarding the different European geographical areas, in Northern Europe, the percentage of institutions reporting student counseling centers differs according to institutions' dimensions ($\chi^2 = 75.01, p < 0.001$). For example, the percentage of medium ($\chi^2 = 32.34, p < 0.001$) and large ($\chi^2 = 20.23, p < 0.001$) institutions reporting students' psychological centers is higher than the total percentage in that area, while the percentage of small institutions reporting such services is lower ($\chi^2 = 22.09, p < 0.001$). Likewise, in Western Europe, the percentage of institutions reporting student counseling centers differs according to legal status ($\chi^2 = 65.87, p < 0.001$). In particular, the percentage of medium $\chi^2 = 24.98, p < 0.001$, large

($\chi^2 = 16.50, p < 0.001$), and very large ($\chi^2 = 7.43, p = 0.006$) institutions reporting such services is higher than the total percentage for the area, while the percentage of small institutions reporting such services is lower ($\chi^2 = 16.96, p < 0.001$). In Southern Europe, also, the percentage of institutions reporting students' psychological centers differs according to their dimensions ($\chi^2 = 89.64, p < 0.001$). Specifically, the percentage of medium ($\chi^2 = 32.77, p < 0.001$), large ($\chi^2 = 19.00, p < 0.001$) and very large ($\chi^2 = 15.40, p < 0.001$) institutions reporting such services is higher than the total percentage for that area, while the percentage of small institutions reporting such services is lower ($\chi^2 = 22.45, p < 0.001$). In Eastern Europe, also, the percentage of institutions reporting student counseling centers differs according to an institution's dimension ($\chi^2 = 23.95, p < 0.001$). In particular, the percentage of medium ($\chi^2 = 6.06, p = 0.014$) and large ($\chi^2 = 11.38, p = 0.001$) institutions reporting students' psychological centers is higher than the total percentage in that area. By contrast, though, in Middle Eastern Europe, the percentage of institutions reporting students' psychological services was found not to differ according to an institution's dimension ($\chi^2 = 2.66, p = 0.448$).

Presence of Students' Psychological Centers According to Legal Status and Geographical Area

Table 6 summarizes the presence of student counseling services in institutions with different legal statuses within each European geographical area for the 2,826 institutions with complete

TABLE 4 | Presence of student counseling services in different European geographical areas.

Geographical Area	Students Counseling Services		Tot	χ^2	df	p
	Not Reported	Reported				
	n (%)	n (%)				
Northern Europe	191 (34.4)	364 (65.6)	555 (100)	53.926	1	< 0.001
Eastern Europe	369 (65.5)	194 (34.5)	563 (100)	54.396	1	< 0.001
Western Europe	509 (50.8)	492 (49.2)	1001 (100)	0.289	1	0.591
Southern Europe	354 (57.7)	259 (42.3)	613 (100)	14.726	1	< 0.001
Middle-Eastern Europe	113 (52.6)	102 (47.4)	215 (100)	0.563	1	0.453
Tot	1536 (52.1)	1411 (47.9)	2947 (100)	5.302	1	0.02

$\chi^2 = 118.808, df = 4, p < 0.001.$

TABLE 5 | Presence of student counseling centers in institutions with different legal status in each European geographical area.

Geographical Area	Legal Status	Students Counseling Centers			χ^2	df	p
		Not Reported	Reported	Tot			
		n (%) [expected]	n (%) [expected]	n (%)			
Northern Europe	Public	84 (40.4) [71.8]	124 (59.6) [136.2]	208 (100)	3.166	1	0.075
		93 (66.9) [48]	46 (33.1) [91]	139 (100)	64.440	1	< 0.001
		14 (6.8) [71.2]	192 (93.2) [134.8]	206 (100)	70.225	1	< 0.001
	Tot	191 (34.5)	362 (65.5)	553 (100)			
$\chi^2 = 137.678, df = 2, p < 0.001$							
Eastern Europe	Public	185 (63.1) [191.6]	108 (36.9) [101.4]	293 (100)	0.657	1	0.418
		163 (67.1) [158.9]	80 (32.9) [84.1]	243 (100)	0.306	1	0.580
		13 (81.3) [10.5]	3 (18.8) [5.5]	16 (100)	1.732	1	0.188
	Tot	361 (65.4)	191 (34.6)	552 (100)			
$\chi^2 = 2.740, df = 2, p = 0.254$							
Western Europe	Public	280 (44.1) [303.5]	355 (55.9) [331.5]	635 (100)	3.486	1	0.061
		125 (60.7) [98.5]	81 (39.3) [107.5]	206 (100)	13.662	1	< 0.001
		39 (44.3) [42.1]	49 (55.7) [45.9]	88 (100)	0.438	1	0.508
	Tot	444 (47.8)	485 (52.2)	929 (100)			
$\chi^2 = 17.618, df = 2, p < 0.001$							
Southern Europe	Public	169 (50.4) [192.9]	166 (49.6) [142.1]	335 (100)	6.981	1	0.008
		169 (68.1) [142.8]	79 (31.9) [105.2]	248 (100)	11.332	1	0.001
		11 (47.8) [13.2]	12 (52.2) [9.8]	23 (100)	0.861	1	0.354
	Tot	349 (57.6)	257 (42.4)	606 (100)			
$\chi^2 = 19.207, df = 2, p < 0.001$							
Middle-Eastern Europe	Public	75 (62.0) [63.6]	46 (38.0) [57.4]	121 (100)	4.308	1	0.038
		38 (40.4) [49.4]	56 (59.6) [44.6]	94 (100)	5.545	1	0.019
	Tot	113 (52.6)	102 (47.4)	215 (100)			
$\chi^2 = 9.860, df = 1, p = 0.002$							
All European areas	Public	793 (49.8) [813]	799 (50.2) [779]	1592 (100)	1.005	1	0.316
		588 (63.2) [474.9]	342 (36.8) [455.1]	930 (100)	55.043	1	< 0.001
		77 (23.1) [170.1]	256 (76.9) [162.9]	333 (100)	104.164	1	< 0.001
	Tot	1458 (51.1)	1397 (48.9)	2855 (100)			
$\chi^2 = 160.083, df = 2, p < 0.001$							

information pertaining to both student centers and dimensions. Throughout Europe, the percentage of institutions reporting student counseling centers differs according to the institutions' various legal statuses ($\chi^2 = 154.88, p < 0.001$). In particular, the percentage of public ($\chi^2 = 5.66, p = 0.017$) and private

government-dependent ($\chi^2 = 77.94, p < 0.001$) institutions reporting students psychological services is higher than the total percentage for Europe, while the percentage of private institutions reporting such services is lower ($\chi^2 = 71.28, p < 0.001$).

TABLE 6 | Presence of student counseling services in different institution category in each European geographical area.

			Students Counseling Centers			χ^2	df	p
Geographical Area	Institution Category		Not Reported	Reported	Tot			
			n (%) [expected]	n (%) [expected]	n (%)			
Northern Europe	Institution Category	University	25 (10.8) [79.8]	207 (89.2) [152.2]	232 (100)	57.363	1	< 0.001
		University of applied sciences	61 (45.9) [45.8]	72 (54.1) [87.2]	133 (100)	7.694	1	0.006
		Other	105 (55.3) [65.4]	85 (44.7) [124.6]	190 (100)	36.564	1	< 0.001
	Tot		191 (34.4)	364 (65.6)	555 (100)			
$\chi^2 = 101.751, df = 2, p < 0.001$								
Eastern Europe	Institution Category	University	174 (56.1) [202.9]	136 (43.9) [107.1]	310 (100)	11.915	1	0.001
		University of applied sciences	11 (73.3) [9.8]	4 (26.7) [5.2]	15 (100)	0.424	1	0.515
		Other	177 (77.6) [149.3]	51 (22.4) [78.7]	228 (100)	14.889	1	< 0.001
	Tot		362 (65.5)	191 (34.5)	553 (100)			
$\chi^2 = 27.289, df = 2, p < 0.001$								
Western Europe	Institution Category	University	262 (58.0) [216.1]	190 (42.0) [235.9]	452 (100)	18.680	1	< 0.001
		University of applied sciences	100 (28.5) [167.8]	251 (71.5) [183.2]	351 (100)	52.487	1	< 0.001
		Other	86 (64.2) [64.1]	48 (35.8) [69.9]	134 (100)	14.344	1	< 0.001
	Tot		448 (47.8)	489 (52.2)	937 (100)			
$\chi^2 = 85.575, df = 2, p < 0.001$								
Southern Europe	Institution Category	University	219 (52.3) [241.3]	200 (47.7) [177.7]	419 (100)	4.859	1	0.028
		University of applied sciences	64 (66.7) [55.3]	32 (33.3) [40.7]	96 (100)	3.228	1	0.072
		Other	66 (72.5) [52.4]	25 (27.5) [38.6]	91 (100)	8.321	1	0.004
	Tot		349 (57.6)	257 (42.4)	606 (100)			
$\chi^2 = 16.412, df = 2, p < 0.001$								
Middle-Eastern Europe	Institution Category	University	92 (50.3) [96.2]	91 (49.7) [86.8]	183 (100)	0.387	1	0.534
		University of applied sciences	7 (46.7) [7.9]	8 (53.3) [7.1]	15 (100)	0.217	1	0.642
		Other	14 (82.4) [8.9]	3 (17.6) [8.1]	17 (100)	6.134	1	0.013
	Tot		113 (52.6)	102 (47.4)	215 (100)			
$\chi^2 = 6.644, df = 2, p = 0.036$								
All European areas	Institution Category	University	772 (48.4) [814.7]	824 (51.6) [781.3]	1596 (100)	4.572	1	0.033
		University of applied sciences	243 (39.8) [311.4]	367 (60.2) [298.6]	610 (100)	30.693	1	< 0.001
		Other	448 (67.9) [336.9]	212 (32.1) [323.1]	660 (100)	74.840	1	< 0.001
	Tot		1463 (51.0)	1403 (49.0)	2866 (100)			
$\chi^2 = 110.081, df = 2, p < 0.001$								

Regarding the different European geographical areas, in Northern Europe, the percentage of institutions reporting students' psychological centers differs according to the institutions' legal status ($\chi^2 = 133.18, p < 0.001$). For example, the percentage of private institutions reporting students' psychological centers is lower than the total percentage in that geographical area ($\chi^2 = 70.30, p < 0.001$), while the percentage of private government-dependent institutions reporting such services is higher ($\chi^2 = 61.98, p < 0.001$). Likewise, in Western Europe, the percentage of institutions reporting students' psychological centers differs according to legal status ($\chi^2 = 29.09, p < 0.001$). In particular, the percentage of public institutions reporting such provision is higher than the total percentage for the area overall ($\chi^2 = 6.42, p = 0.011$), while the percentage of private institutions is lower ($\chi^2 = 22.53, p < 0.001$). A similar pattern can be seen in Southern Europe where the percentage of institutions reporting students' psychological centers also

differs according to legal status ($\chi^2 = 21.81, p < 0.001$). Specifically, the percentage of private institutions reporting students' psychological centers is lower than the total percentage for that area ($\chi^2 = 12.52, p < 0.001$), while the percentage of public institutions reporting such services is higher ($\chi^2 = 7.04, p = 0.008$). In Middle Eastern Europe, also, the percentage of institutions reporting students' psychological centers differs according to the institutions' legal status ($\chi^2 = 9.10, p < 0.001$). However, in this area, the percentage of private institutions reporting students' psychological centers is higher than the total percentage of the area ($\chi^2 = 5.21, p = 0.023$), while the percentage of public institutions reporting them is lower than the total percentage ($\chi^2 = 3.88, p = 0.049$). In Eastern Europe, the percentage of institutions reporting students' psychological centers differs according to legal status ($\chi^2 = 6.92, p = 0.031$); however, no statistically significant differences were found for what concerns each legal status.

TABLE 7 | Effect estimates of independent variables on the availability of student counseling centers.

	B	S.E.	Wald	df	OR	95% CI		p
						lower	lower	
Legal status: Public			66.735	2	ref			
Legal status: Private	-0.341	0.091	14.065	1	0.71	0.60	0.85	<0.001
Legal status: Private Government Dependent	0.952	0.152	39.427	1	2.59	1.93	3.49	<0.001
Institution Category: University			77.104	2	ref			
Institution Category: University of applied sciences	0.208	0.106	3.850	1	1.23	1.00	1.51	<0.001
Institution Category: Other	-0.839	0.110	58.560	1	2.85	0.43	0.35	<0.001
Geographical Area: Northern Europe			50.361	4	ref			
Geographical Area: Eastern Europe	-0.915	0.140	42.612	1	0.40	0.30	0.53	<0.001
Geographical Area: Western Europe	-0.570	0.125	20.869	1	0.57	0.44	0.72	<0.001
Geographical Area: Southern Europe	-0.819	0.136	36.006	1	0.44	0.34	0.58	<0.001
Geographical Area: Middle-Eastern Europe	-0.600	0.179	11.250	1	0.55	0.39	0.78	0.001
Constant	0.693	0.120	33.392	1	2.00			

Model $\chi^2 = 301.625$; $p < 0.001$; Nagelkerke $R^2 = 0.134$; Accuracy (%) = 61.8%.

Presence of Students' Psychological Centers According to Institution Category and Geographical Area

Table 7 the presence of students' psychological services across different institution categories within each European geographical area for the 2,835 institutions featuring complete information pertaining to both student centers and institution category. We found that throughout Europe, the percentage of institutions reporting students' psychological centers differs according to the institution category ($\chi^2 = 130.17$, $p < 0.001$). In particular, the percentage of universities and universities of applied sciences reporting students' psychological centers was higher compared to the general European percentage (respectively, $\chi^2 = 9.90$, $p = 0.002$, and $\chi^2 = 24.61$, $p < 0.001$), while the percentage of other institutions reporting students' psychological centers was lower ($\chi^2 = 95.68$, $p < 0.001$).

Focusing on the individual geographical areas, in Northern Europe, the percentage of institutions reporting students' psychological centers can be seen to differ according to institution category ($\chi^2 = 102.42$, $p < 0.001$). In particular, the percentage of universities of applied sciences and other institutions reporting students' psychological centers is lower compared to the total percentage in that area (respectively, $\chi^2 = 6.67$, $p = 0.010$, and $\chi^2 = 39.15$, $p < 0.001$), while the percentage of universities reporting such services is higher ($\chi^2 = 56.59$; $p < 0.001$). In Eastern Europe, also, the percentage of institutions reporting students' psychological centers differs according to the institution category ($\chi^2 = 33.41$, $p < 0.001$). Specifically, the percentage of universities reporting students' psychological centers is higher compared to the total percentage in that area ($\chi^2 = 13.49$, $p < 0.001$), while the percentage of other institutions reporting students' psychological centers is lower ($\chi^2 = 19.79$, $p < 0.001$). Regarding Western Europe, the percentage of institutions reporting students' psychological centers differs according to the institution category as well ($\chi^2 = 61.41$, $p < 0.001$). Here, the percentage of universities of applied sciences reporting

students' psychological centers is higher than the total percentage in Western Europe overall ($\chi^2 = 36.54$, $p < 0.001$), while the percentage of universities and other institutions reporting students' psychological centers is lower than the total percentage (respectively, $\chi^2 = 11.61$, $p = 0.001$, and $\chi^2 = 13.28$, $p < 0.001$). In respect of Southern Europe, the percentage of institutions reporting students' psychological centers also can be seen to differ according to institution category ($\chi^2 = 24.89$, $p < 0.001$). In this case, the percentage of universities reporting students' psychological centers is higher compared to the total percentage found in the area ($\chi^2 = 6.92$, $p = 0.009$), while the percentage of other institutions reporting students' psychological centers is lower than the total percentage ($\chi^2 = 15.01$, $p < 0.001$). Finally, in Middle Eastern Europe, the percentage of institutions reporting students' counseling centers also differs according to an institutions' category ($\chi^2 = 8.59$, $p = 0.014$). Of particular note in this instance is the observation that the percentage of other institutions reporting students' psychological centers is lower than the total percentage for that area ($\chi^2 = 8.08$, $p = 0.005$).

Predictors of the Presence of Students' Psychological Centers

Table 8 shows the results of the logistic regression analysis. The logistic regression model was found to be statistically significant, $\chi^2 = 485.56$, $p < 0.001$. The model explained 24% (Nagelkerke's R^2) of the variance in the presence of students' psychological centers and correctly classified 69.19% of cases. Regarding dimensions, medium institutions showed a higher probability of reporting students' psychological centers than small institutions, the odds ratio (OR) = 4.22, 95% CI [3.03, 5.88], $p < 0.001$, as well as large institutions, OR = 4.50, 95% CI [3.07, 6.61], $p < 0.001$, and very large institutions, OR = 4.22, 95% CI [2.37, 7.53], $p < 0.001$. Concerning legal status, private government-dependent institutions showed a higher probability of reporting students' psychological centers than public institutions, OR = 2.48, 95% CI [1.75, 3.51], $p < 0.001$.

TABLE 8 | Service offered by students counseling centers in different European areas.

Geographical Area		Counseling		Psychotherapy		Psychiatric Services		Career Counseling		Psychological Service		Group Counseling		Counseling for Disabled students		Psychoeducational Counseling	
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Northern Europe	Not reported	70	19.2	356	97.8	358	98.4	257	70.6	343	94.2	360	98.6	349	95.9	364	100
	Reported	294	80.8	8	2.2	6	1.6	107	29.4	21	5.8	5	1.4	15	4.1	0	0
	Tot	364	100	364	100	364	100	364	100	364	100	365	100	364	100	364	100
Eastern Europe	Not reported	101	51.8	194	99.5	193	99	74	37.9	172	88.2	196	100	190	97.4	194	99.5
	Reported	94	48.2	1	0.5	2	1	121	62.1	23	11.8	0	100	5	2.6	1	0.5
	Tot	195	100	195	100	195	100	195	100	195	100	196	100	195	100	195	100
Western Europe	Not reported	278	53	512	97.3	521	99	294	55.9	407	77.4	526	100	504	95.8	526	100
	Reported	247	47	14	2.7	5	1	232	44.1	119	22.6	0	100	22	4.2	0	0
	Tot	525	100	526	100	526	100	526	100	526	100	526	100	526	100	526	100
Southern Europe	Not reported	115	43.9	257	98.1	260	99.2	185	70.6	206	78.6	262	100	252	96.2	247	94.3
	Reported	147	56.1	5	1.9	2	0.8	77	29.4	56	21.4	0	100	10	3.8	15	5.7
	Tot	262	100	262	100	262	100	262	100	262	100	262	100	262	100	262	100
Middle-Eastern Europe	Not reported	24	23.3	102	99	103	100	80	77.7	93	90.3	102	99	100	97.1	103	100
	Reported	79	76.7	1	1	0	100	23	22.3	10	9.7	1	1	3	2.9	0	0
	Tot	103	100	103	100	103	100	103	100	103	100	103	100	103	100	103	100

Regarding the category of institution, other institutions exhibited a lower likelihood of reporting students' psychological centers than universities, OR = 0.47, 95% CI [0.36,0.60], $p < 0.001$. With respect to geographical areas, Eastern European institutions demonstrated a lower probability toward reporting students' psychological centers than Northern European institutions, OR = 0.37, 95% CI [0.27,0.50], $p < 0.001$, as well as Southern European institutions, OR = 0.41, 95% CI [0.31,0.55], $p < 0.001$, and Middle Eastern European institutions, OR = 0.42, 95% CI [0.28,0.62], $p < 0.001$.

Types of Interventions

As shown in Table 9, we found that European tertiary education institutions provide a variety of levels and types of counseling and/or support for their students. Many institutions reported offering otherwise unspecified psychological services ($n = 285$; 17.44%), counseling services ($n = 906$, 55.45%), career counseling services ($n = 576$, 32.25%), counseling for disabled students ($n = 682$; 41.74%) or counseling for learning specific disabilities ($n = 254$, 15.54%). Other types of services reported were, for example, psychotherapy ($n = 41$; 2.51%), psychiatric services ($n = 20$; 1.22%), group counseling ($n = 11$; 0.67%), and psychoeducational counseling ($n = 17$; 1.04%).

In terms of the different European geographical areas, psychological services were reported by 23 institutions in Northern Europe (6.20%), 34 in Eastern Europe (14.72%), 154 in Western Europe (15.17%), 63 in Southern Europe (21.14%), and 11 in Middle Eastern Europe (9.32%). Counseling services

were found to be available in 293 institutions in Northern Europe (78.98%), 110 in Eastern Europe (47.62%), 271 in Western Europe (43.99%), 153 in Southern Europe (51.34%), and 79 in Middle Eastern Europe (33.95%). Career counseling was reported in 109 institutions in Northern Europe (29.38%), 127 in Eastern Europe (54.98%), 237 in Western Europe (38.47%), 79 in Southern Europe (26.51%), and 24 in Middle Eastern Europe (11.59%). Group counseling was only available in five institutions in Northern Europe (1.34), two in Eastern Europe (0.87%), one in Western Europe (0.16%), one in Southern Europe (0.34%), and two in Middle Eastern Europe (1.69%). Psychotherapy was provided by nine institutions in Northern Europe (2.43%), three in Eastern Europe (1.30%), 21 in Western Europe (3.41%), seven in Southern Europe (2.35%), and by just one university in Middle Eastern Europe (0.85%). Psychiatric services were found to be available in six institutions in Northern Europe (1.62%), two in Eastern Europe (0.87%), nine in Western Europe (1.46%), two in Southern Europe (0.67%), and only one in Middle Eastern Europe (0.85%).

DISCUSSION

University students' distress is an issue of increasing concern for public health because of its adverse effects on affected individuals' personal development and academic performance (Storrie et al., 2010; Vivekananda et al., 2011; Hohenshil et al., 2013; Biasi et al., 2017). Several prior studies

have highlighted an intensified demand for student counseling (Royal College of Psychiatrists, 2011; Watkins et al., 2012; Holm-Hadulla and Koutsoukou-Argraki, 2015). According to an annual report of the Center for Collegiate Mental Health [CCMH] (2020), the number of students who have requested access to university counseling services for psychopathological symptoms and emotional disturbances (e.g., anxiety and depression) has increased by 1.0% since 2001. Similarly, a 2018 World Health Organization survey of students in eight countries found that roughly one out of three students screened positive for a mental health disorder (Auerbach et al., 2018).

We are aware that much of this data comes from an American context. The low proportion of European studies on this topic may depend on the differences in respect to the great difference in enrollment rates between European and non-European countries. This makes it even more imperative to conduct a study that includes every European area.

Yet, our data showed that only nearly half of European tertiary education institutions offered students' psychological services. In a recent "Trends" report, The European University Association underlined how the proposed increase in individual academic counseling has not occurred and that "students still rate academic counseling as one of the weakest aspects of their programs" (Amundsen and Haakstad, 2017). Consistently, Black (2020) underlined that student support, psychological services, and student mental well-being are the most prevalent areas of discussion among student officers and institutions, but at the same time, the traditional approaches currently employed by institutions to tackle these areas are no longer suitable.

Our data also indicates that different dimensions, legal statuses and categories of institution report varying percentages concerning the presence of students' psychological centers. In particular, compared to small institutions, all other institutions showed a higher likelihood of reporting students' psychological centers. Moreover, compared to public institutions, private government-dependent institutions showed a higher probability of having such services. Moreover, compared to universities, other institutions were less likely to report providing such centers. The percentage of students' psychological centers reported also differed according to geographical area. Compared to Northern Europe, Eastern Europe, Southern Europe, and Middle Eastern Europe, they all had a lower likelihood of reporting having students' psychological centers. In Northern Europe, Western Europe and Middle Eastern Europe, most of the institutions reported having a student psychological center. However, most of the Eastern institutions did not report such services on their websites, and in Southern Europe, there were equal numbers of institutions that reported and did not report the provision of students' psychological services. Overall, between the different European geographical areas, there were found to be differences concerning the presence of students' psychological services in institutions according to differing dimensions, legal statuses and institutional categories compared to the general European data. Such results underline an urgent need to promote international data sharing with respect to students' psychological centers, so that a broad range of professionals and departments (e.g.,

academic departments, administrative offices, and institutions) can cooperate both nationally and internationally in order to attain a wider integration of tertiary education services based on the sharing of experiences, expertise, training, and policies.

Regarding the specific services offered by each institution, most of them reported counseling services, career counseling services, or not otherwise specified psychological services. Previous research has demonstrated the efficacy of these interventions, while the sustained growth in the number of students entering higher education has challenged student counseling services to demonstrate the effectiveness of the support offered (Randall and Bewick, 2016). Connell et al. (2008) highlighted the effectiveness of university counseling services in the United Kingdom. Moreover, regarding the issues that such support can help to address, a Danish research has found that counseling is mostly offered to students with personal problems, such as low self-esteem, anxiety and depression, and study-related problems (e.g., exam anxiety and difficulties in writing a thesis), and also issues concerning social security laws (Østergård et al., 2019). In our study, only a small number of European institutions reported on their websites that they offer more specialized services, such as psychotherapies or psychiatric treatments.

It is important to underline that in the current work, only a few institutions in Europe reported offering psychotherapies despite the widely established effectiveness of these types of counseling support for tertiary education students. Notable among such research are the findings that, following psychotherapy, students show increased levels of well-being and reduced levels of distress, affirming the feasibility of psychotherapy in improving students' mental health regardless of the particular psychotherapeutic approach utilized (Pistorello et al., 2012; Mukuria et al., 2013; Monti et al., 2014; Beiter et al., 2015; Kim et al., 2016; Rapinesi et al., 2018). Currently, though, mental health services and support in tertiary education institutions typically follow an approach that gives priority to first-level interventions, with only small subsets of students receiving assistance (Conley et al., 2015). Just 20 to 40% of students who experience mental health problems seek treatment while attending tertiary education, and this rate is even lower for students in public institutions (Ashwood et al., 2015; Conley et al., 2015). Thus, many students who need mental health services are not getting them and cannot receive them within their tertiary education institution (Czyz et al., 2013). Increasing the provision of psychotherapy services could engage a larger number of students during a critical phase of their life, thereby addressing a significant public health problem among late adolescents and emerging adults (Cleary et al., 2011).

Students with psychiatric disorders, both treated and untreated, have been shown to have lower performance levels and higher dropout rates than their peers (Eisenberg et al., 2009). Correspondingly, prior research has illustrated the effectiveness of psychological services in assisting students with psychiatric disabilities through higher education (Manthey et al., 2015; Schindler et al., 2015). However, it is a cause for concern that, as we found in our study, only a small number of tertiary education institutions in Europe provide specific psychiatric care. Given that the duration of an untreated mental illness affects prognosis

and social functioning in relation to other mental diseases (e.g., depression, bipolar disorder, and obsessive compulsive disorder), the lack of psychiatric services provided for tertiary education students represents an issue in respect of which the consequences cannot be underestimated (Altamura et al., 2010, 2015; Ghio et al., 2014; Oguchi et al., 2014).

There should also be improved counseling in relation to disability and learning-specific difficulties. Indeed, learning-difficulty-related symptoms impact academic performance and college completion levels (Cortiella and Horowitz, 2014) as well as psychosocial functioning within post-secondary education (Kreider et al., 2015). Moreover, with respect to students who are disabled, prior research has demonstrated that providing appropriate support and services on campus can improve their mental health as well as their academic outcomes (Emerson et al., 2009; Stumbo et al., 2009). Such findings should be taken into account, especially when considering that, compared to other students, students with disabilities report greater levels of anxiety and academic-related distress as well as higher rates of suicide ideation, suicide attempts, and non-suicidal self-injury (Coduti et al., 2016).

Limitations and Future Directions

This study has some critical limitations to be considered. First, the data available online was either not exhaustive, or else we could not find available data, especially on non-English websites. Moreover, there can be discrepancies in the use of some specific words (e.g., counseling) between the various countries surveyed.

Future research is needed to overcome these limitations and to deepen our understanding of the specific characteristics of the services provided throughout Europe. It is of importance to contact each tertiary education institution directly in order to assess the effective presence or absence of students' psychological centers and the services provided as well as some additional, detailed information, such as how many practitioners are involved in the service's staff, their qualifications, how many sessions are provided for each intervention, and the most common issues that they have to face.

Clinical Implications

Despite these limitations, the present study is a first attempt to underline the importance of mapping the student counseling centers and services available in European tertiary education institutions and to promote an international data sharing of these important insights. This would enable a systematic and continuous monitoring of students' mental health, allowing

tertiary education institutions to identify their students' mental health needs, as well as assess and improve the efficacy of their existing counseling programs. Moreover, such an approach would reinforce the collaboration between counseling staff and other bureaus (academic departments, administrative offices, and institutions), in order to attain a wider integration of university services (Güneri et al., 2003).

CONCLUSION

It is crucial that more comprehensive services are provided to support students with mental health concerns, and innovative institutional, curricular, and service developments will be instrumental in cultivating healthy academic communities (Manthey et al., 2015). Health and education professionals alike must assign appropriate importance to students' mental health and begin investing in tertiary education institutions as key sites for mental health promotion. Investing in professionally trained staff and in the possibility of long-term treatment options would go a long way in supporting students who might not otherwise have access to treatment.

DATA AVAILABILITY STATEMENT

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

AUTHOR CONTRIBUTIONS

IGF contributed to the study design, analysis and interpretation of data, and the drafting and critical revision of the manuscript. MS contributed to the analysis and interpretation of data and drafting the manuscript. GC contributed to data analysis and to drafting the manuscript. AG was involved in the interpretation of data and providing an important clinical and intellectual contribution. All authors contributed to the article and approved the submitted version.

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