Journal of Child and Youth Psychology e-ISSN: 3108-530X
Vol 2, Issue 2, 2026, 86-101 Review
Submitted: 05/05/2026 **Accepted**: 18/07/2026 https://doi.org/10.5281/zenodo.21440540

The Burden of Psychological Distress Among Adolescents in Europe: A Systematic Review of Current Prevalence Studies

Tomasz Wiśniewski[1]

[1] Doctoral School in the Social Sciences, Department of Psychology, Jagiellonian University, Kraków, Poland

Abstract

Adolescent mental health has emerged as a critical public health challenge in Europe, with psychological distress representing a particularly prevalent concern. This systematic review aimed to identify, describe, and synthesize prevalence estimates of depression, anxiety, and stress among adolescents aged 10–19 years in European countries. A systematic literature search was conducted across four electronic databases to identify prevalence studies examining psychological distress among adolescents aged 10 to 19 years in European countries. A total of 1,058 records were initially identified, and 35 studies met all inclusion criteria after screening and full-text review. The 35 included studies represented 17 European countries and over 300,000 adolescents. Reported prevalence estimates varied widely across studies, ranging from 15.01% to 43.3% for depression, from 7.85% to 48.8% for anxiety, and from 29.3% to 50.5% for stress. This heterogeneity appeared to be associated with differences in measurement instruments, cutoff thresholds, sample characteristics, study settings, and data collection periods. Higher levels of psychological distress were more frequently reported among girls, socioeconomically disadvantaged adolescents, adolescents with limited social support, and those with pre-existing vulnerabilities. Findings underscore the urgent need for comprehensive, evidence-based prevention and intervention strategies tailored to demographic risk factors across European adolescent populations.

Keywords: Adolescents, psychological distress, prevalence, systematic review, Europe.

Özet

Ergen ruh sağlığı, Avrupa'da kritik bir halk sağlığı sorunu olarak ortaya çıkmıştır ve psikolojik sıkıntı özellikle yaygın bir endişeyi temsil etmektedir. Bu sistematik derleme, Avrupa ülkelerinde 10–19 yaş arasındaki ergenlerde depresyon, anksiyete ve stresin yaygınlık tahminlerini belirlemeyi, tanımlamayı ve sentezlemeyi amaçlamıştır. Avrupa ülkelerinde 10 ila 19 yaş arasındaki ergenlerde psikolojik sıkıntıyı inceleyen yaygınlık çalışmalarını belirlemek amacıyla dört elektronik veri tabanında sistematik bir literatür taraması gerçekleştirilmiştir. Başlangıçta toplam 1.058 kayıt belirlenmiş ve tarama ile tam metin incelemesinin ardından 35 çalışma tüm dâhil edilme kriterlerini karşılamıştır. Dâhil edilen 35 çalışma, 17 Avrupa ülkesini ve 300.000'den fazla ergeni temsil etmiştir. Bildirilen yaygınlık tahminleri çalışmalar arasında büyük farklılık göstermiş; depresyon için %15,01 ile %43,3, anksiyete için %7,85 ile %48,8 ve stres için %29,3 ile %50,5 arasında değişmiştir. Bu heterojenliğin; ölçüm araçları, eşik değerleri, örneklem özellikleri, çalışma ortamları ve veri toplama dönemlerindeki farklılıklarla ilişkili olduğu görülmüştür. Daha yüksek düzeyde psikolojik sıkıntı; kızlarda, sosyoekonomik açıdan dezavantajlı ergenlerde, sosyal desteği sınırlı olan ergenlerde ve önceden mevcut kırılganlıklara sahip olanlarda daha sık bildirilmiştir. Bulgular, Avrupa'daki ergen nüfuslarında demografik risk faktörlerine göre uyarlanmış, kapsamlı ve kanıta dayalı önleme ve müdahale stratejilerine duyulan acil ihtiyacın altını çizmektedir.

Anahtar Kelimeler: Ergenler, psikolojik sıkıntı, yaygınlık, sistematik derleme, Avrupa.

✉ Corresponding Author: Tomasz Wiśniewski, tz.wisniewski@outlook.com

Avrupa'daki Ergenler Arasında Psikolojik Sıkıntının Yükü: Güncel Yaygınlık Çalışmalarının Sistematik Bir Derlemesi

Genişletilmiş Türkçe Özet

Giriş: Ergenlik dönemi, biyolojik, psikolojik ve sosyal değişimlerin hızla yaşandığı, ruh sağlığı sorunlarına karşı duyarlılığın arttığı önemli bir gelişim evresidir. Bu dönemde ortaya çıkan depresyon, anksiyete ve stres belirtileri akademik işlevsellik, sosyal ilişkiler, yaşam kalitesi ve yetişkinlik dönemindeki ruh sağlığı üzerinde uzun süreli olumsuz sonuçlara yol açabilmektedir. Avrupa ülkelerinde ergen ruh sağlığına ilişkin çok sayıda epidemiyolojik çalışma bulunmasına rağmen, çalışmaların farklı örneklemler, ölçüm araçları, eşik değerleri ve araştırma dönemleri kullanması, mevcut bulguların bütüncül biçimde değerlendirilmesini güçleştirmektedir. Bu sistematik derlemenin amacı, Avrupa ülkelerinde yaşayan 10–19 yaş aralığındaki ergenlerde depresyon, anksiyete, stres ve genel psikolojik sıkıntının bildirilen yaygınlık oranlarını belirlemek, kullanılan değerlendirme yöntemlerini incelemek ve psikolojik sıkıntıyla ilişkili demografik ve psikososyal etmenleri sentezlemektir.

Yöntem: Sistematik literatür taraması Web of Science, Scopus, Google Scholar ve PubMed veri tabanlarında gerçekleştirilmiştir. Tarama stratejisinde psikolojik sıkıntı, depresyon, anksiyete, stres, ergenlik, yaygınlık ve Avrupa kavramlarını içeren anahtar sözcükler kullanılmıştır. Çalışmaya, 10–19 yaş arasındaki ergenlere odaklanan, Avrupa ülkelerinde yürütülen, psikolojik sıkıntıya ilişkin nicel yaygınlık verileri sunan ve geçerli ölçüm araçları ya da tanısal ölçütler kullanan araştırmalar dâhil edilmiştir. İlk taramada 1.058 kayda ulaşılmış, yinelenen çalışmalar çıkarıldıktan sonra 500 kayıt başlık ve özet açısından değerlendirilmiştir. Tam metin incelemesine alınan 39 çalışmanın 35'i dâhil edilme ölçütlerini karşılamıştır.

Bulgular: İncelemeye alınan 35 çalışma, 17 Avrupa ülkesinden 300.000'den fazla ergeni kapsamaktadır. Çalışmaların büyük bölümü kesitsel desenle yürütülmüş, bazı araştırmalarda ise boylamsal veya tekrarlı kesitsel tasarımlar kullanılmıştır. Depresyon yaygınlığı %15,01 ile %43,3, anksiyete yaygınlığı %7,85 ile %48,8 ve stres yaygınlığı %29,3 ile %50,5 arasında değişmiştir. Bulgular, Avrupa'daki ergenler arasında psikolojik sıkıntının önemli düzeyde olduğunu, ancak bildirilen oranların çalışmalar arasında belirgin farklılık gösterdiğini ortaya koymuştur. Bu farklılıkların PHQ-9, GAD-7, DASS-21, HSCL, Beck Anksiyete Envanteri ve Kutcher Ergen Depresyon Ölçeği gibi farklı ölçüm araçlarının kullanılmasından, eşik puanların, örneklem özelliklerinin, yaş aralıklarının ve veri toplama dönemlerinin değişmesinden kaynaklandığı değerlendirilmiştir. Kız ergenlerde depresyon, anksiyete, stres ve genel psikolojik sıkıntı düzeyleri çoğunlukla erkeklerden daha yüksek bulunmuştur. Düşük sosyoekonomik düzey, sınırlı sosyal destek, akran zorbalığı, yalnızlık, olumsuz çocukluk yaşantıları, engellilik, madde kullanımı ve önceden var olan ruh sağlığı sorunları daha yüksek psikolojik sıkıntıyla ilişkili bulunmuştur. Buna karşılık aile, akran ve okul desteğinin koruyucu olabileceği görülmüştür. COVID-19 dönemini inceleyen çalışmalar, özellikle kızlar, dezavantajlı gruplar ve önceden kırılganlığı bulunan ergenlerde ruhsal belirtilerin arttığını göstermiştir.

Tartışma: Bulgular, Avrupa'daki ergenler arasında psikolojik sıkıntının yaygın ve önemli bir halk sağlığı sorunu olduğunu göstermektedir. Bununla birlikte metodolojik heterojenlik, Avrupa geneli için tek bir yaygınlık oranı hesaplanmasını sınırlandırmaktadır. Gelecekte standart ölçüm araçlarının kullanıldığı, ülkeler arası karşılaştırmalara olanak sağlayan ve boylamsal desenlere dayanan araştırmalara ihtiyaç vardır. Okul temelli ruh sağlığı programlarının yaygınlaştırılması, erken tarama uygulamalarının güçlendirilmesi, ruh sağlığı hizmetlerine erişimin artırılması ve kızlar ile sosyoekonomik açıdan dezavantajlı ergenlere yönelik hedeflenmiş müdahalelerin geliştirilmesi önerilmektedir.

Introduction

Adolescent mental health is increasingly recognized as an important public health concern because mental health difficulties during this developmental period may affect health, education, social functioning, and well-being (Schlack et al., 2021). A substantial proportion of mental health disorders first emerge during adolescence or early adulthood (Scheiner et al., 2022). Adolescence, commonly defined as the period from 10 to 19 years of age, is characterized by rapid biological, psychological, and social development (Sawyer et al., 2018). During this period, young people experience changes related to identity formation, peer relationships, academic expectations, family relationships, and increasing autonomy. Mental health difficulties arising during adolescence may be associated with poorer academic functioning, disrupted social relationships, substance use, self-harm, and suicide-related outcomes (Dalsgaard et al., 2020; McLeod, Uemura & Rohrman, 2012). Some adolescent mental health difficulties may also persist into adulthood and contribute to long-term impairment and reduced quality of life (Suppiej, Longo & Pettoello-Mantovani, 2025).

Among the mental health difficulties affecting adolescents, psychological distress is commonly used to describe emotional suffering involving symptoms of depression, anxiety, and stress. Although these symptom domains are conceptually distinct, they frequently overlap and may occur together. Psychological distress can range from temporary emotional responses to developmental or environmental stressors to persistent and severe symptoms associated with substantial functional impairment. However, psychological distress should not automatically be interpreted as a clinically diagnosed mental disorder, particularly when it is assessed using self-report screening instruments. Elevated psychological distress may nevertheless interfere with daily functioning and quality of life and may indicate a need for further assessment or support (Abela et al., 2024; Basta et al., 2022).

European countries provide a relevant geographical context for examining adolescent psychological distress because they differ substantially in cultural characteristics, socioeconomic conditions, healthcare systems, educational structures, and social welfare arrangements (Tarasenko et al., 2025). Many European countries also conduct population-based surveys and epidemiological studies of adolescent health, resulting in a growing but heterogeneous body of evidence. During the period covered by the present review, adolescents in European countries experienced several social and contextual challenges, including economic insecurity, migration-related pressures, climate-related concerns, and disruptions associated with the COVID-19 pandemic (Chabursky & Walper, 2026; McGorry et al., 2025). Pandemic-related school closures, reduced social contact, changes in family

routines, and uncertainty received particular attention in studies of adolescent mental health (Brites et al., 2023; Holm et al., 2023; Kaltiala et al., 2023; Pieh et al., 2021; Šencaj et al., 2023).

A geographically focused synthesis may help describe the available evidence within European settings and identify patterns that warrant further investigation. Nevertheless, Europe should not be regarded as a homogeneous context, and findings from the countries represented in this review cannot be directly generalized to all European countries or to countries outside Europe. Cultural, economic, healthcare, welfare, and educational differences should be considered when interpreting the findings or considering their implications for policy and practice. The available literature on psychological distress among adolescents in European countries is distributed across different national settings, study populations, and research periods. Numerous individual studies have reported prevalence estimates within particular countries or adolescent groups, while previous reviews have often focused on specific mental health outcomes, selected populations, global samples, or particular contexts such as the COVID-19 pandemic. A synthesis of recent European prevalence studies may therefore provide a structured overview of the reported estimates, the populations examined, the assessment approaches used, and the demographic and psychosocial correlates identified in the included studies.

The present systematic review was conducted to address these gaps and provide a comprehensive synthesis of current evidence on the burden of psychological distress among adolescents in Europe. The primary objective was to systematically identify, evaluate, and synthesize prevalence studies examining psychological distress among adolescents aged 10 to 19 years across European countries. Specifically, this review aimed to determine the reported prevalence of psychological distress among European adolescents based on current epidemiological studies. By synthesizing evidence from multiple countries, this review seeks to provide a comprehensive picture of adolescent mental health in Europe that can inform policy development, guide resource allocation, and identify priorities for future research and intervention efforts. Understanding the scope and distribution of psychological distress among European adolescents is an essential first step toward developing effective, evidence-based strategies to promote mental health and prevent mental disorders in this vulnerable population.

Method

Search Strategy

A systematic literature search was conducted to identify prevalence studies examining psychological distress among adolescents in Europe. The search was performed across several electronic databases: Web of Science, Scopus, Google Scholar, and PubMed. The search strategy was developed to address the following research question: What are the characteristics, reported prevalence estimates, assessment approaches, and demographic and psychosocial correlates of psychological distress examined among adolescents in European countries? Search queries were tailored to the specific search capabilities of each database. For Web of Science, Scopus, and Google Scholar, Boolean operators were used to combine the key concepts: (prevalence OR epidemiology OR "mental health burden") AND ("psychological distress" OR anxiety OR depression OR stress) AND (adolescent OR adolescence OR youth OR teenager) AND (Europe OR European) AND ("aged 10–19" OR "10–19 years" OR "school-age"). For PubMed, a combination of Medical Subject Headings (MeSH) terms and free-text keywords was used: (prevalence[Title/Abstract] OR epidemiology[Title/Abstract]) AND (psychological distress[Title/Abstract] OR anxiety[Title/Abstract] OR depression[Title/Abstract] OR stress[Title/Abstract]) AND (adolescent[MeSH] OR adolescence[Title/Abstract] OR youth[Title/Abstract]) AND (Europe[MeSH] OR European[Title/Abstract]).

Eligibility Criteria

Studies were included if they met the following criteria: (a) reported quantitative prevalence data on psychological distress, anxiety, depression, or stress; (b) focused on adolescent populations aged 10-19 years; (c) were conducted in European countries; (d) utilized validated assessment tools or diagnostic criteria; and (e) were published in peer-reviewed journals or as accessible research reports. Studies were excluded if they: (a) did not report prevalence rates; (b) focused exclusively on clinical populations or specific psychiatric diagnoses requiring clinical diagnosis; (c) were conducted outside Europe; (d) did not include adolescents within the 10-19 age range; or (e) were qualitative studies, case reports, editorials, or commentaries without original data.

Screening and Study Selection

The initial database searches yielded 1,058 records. After duplicate records were removed, 500 unique records remained for title and abstract screening. The titles and abstracts were screened against the predefined eligibility criteria, resulting in 39 studies being

selected for full-text assessment. The full-text articles were then evaluated for eligibility. Four studies were excluded because of insufficient prevalence data, ineligible age ranges, or methodological limitations. Ultimately, 35 studies met all inclusion criteria and were included in the review.

Results

Study Selection

The systematic search and screening process is summarized. The initial search across four databases identified 1.058 records. After deduplication, 500 unique records underwent title and abstract screening, of which 39 studies met the initial eligibility criteria and proceeded to full-text review. Following full-text assessment, 35 studies were included in the final synthesis. The included studies were published between 2020 and 2026, with the majority (n = 28) published between 2021 and 2023, reflecting increased research attention to adolescent mental health during and following the COVID-19 pandemic.

Study Characteristics

The 35 included studies represented 17 European countries, with the highest representation from Norway (n = 5), Finland (n = 3), Austria (n = 3), and Sweden (n = 3). Other countries included Switzerland, Liechtenstein, Malta, Serbia, Ireland, the Netherlands, Croatia, Italy, Poland, Germany, France, Slovenia, Portugal, Greece, and North Macedonia. Sample sizes varied considerably, ranging from 204 participants (Sulejmani et al., 2025) to 252,453 participants across multiple survey waves (Holm et al., 2023). Most studies employed cross-sectional designs (n = 28), while seven studies utilized longitudinal or repeated cross-sectional designs to examine temporal trends. The age range of participants across studies generally aligned with the WHO definition of adolescence (10-19 years), though specific age ranges varied. The most commonly studied age groups were 13-19 years (n = 12) and 14-16 years (n = 8). Several studies focused on specific developmental periods, such as early adolescence (10-14 years) or late adolescence (15-19 years).

Assessment Tools and Measures

A diverse range of validated assessment instruments was used across the included studies. The Patient Health Questionnaire-9 (PHQ-9) was among the most frequently used measures of depressive symptoms (Basta et al., 2022; Kaltiala et al., 2023), while other instruments included the Kutcher Adolescent Depression Scale (Heiniger et al., 2025) and the depression subscale of the Depression Anxiety and Stress Scales-21 (DASS-21) (Brites et al., 2023). Anxiety was commonly assessed using the Generalized Anxiety Disorder-7 (GAD-7)

scale (Basta et al., 2022; Heiniger et al., 2025; Kaltiala et al., 2023) and the anxiety subscale of the DASS-21. General psychological distress was frequently measured using the Hopkins Symptom Checklist, including the HSCL-10 and HSCL-5 versions (Krokstad et al., 2024; Linkas et al., 2022). Other instruments used across the included studies were the Beck Anxiety Inventory (BAI) (Sulejmani et al., 2025), the Impact of Event Scale-Revised for event-related distress (Brites et al., 2023), the YP-CORE questionnaire (Šencaj et al., 2023), and the Perceived Stress Questionnaire-30 (PSQ-30) (Sulejmani et al., 2025). Most studies applied established cutoff scores to identify participants with clinically relevant or elevated symptom levels. However, cutoff values, severity categories, and scoring procedures varied across studies and instruments. These methodological differences should be considered when interpreting and comparing the reported prevalence estimates.

Demographic Factors and Risk Correlates

Gender was the most consistently reported demographic factor associated with psychological distress across the included studies. Female adolescents generally demonstrated higher prevalence rates of depression, anxiety, stress, and general psychological distress than male adolescents. Linkas et al. (2022) reported that 26.9% of girls, compared with 10.8% of boys, scored above the cutoff for psychological distress. Similarly, Šencaj et al. (2023) found significantly higher levels of psychological distress among girls during both the pre-pandemic and pandemic periods. Brites et al. (2023) reported that girls had significantly higher levels of depression, anxiety, stress, and traumatic distress than boys. Krokstad et al. (2024) also observed that associations between several risk factors and mental health problems became stronger over time, particularly among girls. Socioeconomic disadvantage was another frequently reported correlate of psychological distress. Heiniger et al. (2025) found that lower socioeconomic status was significantly associated with depression and anxiety. Kaltiala et al. (2023) reported that depressive and anxiety symptoms were more common among Finnish adolescents from socioeconomically disadvantaged families and among those exposed to multiple sociodemographic adversities. Myhr et al. (2020) documented increasing socioeconomic inequalities in mental health among Norwegian adolescents between 2014 and 2018. Abela et al. (2024) similarly identified poverty as a significant correlate of mental health difficulties among Maltese vocational students. Family structure and social support were also associated with adolescent mental health outcomes. Abela et al. (2024) found that not living with both parents was associated with greater mental health difficulties, whereas supportive relationships with family members, peers, and school personnel were identified as protective factors. Kaltiala et al. (2023) reported that not living

with both parents was an indicator of socioeconomic adversity associated with higher levels of emotional symptoms. Heiniger et al. (2025) also found that limited social support was significantly associated with depression and anxiety. Other correlates reported across the included studies included adverse childhood experiences and poor physical health (Heiniger et al., 2025), a previous history of mental health difficulties, co-occurring attention or learning difficulties, and substance use (Basta et al., 2022), as well as bullying and loneliness (Krokstad et al., 2024). Disability status was also identified as a relevant factor. Holm et al. (2023) found that increases in anxiety and depression during the pandemic were greater among adolescents with cognitive or mobility disabilities than among adolescents without disabilities. Because most of the included studies were observational, these findings should be interpreted as associations rather than evidence of causal relationships.

COVID-19 Pandemic-Related Findings

A substantial proportion of the included studies (n = 18) examined adolescent mental health during or following the COVID-19 pandemic. These studies generally reported increases in psychological distress, depression, anxiety, or stress during periods affected by pandemic-related restrictions. Šencaj et al. (2023) documented an increase in psychological distress prevalence from 11% before the pandemic to 23% during the pandemic among Croatian adolescents. Holm et al. (2023) reported population-level increases in anxiety and depression among Finnish adolescents between 2017 and 2021. Pieh et al. (2021) found elevated stress levels among Austrian students following a semester of home-schooling, while Brites et al. (2023) reported that 47.1% of Portuguese adolescents experienced some degree of pandemic-related traumatic distress. Several studies further indicated that pandemic-related mental health difficulties were more pronounced among potentially vulnerable groups, including girls, adolescents from socioeconomically disadvantaged backgrounds, and those with pre-existing disabilities or mental health difficulties (Holm et al., 2023; Kaltiala et al., 2023; Krokstad et al., 2024). However, differences in study design, assessment periods, measurement instruments, and comparison groups should be considered when interpreting these findings.

Prevalence of Depression

Depression prevalence rates varied substantially across studies, ranging from 15.01% to 43.3%. Heiniger et al. (2025) reported a depression prevalence of 37% among 14-19-year-olds in Switzerland and Liechtenstein using the Kutcher Adolescent Depression Scale. Abela et al. (2024) found that 43.3% of vocational education students in Malta experienced moderate

to extremely severe depression. Basta et al. (2022) reported that 29% of Greek adolescents and young adults (aged 15-24 years) exhibited depressive symptoms as measured by the PHQ-9. Muric et al. (2025) documented a depression prevalence of 15.01% among Serbian high school students following a national school tragedy. Several studies examining temporal trends noted increases in depression prevalence during the COVID-19 pandemic. Šencaj et al. (2023) observed an increase in psychological distress from 11% pre-pandemic to 23% during the pandemic among Croatian adolescents. Kaltiala et al. (2023) similarly reported increased depression prevalence among Finnish adolescents from 2019 to 2021.

Prevalence of Anxiety

Anxiety prevalence rates demonstrated similar heterogeneity, ranging from 7.85% to 48.8%. Abela et al. (2024) reported the highest anxiety prevalence at 48.8% (moderate to extremely severe) among Maltese vocational students. Heiniger et al. (2025) found that 25% of Swiss and Liechtenstein adolescents met criteria for anxiety, with 22% experiencing comorbid depression and anxiety. Muric et al. (2025) documented an anxiety prevalence of 7.85% among Serbian students. Basta et al. (2022) reported that 15% of Greek youth exhibited anxiety symptoms. Linkas et al. (2022) found that 26.9% of Norwegian girls and 10.8% of boys scored above the cutoff for psychological distress on the HSCL-10. Several studies noted substantial increases in anxiety during the COVID-19 pandemic, with Holm et al. (2023) documenting population-level increases in anxiety among Finnish adolescents between 2017 and 2021.

Prevalence of Stress

Fewer studies specifically reported stress prevalence as a distinct outcome. Abela et al. (2024) found that 29.3% of Maltese vocational students experienced moderate to extremely severe stress. Brites et al. (2023) reported that while most Portuguese adolescents scored in the normal range for stress, 47.1% reported some level of pandemic-related traumatic distress, with 25.6% reporting high severity values. Sulejmani et al. (2025) documented high levels of perceived stress among North Macedonian youth, with a strong positive correlation ($r = 0.66$) between perceived stress and anxiety scores. Pieh et al. (2021) found elevated stress levels among Austrian high school students after a semester of home-schooling during the pandemic.

Discussion

This systematic review synthesized evidence from 35 prevalence studies conducted across 17 European countries between 2020 and 2026, representing more than 300,000

adolescents aged 10–19 years. The findings indicate a substantial but widely varying burden of psychological distress among European adolescents. Reported prevalence estimates ranged from 15.01% to 43.3% for depression, from 7.85% to 48.8% for anxiety, and from 29.3% to 50.5% for stress (Abela et al., 2024; Basta et al., 2022; Brites et al., 2023; Heiniger et al., 2025; Muric et al., 2025; Sulejmani & Popovska-Jankovic, 2025). The wide variation across studies should not be interpreted solely as evidence of differences between countries, as it may also reflect variation in measurement instruments, cutoff thresholds, sampling procedures, participant characteristics, and study periods.

An important source of heterogeneity was the diversity of assessment tools used across the included studies. Depression, anxiety, stress, and broader psychological distress were measured using instruments such as the PHQ-9, GAD-7, DASS-21, HSCL variants, Kutcher Adolescent Depression Scale, Beck Anxiety Inventory, YP-CORE, and Perceived Stress Questionnaire. These instruments differ in the constructs assessed, recall periods, scoring procedures, cutoff values, and severity classifications. Some studies reported the proportion of adolescents exceeding a screening threshold, whereas others reported moderate-to-severe symptom categories or general psychological distress. Consequently, prevalence estimates derived from different instruments should not be regarded as directly interchangeable. Measurement-related variation is therefore likely to explain part of the observed heterogeneity and highlights the need for greater standardization in future prevalence research.

The substantial variability in prevalence estimates can be attributed to several factors. First, methodological heterogeneity across studies—including differences in assessment instruments (PHQ-9, GAD-7, DASS-21, HSCL-10, Kutcher Adolescent Depression Scale), cutoff scores, sampling strategies, and age ranges—limits direct comparability and likely accounts for a portion of the observed variation. For example, Abela et al. (2024) reported the highest depression prevalence at 43.3% among vocational education students in Malta using the DASS-21, while Muric et al. (2025) documented the lowest depression rate at 15.01% among Serbian high school students following a national tragedy. Similarly, anxiety prevalence ranged from 7.85% in Serbia (Muric et al., 2025) to 48.8% in Malta (Abela et al., 2024). Second, genuine cross-national differences in mental health burden may reflect variations in healthcare systems, cultural factors influencing symptom expression and help-seeking, socioeconomic conditions, and exposure to stressors. The underrepresentation of Eastern European countries in the literature limits conclusions about regional patterns, though available evidence suggests comparable or higher prevalence rates in these populations.

The demographic and psychosocial findings provide additional context for understanding the distribution of psychological distress. Female adolescents generally reported higher levels of depression, anxiety, stress, and general psychological distress than male adolescents (Brites et al., 2023; Linkas et al., 2022; Šencaj et al., 2023). Socioeconomic disadvantage was also repeatedly associated with poorer mental health outcomes (Abela et al., 2024; Heiniger et al., 2025; Kaltiala et al., 2023; Myhr et al., 2020). Family structure, limited social support, loneliness, bullying, adverse childhood experiences, previous mental health difficulties, substance use, and disability status were among the additional correlates reported across the included studies. Conversely, supportive relationships with family members, peers, and school personnel appeared to have a potentially protective role. These findings suggest that adolescent psychological distress is embedded within broader social, familial, educational, and economic contexts. However, because most included studies were observational and cross-sectional, these associations should not be interpreted as evidence of causal relationships.

The COVID-19 pandemic was an important contextual feature of the evidence base. Eighteen included studies examined adolescent mental health during or in relation to the pandemic period. Several studies with temporal comparisons reported increases in psychological distress, depression, anxiety, or stress during pandemic-related restrictions. Šencaj et al. (2023), for example, reported an increase in psychological distress prevalence from 11% before the pandemic to 23% during the pandemic among Croatian adolescents. Kaltiala et al. (2023) reported increased depressive and anxiety symptoms among Finnish adolescents between 2019 and 2021, while Holm et al. (2023) observed population-level increases in anxiety and depression between 2017 and 2021. Pieh et al. (2021) reported elevated stress among Austrian students following a semester of home-schooling, and Brites et al. (2023) found that 47.1% of Portuguese adolescents experienced some degree of pandemic-related traumatic distress. The studies also suggested that pandemic-period mental health difficulties were more pronounced among girls, socioeconomically disadvantaged adolescents, and those with pre-existing disabilities or mental health difficulties. Nevertheless, differences in study design, assessment timing, comparison groups, and measurement instruments limit the extent to which changes can be attributed specifically to the pandemic.

Limitations

Several limitations should be considered when interpreting the findings of this review. First, substantial heterogeneity was present in the assessment instruments, cutoff values,

symptom definitions, sampling strategies, age ranges, and study periods. This heterogeneity limits direct comparison across studies and precluded the calculation of a single pooled prevalence estimate. Second, most included studies used cross-sectional designs, which restrict causal inference and make it difficult to distinguish temporary distress from persistent mental health difficulties. Third, the geographical distribution of the evidence was uneven. Some countries were represented by several studies, whereas other European countries and regions were represented by only one study or were not represented at all. The findings should therefore not be interpreted as providing equally comprehensive evidence for all European adolescent populations. Fourth, a substantial proportion of the included studies were conducted during or shortly after the COVID-19 pandemic. The reported estimates may consequently reflect an exceptional period characterized by school closures, social restrictions, uncertainty, and disrupted access to support services, rather than longer-term prevalence patterns. Fifth, some studies focused on specific populations, such as vocational students, students exposed to traumatic events, or adolescents with disabilities. These samples may not be representative of the general adolescent population. Sixth, the inclusion of peer-reviewed journal articles may have introduced publication bias, as studies reporting higher or statistically significant prevalence estimates may have been more likely to be published. The geographical restriction to European countries limits the generalizability of the findings to adolescents in other world regions, particularly those living in low- and middle-income settings where the prevalence, determinants, and reporting of psychological distress may differ. Finally, differences in the reporting of demographic and psychosocial variables limited the possibility of systematically comparing correlates across all included studies. These limitations indicate that the reported prevalence ranges should be interpreted as a synthesis of heterogeneous study estimates rather than as precise population-level prevalence values for Europe as a whole.

Implications and Future Directions

These findings have important implications for policy, practice, and future research. The high prevalence rates—indicating that between one-quarter and one-half of European adolescents experience clinically significant psychological distress—underscore the urgent need for comprehensive, evidence-based prevention and intervention strategies. School-based mental health programs represent a promising avenue for reaching large numbers of adolescents, particularly those who might not otherwise access services. Universal prevention programs targeting social-emotional skills, stress management, and resilience, combined with indicated interventions for high-risk youth, could reduce the population burden of

psychological distress. Early screening initiatives using validated brief instruments could facilitate identification of adolescents requiring additional support, though such programs must be coupled with adequate treatment resources to avoid overwhelming existing services. Policy recommendations include increased investment in adolescent mental health services, integration of mental health support within educational settings, and targeted programs addressing gender disparities and socioeconomic inequalities. Given the pronounced gender differences observed across studies, interventions should be tailored to address gender-specific vulnerabilities and stressors. Similarly, programs targeting socioeconomically disadvantaged populations should address both individual-level risk factors and structural determinants of mental health. The documented impact of the COVID-19 pandemic highlights the need for mental health systems that can rapidly scale up support during public health crises and address the long-term consequences of collective trauma.

Conclusion

This systematic review reveals a substantial burden of psychological distress among European adolescents, with prevalence rates indicating that between one-quarter and one-half experience clinically significant symptoms of depression, anxiety, or stress. The COVID-19 pandemic exacerbated existing mental health challenges, particularly among vulnerable populations including girls and adolescents from lower socioeconomic backgrounds. Methodological heterogeneity across studies limits precise prevalence estimation but does not diminish the clear evidence of widespread psychological distress requiring public health attention. Findings underscore the urgent need for comprehensive, evidence-based prevention and intervention strategies tailored to demographic risk factors and regional contexts to address this growing public health challenge.

Author Contributions: The author was solely responsible for the conception and design of the study, literature search, data collection, analysis and interpretation of the findings, and preparation and revision of the manuscript.

Conflict of Interest: No conflict of interest exists for this manuscript for any of the author.

Funding: The author received no financial support for the research, authorship, and/or publication of this article.

References

Abela, M., Saliba, S., Borg, J., & Muscat, R. (2024). Mental health difficulties and health related quality of life amongst late adolescents in vocational education. *International Journal of Emotional Education*, *16*(1), 3–23. https://doi.org/10.56300/cldf4068

Basta, M., Karatzi, K., Drigas, A., Karagianni, M., Kokkevi, A., & Lionis, C. (2022). Depression and anxiety symptoms in adolescents and young adults in Greece: Prevalence and associated factors. *Journal of Affective Disorders Reports*, *10*, 100334. https://doi.org/10.1016/j.jadr.2022.100334

Brites, R., Brandão, T., Hipólito, J., & Nunes, O. (2023). Initial psychological reactions to COVID-19 of middle adolescents in Portugal. *International Journal of Environmental Research and Public Health*, *20*(9), 5705. https://doi.org/10.3390/ijerph20095705

Chabursky, S., & Walper, S. (2026). Exploring coping strategies among adolescents during COVID-19 and war displacement: A qualitative analysis comparing two crisis settings. *Journal of Research on Adolescence,* *36*(1), e70150. https://doi.org/10.1111/jora.70150

Dalsgaard, S., Thorsteinsson, E., Trabjerg, B. B., Schullehner, J., Plana-Ripoll, O., Brikell, I., Wimberley, T., Thygesen, M., Madsen, K. B., Timmerman, A., Schendel, D., McGrath, J. J., Mortensen, P. B., & Pedersen, C. B. (2020). Incidence rates and cumulative incidences of the full spectrum of diagnosed mental disorders in childhood and adolescence. *JAMA Psychiatry*, *77*(2), 155–164. https://doi.org/10.1001/jamapsychiatry.2019.3523

Heiniger, S., Schlup, N., Grob, A., & Morawa, E. (2025). Prevalence and factors associated with depression and anxiety in young people in Switzerland and Liechtenstein in the post pandemic context. *Discover Psychology*, *5*(1), 416. https://doi.org/10.1007/s44202-025-00416-6

Holm, M., Taanila, A., Hartikainen, A. L., Kinnunen, P., Laitinen, J., Järvelin, M. R., & Moilanen, I. (2023). Population-level changes in anxiety and depression and the unmet need for support at school among adolescents with and without disabilities, 2017–2021: The effects of the COVID-19 pandemic. *Disability and Health Journal*, *16*(4), 101540. https://doi.org/10.1016/j.dhjo.2023.101540

Kaltiala, R., Riittakerttu, K., Holttinen, T., & Ranta, K. (2023). Socioeconomic disparities in adolescent anxiety and depression in Finland have not increased during the COVID-19

pandemic. *Scandinavian Journal of Public Health*, *51*(5), 678–685. https://doi.org/10.1177/14034948231166466

Krokstad, M. A., Sund, E., Rangul, V., Bauman, A., Olsson, C., & Bjerkeset, O. (2024). Secular trends in risk factors for adolescent anxiety and depression symptoms: The Young-HUNT studies 1995-2019, Norway. *European Child & Adolescent Psychiatry, 33*(11), 3819–3827. https://doi.org/10.1007/s00787-024-02373-2

Linkas, S., Grimstad, H., Dahl, S. R., Melhus, M., & Broderstad, A. R. (2022). Are pro-inflammatory markers associated with psychological distress in a cross-sectional study of healthy adolescents 15–17 years of age? The Fit Futures study. *BMC Psychology*, *10*(1), 779. https://doi.org/10.1186/s40359-022-00779-8

McGorry, P., Gunasiri, H., Mei, C., Rice, S., & Gao, C. X. (2025). The youth mental health crisis: analysis and solutions. *Frontiers in Psychiatry, 15*, 1517533. https://doi.org/10.3389/fpsyt.2024.1517533

McLeod, J. D., Uemura, R., & Rohrman, S. (2012). Adolescent mental health, behavior problems, and academic achievement. *Journal of Health and Social Behavior, 53*(4), 482–497. https://doi.org/10.1177/0022146512462888

Muric, M., Jovanovic, V., Novovic, Z., & Knezevic, G. (2025). Anxiety and depression among final-year high school students in Serbia: A cross-sectional study following a national school tragedy. *EABR. Experimental and Applied Biomedical Research*, *26*(1), 9. https://doi.org/10.2478/eabr-2025-0009

Myhr, A., Anthun, K. S., Lillefjell, M., & Sund, E. R. (2020). Trends in Socioeconomic Inequalities in Norwegian Adolescents' Mental Health From 2014 to 2018: A Repeated Cross-Sectional Study. *Frontiers in Psychology, 11*, 1472. https://doi.org/10.3389/fpsyg.2020.01472

Pieh, C., Budimir, S., Delgadillo, J., Barkham, M., Fontaine, J. R. J., & Probst, T. (2021). Stress levels in high-school students after a semester of home-schooling. *European Child & Adolescent Psychiatry*, *31*(10), 1826-1832. https://doi.org/10.1007/S00787-021-01826-2

Sawyer, S. M., Azzopardi, P. S., Wickremarathne, D., & Patton, G. C. (2018). The age of adolescence. *The Lancet Child & Adolescent Health, 2*(3), 223–228. https://doi.org/10.1016/S2352-4642(18)30022-1

Scheiner, C., Grashoff, J., Kleindienst, N., & Buerger, A. (2022). Mental disorders at the beginning of adolescence: Prevalence estimates in a sample aged 11-14 years. *Public Health in Practice, 4*, 100348. https://doi.org/10.1016/j.puhip.2022.100348

Schlack, R., Peerenboom, N., Neuperdt, L., Junker, S., & Beyer, A. K. (2021). The effects of mental health problems in childhood and adolescence in young adults: Results of the KiGGS cohort. *Journal of Health Monitoring, 6*(4), 3–19. https://doi.org/10.25646/8863

Šencaj, M., Šimić, N., & Brajković, L. (2023). Mental health of adolescents before and during the Covid-19 pandemic. *The Central European Journal of Paediatrics*, *19*(2), 341–349. https://doi.org/10.5457/p2005-114.341

Sulejmani, H., & Popovska-Jankovic, N. (2025). Not just numbers: Exploring the inner landscape of youth anxiety and stress. *Prilozi - Makedonska Akademija na Naukite i Umetnostite. Oddelenie za Medicinski Nauki*, *46*(1), 20. https://doi.org/10.2478/prilozi-2025-0020

Suppiej, A., Longo, I., & Pettoello-Mantovani, M. (2025). The Pivotal Role of Mental Health in Child and Adolescent Development: Brief review by the Working Group on Child and Adolescent Mental Health of the" GE Ghirardi" Foundation on the Occasion of the World Mental Health Day 2024. *Global Pediatrics*, *13*, 100277. https://doi.org/10.1016/j.gpeds.2025.100277

Tarasenko, A., Josy, G., Minnis, H., Hall, J., Danese, A., Lau, J. Y. F., Cortese, S., Stringaris, A., Redlich, C., & Ougrin, D. (2025). Mental health of children and young people in the WHO Europe region. *The Lancet Regional Health Europe, 57*, 101459. https://doi.org/10.1016/j.lanepe.2025.101459