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Depression in young adults



In this next section we look at national data on depression prevalence in Australia's young adults – those aged 18 to 34 – to determine whether the rising depression prevalence in adolescents discussed in the prior section is also evident in older age groups. We then present new data on young adults using (1) Vibe Up, a new digital mental health application, and (2) a university-based health service, to show how certain demographic, social and economic factors are associated with depression severity and mental health service use in young people.

Young adulthood as a time of risk and opportunity

Young adulthood, defined as the period between the ages 18 and 34, is a period of rapid personal development. For most people, it is a time marked by major life transitions, including leaving home, beginning tertiary education, entering the workforce, first experiences with financial independence, forming relationships, and early parenthood. Australia's geographic sprawl means that young adults often leave the community they grew up in to pursue further schooling or employment opportunities elsewhere. Similarly, our globally competitive universities attract a sizeable population of young adults who travel internationally to Australia to pursue higher education.

While this period represents a significant opportunity for new autonomy and independence, the stripping away of early family and social support structures can also make young adulthood a time of increasing vulnerability to stress and mental health problems. Furthermore, a young adult's pursuits can be formative for later phases of their life. The impact of social inequalities can be amplified during this time, creating lasting impacts on a person's economic mobility, social circumstances, and mental health.

Why depression in young adults matters

In Australia, young adults experience high rates of mental health problems. Results from the 2020–21 National Survey of Mental Health and Wellbeing indicate that the 12-month prevalence of any mental disorder was highest in individuals under age 35: 32% of people aged 16–34 reported having had a mental illness in the preceding 12 months. Furthermore, data from the 2021 Census showed that the highest proportion of individuals with a chronic mental health condition occurred in those aged 20–24 (12.3%) and 25–29 (11.9%). For many young adults, then, mental health problems are not transient conditions.

Depression is the second most common mental health condition affecting young adults. Although anxiety disorders are more prevalent, the lifetime comorbidity between anxiety disorders and depression can be as high as 70% (Kalin, 2020), and the two conditions share many overlapping risk factors. Depression is, however, of particular importance in this developmental period. Unlike anxiety disorders, which typically emerge in childhood and early adolescence, the peak age of onset for depression is 19–20 years of age (Solmi et al., 2022) – making young adulthood a critical period for depression prevention and early intervention.

Have the lives of young adults become more challenging?

Australia's young people are currently entering adulthood in a time of soaring house prices, rising rental prices, and growing job insecurity. Here we examine how the lives of young adults have changed over the past 20 years, and whether times are becoming more challenging.

Slow income growth

The risk for depression rises as the level of income inequality in a country's population increases (Patel et al., 2018). Accordingly, gaps in wage growth between younger and older adults may lead to increased risk for depression in younger people.

Today's young adults are expected to be the first generation not to experience income gains relative to the generation before it (Wood et al., 2019). Wage growth for those under 35 has declined since 2008 (Productivity Commission, 2020), with imbalances between labour supply and demand likely playing a role. Older, more experienced workers are retiring later, and a rising number of university graduates has increased the supply of workers with tertiary degrees who are competing for jobs. As a result, young adults are now more likely to obtain work in lower-ranked, lower-paid occupations than comparably skilled young adults before 2008 (Productivity Commission, 2020). Moreover, income support payments and allowances that are often used by young people, such as Youth Allowance, may keep them below the poverty line and are not benchmarked to wages. This means that young adults both in and out of the workforce are often subsisting on incomes that are lower than other age groups, and also comparatively lower than young adults of the same age in previous years.

Rising cost of living

At the same time, the rising cost of living in Australia means that the income young adults do receive now buys them less. Nationally, rates of home ownership have decreased for each successive generation ([Australian Institute of Health and Welfare, 2022a](#)), however this decrease has been largest for young adults aged 30–34. In 2021, 49.7% of Australians aged 30–34 owned a home ([2021 Census](#)) compared to 57.3% in 2001 ([2001 Census](#)).

Rising house prices have been accompanied by a sharper increase in the proportion of Australians who rent, and this increase has been greater for those under the age of 35 compared to older Australians ([Australian Institute of Health and Welfare, 2022a](#)). Although rents are cheaper than mortgages, rents across Australia have now risen at the fastest rate in 14 years ([CoreLogic, 2022](#)), with students and lower wage earners at times being refused tenancy. Commonwealth Rent Assistance, which is designed to alleviate rent pressure for those who receive income support and allowances, is indexed in line with the Consumer Price Index, and this has lagged behind rents for several years.

In response to this financial strain, the proportion of young adults relying on financial support from their parents has grown substantially, as has the number of young adults continuing to live at home after they leave high school ([Productivity Commission, 2020](#)). Although financial support from parents may buffer them against financial pressures, young adults who are unable to live with family or whose family is unable to support them financially continue to be disproportionately affected by economic factors, increasing their risk for depression.

Changes in the requirements of entry-level employment

Many people enter the workforce for the first time during young adulthood. This transition is important not only in terms of future economic security, but also because unemployment (and underemployment) are two of the strongest risk factors for depression in young adults ([Crowe & Butterworth, 2016](#)).

Recent evidence indicates that the requirements for entry-level employment in Australia have changed. There has been a progressive decline in jobs that do not require qualifications or work experience, from 22% in 2006 to 10% in 2019. There are currently, on average, 27 job seekers competing for each entry-level job ([Anglicare Australia, 2021](#)). Faced with a tighter job market, many young adults have had to move down the jobs ladder and this is having a lasting impact on their longer-term career prospects ([de Fontenay et al., 2020](#)). For young adults without a university degree, job opportunities have decreased substantially over time ([de Fontenay et al., 2020](#)).

Increased employment precarity

There has been an increase in casualised and ‘gig’ economy work in recent decades, and young adults make up a significant proportion of people employed in this form of work. Although this type of work can offer workers greater flexibility and control over when and how they work, its downsides include limited leave entitlements, inconsistent working hours or pay, sudden cessation of employment, and limited upward mobility. Gig work also leads to significant gender-based inequalities; a report commissioned by the state of Victoria found that women were half as likely as men to participate in gig-based jobs, and earned 10% to 37% less than their male peers ([Williams et al., 2021](#)).

More complex tertiary education pathways

Higher education is typically protective against depression, with the benefits in terms of mental health being greater for younger adults, women, racial minorities, and those from low socioeconomic backgrounds (Bauldry, 2015). The proportion of Australians participating in higher education has risen over the past 20 years. Approximately half of all Australians now hold a bachelor's-level degree or higher (Organisation for Economic Co-operation and Development, 2021).

However, the pathways through tertiary education to employment are becoming increasingly competitive and complex. Due to rising numbers of applications, the university offer rate is currently the lowest it has been since 2011 (Australian Government, 2021). Rapid advances in technology mean that the technical skills young people learn in higher education are becoming outdated faster, requiring them to continuously update their skills to keep pace with new job structures. The increased cost of living has also led to an increase in the number of university students who are working while completing their degree part time, which in turn leads to an increase in the rate of student dropout (Norton & Cherastidtham, 2018).

Social isolation

Loneliness is an important risk factor for depression. Although young adults are often well connected to strong social structures, critical transitions, such as moving away from home, can upend these structures, putting them at risk for loneliness. Results of the Young Australian Loneliness Survey (Lim et al., 2019) found that almost 1 in 3 young adults aged 18–25 living in Victoria in 2019 reported problematic feelings of loneliness. Rates of loneliness among young adults were higher than rates of loneliness reported by adolescents (with 1 in 6 reporting loneliness), and were higher among young women than young men. Lonelier young adults also reported significantly greater levels of depression compared to those who were not lonely. Furthermore, there is evidence that loneliness has increased over time in young adults, with one meta-analysis demonstrating a steady increase from 1976 to 2019 (Buecker et al., 2021).

Perspective from the Australian Council of Social Service (ACOSS)



Young people have been through the wringer these past few years. They were most likely to lose their jobs during the pandemic lockdowns because they worked in sectors like hospitality and tourism. School, university and vocational training were disrupted. And perhaps the most difficult thing was the loss of face-to-face engagement with one another.

It's no surprise to us at ACOSS that levels of depression among young people have increased. Young people bore the brunt of the pandemic. But while we do not have a huge amount of control over pandemics, we can improve how we support young people, particularly young people on the lowest incomes.

One of the best ways to do this would be for the federal government to increase income support payments, including Youth Allowance, to \$70 a day.

Youth Allowance, the unemployment and student payment for young people, is \$38 a day, or \$266 per week. This equates to just 33% of the minimum wage. To put this into perspective, median rent for a unit in Australia is almost twice this at \$460 a week. A tank of fuel right now averages \$80. You can quickly see how Youth Allowance is completely inadequate to support a young person and cover basic costs.

Its inadequacy undermines people's health and wellbeing. Being under constant financial stress, worrying about paying the week's rent or the next energy bill is debilitating.

As Sophie,* a student on Youth Allowance, recently told us:

“ I feel like I'm seconds away from drowning at all times. Every time I step into a grocery store or look at my bank account, I lose a bit of myself. I saw the price of petrol the other day, and I just had to sit down and process it all. I'm thinking about money so often, I find it difficult to think about or do anything else. I'm a student, and it's affecting my grades, but I'm not sure how to explain to my professors that I may fail my class because I have to think about the price of my monthly grocery shop for hours every day. I'm exhausted. ”

The good news is that, if income support was increased, the flow-on benefits would be huge. The Melbourne Institute found as much in its analysis of the mental health effect of the Coronavirus Supplement, which doubled income support payments like Youth Allowance for six months in 2020: people's mental health was protected. We know that when payments were higher, people could afford fruit and vegetables and they could buy the medications they needed.

Having enough money to meet basic needs is critical to supporting good mental health. Not only does this help with the cost of care, it removes one of the biggest stressors for people: financial stress.

There aren't many silver bullets in public policy but lifting income support like Youth Allowance to \$70 a day would go a long way to improving the health and wellbeing of young people doing it tough.

* Not her real name.

Changes in the population demographics of young adults

Changes in the demographic makeup of a population can also affect the prevalence of depression. Australia's young adults are more diverse than they were in earlier generations. Increased diversity in a population has a host of social and economic benefits, creating a thriving, forward-thinking economy. However, individuals from cultural minority backgrounds often experience higher rates of marginalisation, socioeconomic disadvantage, and discrimination, increasing their risk for depression.

International students

Australia now has the highest ratio of international students per capita of any country, having risen by more than 80% between 2010 and 2019 ([UNESCO Institute for Statistics, n.d.](#)). In 2022 there were 469,248 international students in Australia ([Australian Government, 2022](#)), with almost 1 in 4 students coming from abroad.

Living abroad leads to unique linguistic, social, legal and financial challenges that may compound issues already faced by young adults. For example, international students are at increased risk of exploitation at work. A recent report found that more than 75% of international young adults had been paid below the minimum casual hourly wage (\$21.38 per hour), with 20% being paid less than \$12 an hour ([Farbenblum & Berg, 2020](#)). Cultural factors can also lead international students to underutilise mental health services. An analysis of coronial reports found that international students who died by suicide were 2–3 times less likely to have sought help compared to local students ([Coroner's Court of Victoria, 2019](#)). This may be due to increased mental health stigma among international students ([Maeshima & Parent, 2020](#)), as mental health problems are often regarded as a sign of personal fault or moral failing in many cultures outside Australia (e.g., the term 'mental health' in Bahasa Indonesia directly translates to 'a sickness of the soul').

Culturally and linguistically diverse populations

Culturally and linguistically diverse populations (CALD) make up approximately 30% of the Australian population ([Australian Institute of Health and Welfare, 2022b](#)). These are people who were born overseas, or who have a parent born overseas, or who speak a language other than English at home. There is evidence to suggest that CALD populations may have been disproportionately impacted by the COVID-19 pandemic, with increased reports of ethnic discrimination, observed primarily towards individuals of Asian descent ([Liu et al., 2020](#)). In the United States, the predicted probability of COVID-19 stigmatisation was 2.54 times higher for foreign-born Asians (11.6%) and 2.4 times higher for US-born Asians (10.9%) than for non-Hispanic Whites (4.5%), according to a nationally representative survey of adults (n=6,707) ([Pan et al., 2021](#)).

CALD populations are also more likely to be exposed to COVID-19 due to high representation in essential work settings (e.g., healthcare facilities, grocery stores and public transport) where there is a high chance of close contact with the public ([Lassale et al., 2020](#)), and to encounter greater financial constraints due to the exacerbation of high levels of insecure employment pre-pandemic ([Soiné et al., 2021](#)). In a study of 419 first-year US university students, the prevalence of moderate to severe depression was found to increase from 21.5% to 31.7% over the course of the pandemic, and non-Hispanic Black, female university students were at the highest risk of increases in the symptoms of depression ([Fruehwirth et al., 2021](#)).

Depression prevalence in young adults

Latest estimates of depression prevalence in Australia's young adults

The prevalence of depression has increased in Australia's young adults, having more than doubled in those aged under 25 in the past 14 years. This is indicated by data from the 2007 and 2020–21 National Survey of Mental Health and Wellbeing, which reports on the 12-month prevalence of affective disorders (encompassing major depressive disorder, dysthymia, and bipolar disorder). Data show that from 2007 to 2020–21, the 12-month prevalence of affective disorders increased from 6.3% to 13.6% for young adults aged 16–24, and increased from 7.9% to 11.0% for young adults aged 25–34.

Rates of depression among young women are particularly worrisome (see Figure 1). In the 2020–21 survey, 19% of women aged 16–24, and 12.8% of women aged 25–34, had had an affective disorder in the preceding 12 months; this was substantially higher than the prevalence observed in men of the same age (men aged 16–24: 8.8%; men aged 25–34: 9.6%).

The gender gap in depression prevalence has also widened in the past 14 years. From 2007 to 2020–21, the gender gap in affective disorder prevalence between men and women widened by 11% for those aged 16–24, and by 7% for those aged 25–34. The widening gender gap has been driven by a more rapid increase in affective disorder prevalence from 2007 to 2020–21 in young women (ages 16–24: 126% increase; ages 25–34: 47% increase) compared to young men (ages 16–24: 105% increase; ages 25–34: 37% increase).

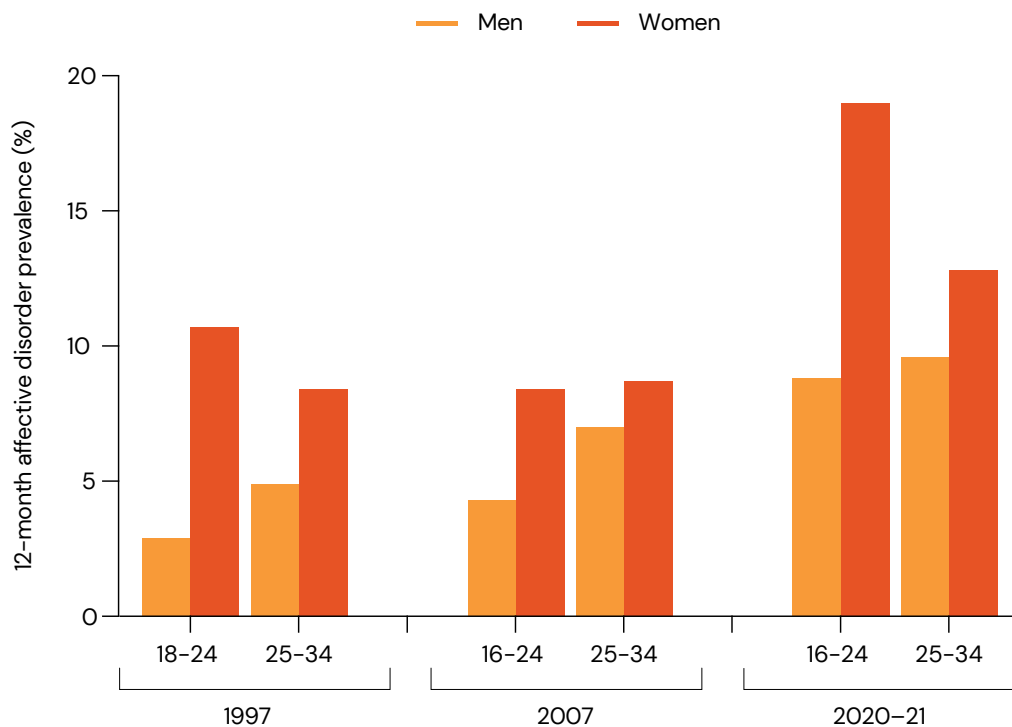


Figure 1. Age-specific prevalence of depression (or 'affective disorders') among the Australian population for men and women in 1997, 2007, and 2020–2021.

Note: Individuals aged 16–17 were not included in the 1997 survey.

Data sources: Australian Bureau of Statistics National Survey of Mental Health and Wellbeing (1997, 2007, 2020–2021).

Increases in the severe consequences of depression

It is difficult to determine whether this national survey data reflects a true increase in depression prevalence among young adults, as opposed to differences in the way young adults are reporting their symptoms now. However, looking at trends in behaviours that often represent the severe consequences of depression, such as intentional self-harm, can provide insight.

Data from the Australian Institute of Health and Welfare reports rates of hospitalisation due to intentional self-harm from 2008–09 through to 2020–21. Figure 2 shows the rates of hospitalisation for young adults according to gender and is grouped in 5-year age increments among those aged 20–34. The data shows a notable elevation in hospitalisations for self-harm among women aged 20–24, which has increased from 295.1 to 363.1 per 100,000 across the period. This data provides converging evidence that the severe consequences of depression may be rising in a similar manner to that of overall affective disorder prevalence among young adults, especially women. It indicates that increases in the proportion of young adults reporting depression and other affective disorders may illustrate real increases in mental illness rather than differences in how symptoms are being reported.



Figure 2. Age-specific rates of hospitalisation for intentional self-harm among Australian young women (left) and men (right) (2008–2021).

Data sources: Australian Institute of Health and Welfare National Hospital Morbidity Database—Intentional self-harm hospitalisations.

Which young adults are seeking help for depression?

Cost is a significant barrier for young adults seeking traditional fee-for-service mental health services, particularly for those who are engaged in higher education and those who do not work full time. Although patient data from these services is often used to infer mental health treatment needs of young adults, doing so likely fails to capture the needs of those who seek services but who are unable to afford them.

To get a better sense about which young adults are seeking help for depression and other common mental health conditions, we present new data on the characteristics of young people seeking help from two low- or no-cost services: (1) a free digital mental health intervention, and (2) a bulk billing/low-cost Australian university health service. Both services targeted students enrolled in higher education.

Vibe Up: characteristics of young adults seeking help via a new digital mental health intervention

As part of a landmark study to optimise mental health treatment using artificial intelligence (AI), researchers at the Black Dog Institute launched Vibe Up, a new application that uses AI to deliver tailored digital mental health interventions to tertiary students through their smartphones. Vibe Up targets students who are seeking strategies to cope with common mental health problems, such as symptoms of depression, anxiety and stress. Since it was launched in 2021, more than 800 tertiary students have signed up to the first trial of Vibe Up. Below, we look closely at the demographic, social and economic characteristics of students who expressed interest in using Vibe Up to manage their mental health.

Demographics

Most students seeking mental health support through the Vibe Up application were either enrolled in an undergraduate university degree or at TAFE (78.8%) and were under the age of 35 (97.5%). More than three-quarters (78.6%) were women. A substantial proportion (38.8%) identified as sexuality diverse (e.g., bisexual), and a small proportion identified as gender diverse (6.7%). The proportion of sexuality diverse students was significantly larger than what would be expected relative to the general population, indicating that university students who identify as sexuality diverse may have significant needs for mental health support that are going unmet.

Despite international students making up approximately a quarter of the tertiary student population in Australia, only 5.5% of Vibe Up users were international students, and only 6.4% spoke a language other than English at home. Given that international students incur more risk factors for depression, this is substantially lower than expected. It suggests that international students may be experiencing barriers in seeking out support for their mental health.

Mental health

More than half (55.2%) of the Vibe Up users had received a mental health diagnosis by a doctor at some point in their lives, with major depression being the second most common diagnosis behind generalised anxiety disorder. This is consistent with data from the 2021 Census, showing that major depression was the second most common disorder in young adults (Census, 2021). Furthermore, 16.2% had made a suicide attempt at some point in their lives, which is higher than the average proportion of the Australian general population aged 16–34 who had attempted suicide (5.5%), according to data from the 2020–21 National Survey of Mental Health and Wellbeing. The rate of prior suicide attempt was even higher among students who identified as sexuality- (26.3%) or gender diverse (32.8%).

Despite experiencing mental health problems, over half (59%) had not seen a health professional about it in the past 12 weeks. Men were over-represented in this group. For students who had sought professional help, a general practitioner was the health professional most commonly seen (73.9%).

Social and economic factors

Although most (77.8%) students reported that they had at least one person they felt they could turn to if they needed support, loneliness was still common: 40.3% reported that they felt lonely often or all of the time. Those who reported feeling lonely more regularly also had more severe levels of depression.

Many students worked for pay alongside their studies. Of the sample, 76.9% had a paying job and 39.0% worked 20 or more hours per week (i.e., above the amount recommended by most universities for full-time students). Perceptions of financial security were closely tied to the severity of depressive symptoms, such that students who perceived themselves to be less 'well off' financially reported more severe levels of depression.

Tertiary students seeking digital mental health support for elevated symptoms of depression and other common mental health concerns were more likely to be young women, and a substantial proportion identified as sexuality diverse. More than half had not had recent contact with a health professional despite experiencing significant mental health symptoms. For those who had had recent contact with a health professional, a general practitioner was the most commonly consulted. A substantial proportion felt lonely most or all of the time, and there was a clear association between perceptions of financial insecurity and more severe levels of depression.

Characteristics of young adults seeking help through an Australian university health service

Young people rely most heavily on general practitioners as their primary source of mental health support. Yet compared to older adults, young people access general practice services less frequently when needed (Australian Bureau of Statistics, 2021). Potential barriers to the use of general practice services are well known and include concerns about cost; limited/inconvenient opening hours; fear of negative judgement or embarrassment; and a lack of knowledge about services. These factors could be mitigated, with improved rates of presentation, through the provision of youth-centric services to students through higher education institutions (Staunton Smith, 2018).

The University of New South Wales Health Service

To examine patterns of mental health service use in university students, we examined data from the University of New South Wales Health Service. This service is based on campus and available to all students of the university. It is a bulk billing service for local students (with a Medicare card), and there are no fees for enrolled international students with overseas health cover (with insurance providers billed directly for services provided) – as such, the service minimises cost-related barriers to health care for the university student population. The health service is staffed predominantly by general practitioners, with one student mental health nurse and two part-time psychiatrists. Psychology services are provided on campus through a separate service and are not included here.

Methodology

All health service encounters from calendar year 2019 (1 January to 31 December) were extracted from the practice software (Best Practice) using the Pencil clinical audit tool. This period was selected to capture health service use before the disruptive effects of the COVID-19 pandemic. In total, 14,773 students accessed the service during this period. We examined patterns of service use, focusing on the potential impact of specific social determinants.

Findings

Our analyses revealed the following key points:

1. Mental health conditions represented a significant proportion of ongoing health conditions, accounting for 46% of total ongoing health conditions in students, with asthma (13%) the next most common. This also represented 11.35% of total students presenting to the service, which aligns closely with the national estimates of rates of chronic mental health conditions.
2. Depression was the second most common mental health condition (640 total patients), after anxiety (955 total patients).

3. The importance of general practitioners in providing front-line mental health care was readily apparent – there were 1,674* (see note below) patients who had a mental health consultation with a general practitioner, representing 11% of the total student population using the health service. This compares with 99 initial psychiatrist consultations (0.07% of the total student population using the service), emphasising the crucial role of general practitioners in student mental health care in this setting.
4. The gender differences in mental health conditions evident in national data were similarly present in the university student cohort. Women comprised 65.2% of those seeing a general practitioner for a mental health-specific MBS item number.
5. Although the proportion of international students using the health service overall was large relative to the domestic student population (63.2% of total patients as compared to 36.8%), international students only accounted for 32.5% of students seeing a general practitioner for a mental health consultation. This suggests that the uptake of mental health services is substantially lower for international students (and much lower relative to the total proportion of students presenting to the service – 6% of total international students using the service relative to 21% of local students).

*This number is almost certainly an under-representation of the total burden of mental health care provided in this setting. This is because only specific mental health item numbers were considered in quantifying the number of mental health consults performed by general practitioners during the period of data collection. There are recognised limitations to this. Specifically, local survey data suggest that a majority of general practitioners opt to use a generic item number for a mental health-related consultation or for a consultation combining both physical and mental health care, which could lead to an underestimate of the burden of mental health care in general practice (Thornley & Harris, 2021).

Ongoing mental health conditions represent one of the most common reasons university students used a university health service, with depression being the second most common diagnosis. Women had more mental health consultations than men, mirroring the increased prevalence of depression in women shown in epidemiological data. Although international students used the service more frequently than domestic students, they used mental health-related consultations less frequently. Given the higher rates of mental health issues faced by international students, we expect that there is a large proportion of international students with unmet mental health treatment needs. From a health service perspective, general practitioners performed the majority of mental health-related work, suggesting that encouraging and incentivising mental health specialisation among them, while also enhancing access to specialist care, may help to improve access to treatment for university students.

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