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RESEARCHER MENTAL HEALTH OVERVIEW IN (SLOVENIA)



COST ACTION CA19117 - Researcher Mental Health (ReMO)

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What is the news?



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Recently, several key issues related to the academic system, mental health, the careers of researchers, funding, and research culture have come to light. Surveys from the Countrywide Integrated Noncommunicable Diseases Intervention Programme (2012, 2016) show a rising trend in workplace stress, particularly due to workload and poor interpersonal relationships. In 2016, 55% of adults reported daily stress from their workload, up from 48% in 2012, and stress from poor workplace relationships nearly doubled, from 10% to 19%. Mental health challenges have been especially pronounced in academia, with sick leave due to mental and behavioral disorders ranking third in frequency between 2008 and 2016. In 2015 alone, there were over 18,000 cases of workplace absences due to these disorders, affecting especially those aged 45-64[1].

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The pressures of academic life, compounded by a lack of explicit attention to researcher well-being in policy, are highlighted by the 2021 Scientific Research and Innovation Act, which makes no mention of health or well-being for researchers[2]. This gap has sparked concern, particularly among early-career researchers, such as PhD students and postdocs.

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Organizations like *Mlada akademija* (Young Academy) have responded by creating spaces for dialogue and support around these issues. They have organized several events, including a roundtable discussion on increasing mental health struggles among young researchers, and a virtual event focused on redefining success for PhD students[3]. These initiatives emphasize mental health and well-being as critical components of a balanced life, focusing on thoughts, behavior, body, and emotions[4].

[1] <https://pisrs.si/pregledPredpisa?id=RESO120>

[2] <https://pisrs.si/pregledPredpisa?id=ZAKO7733>

[3] <https://www.uni-lj.si/aktualno/novice/2022101309470922/>

[4] <https://www.uni-lj.si/aktualno/novice/2022021409384641/>

DISCUSSION

Slovenia has established laws that address mental health, most notably through the Mental Health Act (ZDZdr), which regulates mental illness but places less focus on prevention and general mental well-being. While there is a formal recognition of the importance of mental health, the provisions mainly target clinical treatment rather than broader psychosocial support. This leaves certain gaps, particularly in the context of academia, where stress and mental health challenges are prevalent.

Universities in Slovenia have recognized the need for psychological services, especially for students. However, these services are limited in scope and availability, often restricted to counseling sessions without offering psychotherapy. Furthermore, undergraduate and master's students are typically prioritized, leaving PhD students, who frequently face intense pressure, with less access to psychological support. Additionally, researchers are as well neglected from this point of view.

Researchers, particularly early-career professionals, face a notable lack of psychosocial support. While students may benefit from some services, researchers often encounter high levels of stress without access to adequate mental health resources. Despite some efforts by organizations like Mlada akademija to raise awareness, there are few structured programs aimed at providing researchers with the psychological and emotional support they require. As a result, many researchers are left to navigate mental health challenges without sufficient institutional backing, which contributes to a strained academic environment.



Funding for research and academia

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According to the data from the Statistical Office of the Republic of Slovenia, the country allocated 2.1% of the GDP for research and development, placing it below the EU average[5]. The expenditure has stagnated and is far from the 3.5% target set in the Resolution on the Scientific Research and Innovation Strategy of Slovenia 2030 (ZRISS 2030)[6]. This key strategic document emphasises on digital transformation, green technologies, and fostering innovation ecosystems that connect academia with industry.

The measures defined in ZRISS 2030 will gain further momentum and focus through the implementation of the Recovery and Resilience Plan (RRP) and the European Cohesion Policy Program 2021-2027. Slovenia also benefits significantly from EU funding programs, like Horizon Europe. Additionally, Article 12 of the law of the Scientific Research and Innovation Activities Act (ZZrID)[7] ensures funding for scientific research and innovation activities from the state budget and other sources in accordance with the goals and priorities set out in the strategic documents in the country and the EU. The Ministry of Higher Education, Science and Innovation has also published the Research Infrastructure Development Plan 2030 (NRRi 2030)[8] that outlines how research infrastructure will be funded from different sources.

Slovenian Research and Innovation Agency (ARIS)

The Slovenian Government is the primary source of research funding, particularly through the Slovenian Research and Innovation Agency (ARIS), which allocates funds for basic and applied research projects. However, with ZZrID a notable portion of the funding that was previously allocated through ARIS has been redirected to public research institutions. This change is part of a broader strategy to provide more stable and predictable funding for these institutions, allowing them to plan long-term research activities more effectively. Nevertheless, some are concerned that this move might reduce the competitive aspect of funding, which is crucial for maintaining high standards in research output. It is a challenge to balance having a stable funding environment with the need for competitive, high-impact research that drives innovation and economic growth.

[5] [Research and development activity, detailed data, 2022 \(stat.si\)](#)

[6] [Resolution-on-the-Slovenian-Scientific-Research-and-Innovation-Strategy-2030.pdf \(gov.si\)](#)

[7] [Zakon o znanstvenoraziskovalni in inovacijski dejavnosti \(ZZrID\) \(PISRS\)](#)

[8] [NRRi 2030_SLO \(gov.si\)](#)

Funding for research and academia

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One of the most prominent national funding instruments for early career researchers in Slovenia is the Young Researchers program, which has been in place since 1985. This program supports approximately 200 doctoral candidates each year, covering their salaries, social contributions, and both material and non-material research costs. However, like many other funding schemes, the administration of this program has shifted away from ARIS and is now part of the stable financing system for public research institutions.

This shift has excluded researchers from non-public institutions from participating as mentors. After completing their doctoral studies, early career researchers can apply for postdoctoral projects, which continue to be funded through ARIS. However, the number of available positions for postdoctoral researchers has decreased, making the competition even more intense. Additionally, such type of financing enables greater exploitation of young people, which makes it more difficult to become independent, it is more prone to polarization and getting jobs based on acquaintances rather than competences.

Continued reforms and strategic investments are expected to enhance Slovenia's research capabilities and global competitiveness. If Slovenia manages to boost private sector participation and increases its research and development expenditure as targeted, the future looks promising.

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Persona of the Researcher on the Career Ladder

Number of researchers

In 2022, there were 25,336 persons engaged in research and development activities in Slovenia but their total workload accounted for only about 17,356 full-time employees. Among them two thirds (17,015) were researchers[9]. Most of them are employed in the business enterprise sector, followed by the higher education sector, government sector and private non-profit sector.

Gender gap

Almost two thirds of researchers in Slovenia are men. The gender gap is particularly wide, particularly in senior academic positions and in STEM (Science, Technology, Engineering, and Mathematics) fields[10]. However, efforts to close the gender gap are gaining traction, with increasing awareness and initiatives aimed at promoting gender equality in research. Slovenia has implemented specific policies to address gender disparities in research and some institutions, particularly those required by funders, have developed Gender Equality Plans.

Young researchers

The research workforce in Slovenia is relatively young, with almost a third falling into the less than 35 years old category, while 30% are between 35 and 44, 22% are 45 to 54, and the remaining 13% are 55 and above [11]. There is a growing emphasis on attracting younger researchers, with targeted funding for doctoral candidates and other early-career scientists. However, the issue of brain drain, where talented young researchers move abroad for better opportunities, continues to be a concern[12].

Internationalisation

Slovenia hosts a modest but increasing number of international researchers: in 2022 that accounted for only 5% of all researchers[13]. These researchers are often in early career stages and are drawn by collaborative projects and funding opportunities like those offered by Horizon Europe. There has been a noticeable increase in the mobility of researchers, with more Slovenian researchers participating in international collaborations and in foreign researchers coming to Slovenia, with programs like the Marie Skłodowska-Curie Actions facilitating this trend. Also ARIS is financing collaborative projects, in particular through the WEAVE financing scheme [14].

[9] Research and development activity, detailed data, 2022 (stat.si)

[10] Mednarodni dan žensk in deklet v znanosti (stat.si)

[11] Researchers by SECTOR OF EMPLOYMENT, AGE GROUP, YEAR and SEX. PxWeb (stat.si)

[12] Omilitev-posledic-bega-mozganov-in-kepitev-mehanizma-krojenja-mozganov.pdf (gov.si)

[13] Researchers by SECTOR OF EMPLOYMENT, CITIZENSHIP, YEAR and SEX. PxWeb (stat.si)

[14] Weave-Information-for-applicants-150923.pdf (aris-rs.si)

Academic system in the country

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Data on Slovenian researchers, organisations, projects, and research infrastructures is available through the Slovenian Current Research Information System (SICRIS)[15].

There are more than a thousand research performing organisations and researchers are organised in more than 1.500 research groups.

In addition to universities, Slovenia is home to several prominent research institutes such as the Jožef Stefan Institute, the National Institute of Chemistry, the National Institute of Biology, the Scientific Research Centre of the Slovenian Academy of Sciences and Arts, and several more. Some of the independent non-profit research and infrastructure institutes are joined in the KOsRIS coordination[19].

Research is mainly carried out at universities and research institutes. There are three big public universities in Slovenia, the University of Ljubljana, the University of Maribor, and the University of Primorska. There is also a private university, the University of Nova Gorica. Three of them are members of European university alliances, specifically Ljubljana (EUTOPIA)[16], Primorska (Transform4Europe)[17] and Nova Gorica (ACROSS)[18].

Most Slovenian universities adopt a mixed approach, combining strong teaching programs with active research agendas. Some smaller universities and faculties, particularly in humanities and social sciences, are more teaching-focused, though they still contribute to research in their respective fields. Research institutes are research-intensive institutions but the Jožef Stefan Institute and the Research Centre for the Slovenian Academy of Sciences and Arts have also their own doctoral school.

The majority of research institutions in Slovenia are public, enjoying a degree of autonomy, particularly in academic matters, though they are subject to government oversight and funding policies. Faculty members at public universities and research institutes are considered public servants. Slovenia also has a growing number of private higher education institutions and research institutions. These private entities often collaborate closely with industry but also with public research institutions. Private entities are fully autonomous but rely on private funding and competitive grants for their operation.

[15] SICRIS (cobiss.net)

[16] Eutopia (eutopia-university.eu)

[17] Home page - Transform4Europe

[18] Across: Cross-border Education between European Universities | Across (across-alliance.eu)

[19] kosris.si

Career track for researcher in the country

The research career in Slovenia typically begins with doctoral studies, where individuals focus on specialised research under the supervision of experienced faculty members. Doctorates are awarded by universities and independent higher education institutions founded by the Republic of Slovenia, according to the Higher Education Act. Doctorates may also be carried out in cooperation with foreign HEIs (so called double doctorates). The length of a doctorate is 3 or 4 years according to law but in practice it can take longer.



Doctoral candidates

They are officially students, and their status depends on employment. Unemployed candidates qualify for state-funded social benefits [20]. Those not funded by the Young Researcher scheme may receive institutional support or self-fund their tuition. Many work as research or teaching assistants, often on projects funded by national or European grants. Some are employed outside academia, in the private or public sectors. In some cases, the work overlaps with their doctoral research, while in other this is extra work that they do in their free time.

The Statistical Office has collected survey data on the careers of doctorate holders in 2009 and 2020 [21].

According to their latest data, 54% of doctorate holders are male and 92% have received their doctorate in Slovenia.

The majority (95 %) are employed or self-employed, among them 82% have a permanent contract. More

than a third (35%) are employed in the higher education sector, followed by the business enterprise (29%) and government sector (28%).

71% of all doctorate holders are involved in research and 19% are internationally mobile.



[20] EURODOC survey on the Doctorate structure across Europe, 2018slovenia.pdf (eurodoc.net)

[21] Careers of doctorate holders, 2020 (stat.si)

According to data from the Slovenian employment agency, among doctoral holders who are not employed, there is a higher percentage of those in the 30 to 39 years old category and there are slightly more females [22]. Although a doctorate brings better employability than bachelor's and master's degrees, there is still a risk of facing long-term unemployment, especially among those in humanities and social sciences. Moreover, in the field of engineering having a doctorate is an opportunity cost as master's students start in jobs with higher salaries than at academic institutions and are quicker to make financial progress in their career.



Doctorate holders who stay in academia often pursue postdoctoral positions that are usually fixed-term and focused on further developing research skills, building a publication record, and gaining independence as a researcher. As with other early career researchers, their position depends on project funding. Slovenia does not have a formalized tenure-track system, with permanent positions being highly competitive and often scarce. Career progression is typically linked to habilitation, which serves as a recognition of a researcher's ability to conduct independent research. The first level is Research Assistant, followed by Research Fellow, Senior Research Fellow, and Research Advisor. For those who are also teaching, the habilitation levels are Teaching Assistant, Assistant Professor, Associate Professor, and Full Professor. In both research and teaching, the last two positions secure a permanent contract.



Slovenia faces challenges with brain drain, especially among early career researchers, who seek for better opportunities for career advancement abroad [23]. Another characteristic is the leaky pipeline phenomenon where women and other underrepresented groups drop out of the academic track. The aforementioned gender equality plans are an attempt to address this problem. Moreover, Slovenia is also actively working to internationalize its research community by attracting foreign researchers.

[22] 2020_12_21_Mlada_akademija_Trg_dela_SLO_ECRs_2010-2019.pdf (mladaakademija.si)

[23] Omilitev-posledic-bega-mozganov-in-krepitev-mehanizma-krozenja-mozganov.pdf (gov.si)

Workplace of academia, employment



Slovenian researchers that are employed at public universities and research organisations are public employees, which has a structured approach to employment practices and laws governing the academic workforce. As mentioned in previous sections, there is no formalised tenure-track system and early career researchers are often employed on fixed-term contracts that are linked to specific research projects or grants. Permanent contracts only come with more senior positions.

The standard working week in Slovenia is 40 hours, though academic staff often work beyond this, particularly in research-intensive roles. Flexibility in working hours is common, especially for researchers balancing teaching, research, and administrative roles. Academic staff are entitled to a minimum of 20 days of paid annual leave but the number increases with years of employment, parenthood, and the position at the institution. Sabbaticals are available but are typically reserved for more senior faculty.

Employers in Slovenia have a legal duty of care towards their employees. This includes ensuring a safe working environment and providing necessary resources for work. Social security contributions in Slovenia are mandatory and their burden is shared between the employer and the employee. All employees are covered by the public healthcare system, which is funded through mandatory health insurance contributions and provides access to a wide range of medical services. Additionally, they might opt for additional private health insurance.

Mental Health and Well-being



01. Public Awareness and Mental Health Services:



Slovenia has a broad network of psychological support, ranging from public to private services, though accessibility varies significantly across regions. Socio-economic factors influence the risk of developing mental health issues, with some areas facing greater challenges[24]. Long waiting times, especially for psychotherapy, remain a major concern. The field of psychotherapy is unregulated, and the Institute for Health Insurance of Slovenia (ZZZS) only covers services provided by clinical psychologists and psychiatrists. However, only one in three psychologists specializes in clinical psychology, and this specialization is based on personal interest rather than population needs. As a result, public waiting times for mental health services can average around two years.

02. Mental Health in the Academic Workplace:



In academia, mental health support is primarily aimed at students, especially after COVID-19. Universities like the University of Primorska, University of Ljubljana, and University of Maribor offer psychological counseling services, but these are limited to counseling rather than psychotherapy. The availability of services is further strained by long waiting lists, with undergraduate and master's students given priority over PhD students, who often face greater pressures. Additionally, the number of counseling sessions is restricted, and resources are limited due to budget constraints. While some universities, such as the University of Ljubljana, have partnerships with private institutions like the University of Sigmund Freud to offer psychotherapy to students, these services are often insufficient to meet demand.

Student organizations, for example at the University of Primorska, cofinance psychotherapeutic sessions for students in collaboration with Counseling Center Istria. Moreover, Mlada akademija (Young Academy) is working to raise awareness about mental health in academia, especially for PhD students who face unique pressures. Similarly, women in academia face additional challenges, balancing professional and family responsibilities, which intensifies the mental health burden[25], which was also found in a sample of Slovenian women in academia[26].

Another good practice aimed at improving well-being at the T4EU universities is a project where the University of Primorska will organize a series of workshops focused on mental health for researchers as well. Additionally, a benchmarking report will be created, highlighting the state of mental health support at the participating universities.

Despite these initiatives, significant gaps remain in Slovenia's mental health services, particularly in psychotherapy and resources for academic staff.

[24] Šprah, L. in Dolenc, B. Priročnik za obvladovanje psihosocialnih tveganj in absentizma s pomočjo orodja OPSA. ZRC SAZU; Ljubljana 2014.

[25] Mivšek, A. P., Petročnik, P., Skubic, M., Geuens, S., Banovcinova, L., Baškova, M., & Wilhelmova, R. (2021). Women in Academia and the Burden of Successful Parenting. *Revija za zdravstvene vede*, 8(1), 3-21.

[26] Jones, V., Person, D., & Leyva, C. (2020). Resiliency Factors: An Exploration of Slovenia and US Women in Higher Education. *Sociology and Anthropology*, 8(6), 171-177.

Policy view on mental health



The Resolution on the Scientific Research and Innovation Strategy of Slovenia 2030 (ReZrIS30) and the Scientific Research and Innovation Strategy of Slovenia 2030 (ZRISS 2030), which guide research, development, and innovation, do not address mental health.



Slovenia's Mental Health Act (ZDZdr) regulates mental health, but focuses mostly on mental illness, overlooking prevention and the treatment of mental distress. The Resolution on the National Mental Health Program 2018-2028 (ReNPDZ18-28) is the main policy addressing mental health, introducing regional centers to enhance community-based mental health services. The RNPZ proposal was coordinated with the Resolution on the National Health Care Plan 2016-2025 Together for a Health Society, with the Development Strategy of Slovenia 2030, the Strategy for a Long-Lived Society, the Program for Children, with the Resolution on the National Program for Youth 2013-2020, with the Resolution on the National Program of Social care for the period 2013-2020, the Strategy for the control of dementia in Slovenia until 2020, the Act on comprehensive early treatment of preschool children with special needs and solutions in the proposal of the Act on long-term care and the Family Code.



Increased attention to psychosocial risks in the workplace has emerged, particularly following the Act on Safety and Health at Work (ZVZD-1) in 2011, which promotes health and well-being in organizations.

Stakeholders and policies

In addition to the Ministry of Higher Education, Science, and Innovation, that is developing strategic documents to improve research conditions of researchers, and the Slovenian Research and Innovation Agency, that is managing funding schemes, there are a few other organisations that are involved in the recognition and improvement of the status of researchers. The Slovenian Academy of Sciences and Arts (SAZU) is an elite scholarly society that brings together leading scientists and scholars in Slovenia[27]. It works to promote research excellence and advocate for the interests of the research community.

The Young Academy of Slovenia (Društvo Mlada akademija), formerly the Society of Young Researchers of Slovenia (Društvo Mladih raziskovalcev Slovenije) was established in 1995 and is a non-profit, voluntary association of doctoral candidates and early career researchers[28]. Its main aims are striving for a higher quality of postgraduate studies, promoting and improving the work conditions of young researchers, popularising basic and applicative research and innovation activities, and, of course, bringing together its members. It promotes generationally responsible research and higher education policy in Slovenia, and for meritocratic criteria of work, rewards, and promotion in all areas of higher education and research activities. Regardless of its name, it is not associated with SAZU.

Društvo VTIS is a Slovenian non-governmental organisation (NGO) and association of Slovenian researchers, professionals, and students who are living, studying, or working abroad[29].

The name "VTIS" stands for "V tujini izobraženi Slovenci," which translates to "Slovenians Educated Abroad." The organisation was founded in 2013 with the aim of connecting Slovenian expatriates and facilitating their engagement with Slovenia. It plays a crucial role in maintaining ties between Slovenia and its diaspora, especially among those who have left the country of educational and professional opportunities. A big share of its members are researchers and the association advocates for their interests with government institutions and other stakeholders.

The American Slovenian Education Foundation (ASEF) is a non-profit organisation dedicated to promoting the development of the Slovenian intellectual and academic capacity through international exchange programs between Slovenia and the United States[30]. It aims to enhance educational opportunities for Slovenians, foster academic collaboration, and build strong ties between Slovenian and American academic communities.

[27] SAZU - Slovenska Akademija Znanosti in Umetnosti - sazu.si

[28] Mlada akademija | Društvo doktorskih študentov in raziskovalcev na začetku kariere

[29] Društvo VTIS | Postani del vodilne skupnosti za kroženje znanja (drustvovtis.si)

[30] Domača stran - Asef

Stakeholders and policies

The Slovenian Academic and Research Network (SATENA) is an organisation aimed at enhancing the networking and collaboration among researchers and academic institutions in the field of technical and natural sciences [31]. It nurtures, encourages and promotes technical and natural sciences and innovation activity, contributing to the development of scientific and technical culture.

Except for the Young Academy of Slovenia, these institutions are not particularly active in the field of mental health and they might only indirectly support it: the Ministry by setting supportive policies, ARIS by providing stable funding and project evaluation, SAZU through broader discussions on public health, while VTIS, ASEF and SATENA through community-building efforts. In contrast, Mlada akademija has recognised the importance of mental health, particularly for young researchers who often face high levels of stress, job insecurity and pressure to publish. The association has a working group dedicated to this topic and, as mentioned in previous sections, it has organised workshops, seminars, and discussion focusing on mental health awareness, pointing out the need to destigmatize it, and highlighting help services that are available in Slovenia. In the organisation of some of its events, it collaborated with the ReMO COST action, the National Institute of Public Health and the OMRA project.



Equity, diversity, inclusion, accessibility in academia

Slovenia has established laws that address mental health, most notably through the Mental Health Act (ZDZdr), which regulates mental illness but places less focus on prevention and general mental well-being. While there is a formal recognition of the importance of mental health, the provisions mainly target clinical treatment rather than broader psychosocial support. This leaves certain gaps, particularly in the context of academia, where stress and mental health challenges are prevalent.

[31] Satena – Slovensko akademsko tehniško-naravoslovno združenje

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