

Paycheck to Panic: Global Mental Health Consequences of Rising Unemployment and Inflation -A Systematic Review

Kriti Malani¹, Rinshu Dwivedi², Ramesh Athe^{3*}

¹ Student, The Hyderabad Public School, Hyderabad, India

² Assistant Professor, Department of Humanities and Social Science, National Institute of Technology, Hamirpur, Himachal Pradesh India

^{3*} Assistant Professor, Department of Data Science and Artificial Intelligence, Indian Institute of Information Technology Dharwad, Karnataka, India

Abstract:- Economic instability has become a recurring reality across the globe, with rising unemployment and climbing inflation placing steady pressure on everyday life. These economic shifts do more than strain finances they also shape psychological well-being in meaningful ways. This systematic review brings together research published between 2000 and 2025 to examine how unemployment, inflation, and financial strain influence mental health among adults. Using searches across PubMed, ScienceDirect, and Scopus, forty-eight studies were identified and synthesized through a narrative approach due to significant methodological variation. This systematic review and meta-analysis, registered under PROSPERO (Prospective Register of Systematic Reviews, CRD420251122228), and PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) standards.

Across countries with both strong and limited economic resources, unemployment and job insecurity repeatedly showed strong links to higher levels of depression, anxiety, and general psychological distress. Inflation and escalating living costs further reduced purchasing power, created insecurity around essential resources, and intensified day-to-day mental strain. Vulnerability to these pressures was shaped by socioeconomic status, age, and gender, with younger adults, women, and informal workers facing the most severe impacts. Altogether, the findings point to an urgent need for mental health support to be woven directly into economic and policy responses.

Keywords: Mental Health, Unemployment, Inflation, Financial stress, Systematic Review, Meta-analysis.

1. Introduction

Volatile labour markets and rising inflation have become defining economic pressures over the past two decades, unsettling people's livelihoods and limiting the ability of households to meet every day needs. Access to financial security, social participation, and a sense of autonomy plays a major role in shaping mental well-being. When these foundations are shaken by job loss or a decline in purchasing power, psychological distress often follows (Buffel et al., 2022; Kim & von dem Knesebeck, 2015; Paul & Moser, 2009; Silva et al., 2021).

Studies from different regions consistently show higher risks of depression, anxiety, and even suicidality among unemployed people (Liu et al., 2024; Wang et al., 2021). Inflation has drawn increasing concern as surging housing, energy, and food prices place the heaviest strain on low-income families, weakening their financial coping capacity and increasing psychological vulnerability (Jouriles et al., 2024; Wu et al., 2022). Economic hardship during recessionary periods has also been linked with elevated suicide risk at both individual and population levels (Oyesanya et al., 2015; Reeves et al., 2021).

Yet despite these patterns, existing evidence remains fragmented across country-specific studies, crisis-driven research, and varied outcome measures. A number of health-focused reviews highlight the need to bring together current knowledge to better guide care, resource planning, and policy development (Morton et al., 2019; Ryu & Fan, 2022). In line with this approach, the present review seeks to build a global understanding of how economic instability affects mental health and to pinpoint the evidence gaps that should be addressed in future research.

2. Materials and Methods

A systematic review methodology was used to ensure comprehensive coverage and consistency in study selection procedures and according to PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-analyses) guidelines employed (Liberati et al., 2009; Page et al., 2021; Athe et al., 2023). PubMed, Scopus, and ScienceDirect were searched for peer-reviewed studies from January 2000 to February 2025. Search terms covered unemployment (job loss, job insecurity), inflation (cost of living, purchasing power) and mental health outcomes (depression, anxiety, psychological distress, stress-related disorders, suicidality).

Eligible criteria based on adult populations (≥ 15 years), quantitative or qualitative mental health findings, economic exposure is defined as unemployment or inflation-related hardship. And exclusion criteria based on child-only studies, purely economic analyses without mental health data, and editorials or non-data commentary. Data extraction included location, sample size, economic exposure type, mental health indicators, and primary findings. Due to wide variation in methodologies and outcome definitions, a narrative synthesis approach was applied. The Joanna Briggs Institute critical appraisal checklist for studies reporting prevalence data was used to determine and control the articles' quality. This instrument was used for the quality assessment of articles, which contains questions responded to via three options: yes, no, and not applicable (The Joanna Briggs Institute Critical Appraisal Tools for Use in JBI Systematic Reviews). The instrument aimed at evaluating the methodological quality of articles and determining errors in studies, designs, and data analysis. The results for the quality of studies indicated that all included studies had been qualified as per the quality standards for the final analysis.

Further, for assessing the impact of mental health among the included studies, a random-effects meta-analysis model was applied to estimate the overall effect size with a 95% confidence interval (CI). The effect sizes were measured using relative ratios (RR) between the numbers of unemployed and employed. Once an effect size was estimated for each trial, the overall effect of these results was assessed by Cochrane's Q statistic, which measures consistency among studies. The Q test was computed under the assumption of homogeneity among the effect sizes and the statistic follows the Chi-square distribution with $k-1$ degrees of freedom, where k is the number of studies. Another method for quantifying the heterogeneity among the studies in a meta-analysis consisted of estimating the variance (τ^2) between studies. The parameter I^2 quantified the percentage of total variation in study estimates due to heterogeneity rather than sampling error. (Jackson and Turner 2017; Athe et al., 2023).

The heterogeneity of results was depicted in the form of a forest plot, which typically represents a blob in the middle of the 95%CI that characterizes the RR estimates. The forest plot presents the graphical representation of the results. The horizontal line in the middle of the plot represents the overall effect size, and the pooled or combined result of the RR in effect size is denoted by diamonds on the plot representing 95%CI for each study or subgroup for the combined data. The size of the diamond reflects the weight assigned to each study, and the horizontal line through the diamond represents the point estimate of the prevalence rate. The vertical line represents the null effect line, indicating no difference between the experimental and control groups. The forest plot also shows Cochrane's Q statistic, τ^2 , df, I^2 , Z, and p value. The I^2 statistic and funnel plots were administered to measure the publication bias and presence of heterogeneity between the included studies respectively (Jackson and Turner 2017; Athe et al., 2023).

An $I^2 > 50\%$ indicates a significant heterogeneity between the trials. The meta-regression analysis was performed to detect the source of heterogeneity ($I^2 > 50\%$) of depression, anxiety, stress, and unemployment (Spineli and Pandis 2020; Athe et al., 2023). Publication bias was assessed with the funnel plot and Egger regression test (Egger 1997). Publication bias is present when studies with minor or non-significant results are less likely to be published than studies with large and significant results. Egger's regression is a statistical approach used in meta-analysis to evaluate the presence of publication bias. A modified version of the traditional regression model called

Egger's regression takes into consideration the likelihood of publication bias or small study effects in the meta-analysis. If there is evidence of heterogeneity, a meta-regression approach is used to test the heterogeneity by relating study characteristics. The major confounders were identified, followed by a meta-analysis to estimate the net pooled effect size, after standardizing the effect of confounding variables. To investigate the link between study-level covariates and the effect size estimates gleaned from individual research, a meta-regression approach was used. Statistical analyses were performed with Review Manager (RevMan) software version 5.3 (The Cochrane Collaboration, London, United Kingdom) and Stata Statistical Software: Release 14 (2015; StataCorp LLC, College Station, Texas, United States).

3. Results

A total of 1,181 records were identified through database and register searching. After removing 1,078 records before screening, 100 records were evaluated at the abstract level. Following retrieval attempts, 16 full-text reports were assessed for eligibility, resulting in 5 studies included in the final review and results depicted in **Figure 1**.

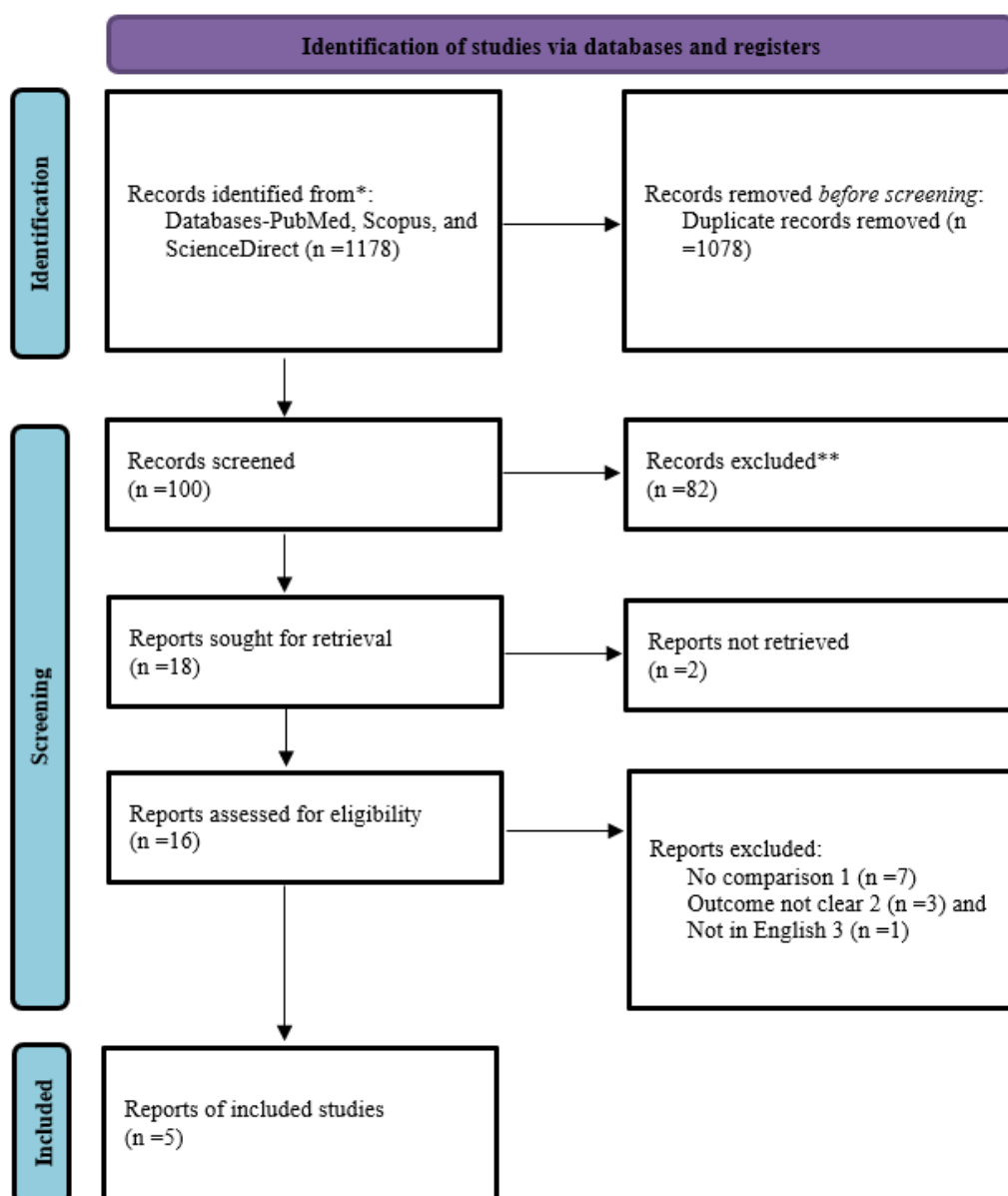


Figure 1. PRISMA flow chart for included studies about Summary of included studies assessing the effect of mental health.

Mental health from the forest plot (Figure 2), the results (Coope et al., 2015; Córdoba-Doña et al., 2016; Konstantakopoulos et al., 2019; Milner et al., 2014; Solano et al., 2012) indicate that the prevalence rate of mental health among included participants ranges from 2.9% to 29.5%, with a pooled estimate of relative risk (RR) 0.64 (95%CI: 0.42-0.99). The random effects model was used for the analysis, and the heterogeneity statistics showed a high degree of heterogeneity (Tau 0.32; Chi=805.84; df= 6; p< 0.00001; I square=99%) that indicates variation in prevalence estimates across the studies. Meta-regression analysis was performed to detect the sources of heterogeneity and the results indicate a notable association between the logarithmic event rate and the covariates in respective models.

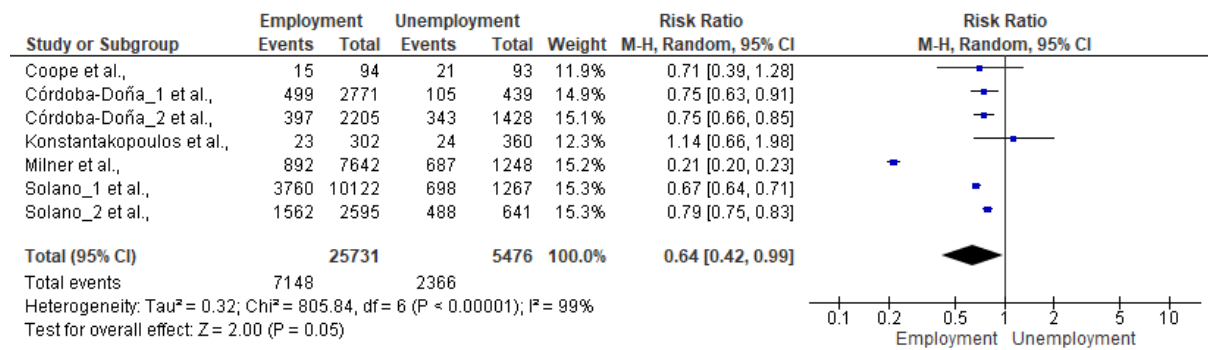


Figure 2. Prevalence rate of mental health among unemployed vs. employed participants in included studies.

The funnel plot (Figure 3) was symmetrical, indicating the probable absence of publication bias which was confirmed using Egger’s weighted regression method. The inverse of the sample size of each study that was included in the meta-analysis is regressed against the standard error of the effect size estimate in Egger’s regression. Egger’s regression has confirmed that there is no publication bias (p=0.693).

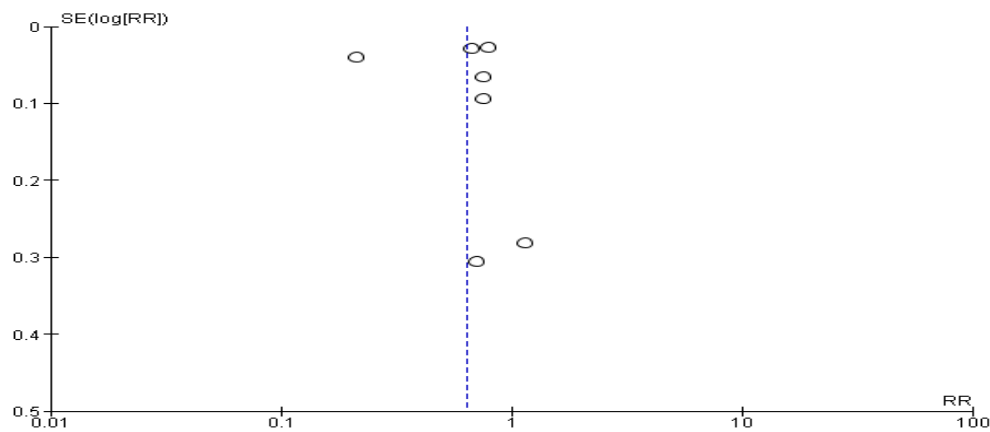


Figure 3. Publication bias of prevalence rate of mental health among unemployed vs. employed participants in included studies.

4. Discussion

Economic insecurity plays a major role in shaping mental health outcomes. This review shows that both unemployment and high inflation create ongoing, interconnected psychological pressures. Losing a job can undermine not only income but also a sense of identity, leading to diminished self-worth, as consistently evidenced in large-scale research on unemployment-related depression and anxiety (Fiori et al., 2021; Milner et al., 2014). At the same time, inflation and financial hardship heighten everyday stress by making it harder for individuals to afford necessities, contributing to increased psychological distress and reduced well-being (Guan et al., 2023; Tsai et al., 2023).

When these forces occur together, the resulting distress often intensifies, especially for those with limited financial resources. Systematic reviews on economic recessions have shown strong links with elevated rates of mood disorders, self-harm and suicide attempts (Frasquilho et al., 2016; Sargent et al., 2021). The findings support broader evidence showing that prolonged exposure to stressful economic environments leads to long-term declines in mental health and growing demand for psychiatric and community care services (Brydsten et al., 2018).

Yet despite this, mental health is rarely embedded into core economic policy frameworks. Current interventions often overlook the need to combine financial protections with mental health support, while evidence suggests that safeguards such as unemployment benefits and active labor-market policies may reduce suicide risk and buffer psychological deterioration in economically vulnerable groups (Oyesanya et al., 2015).

Given this evidence, there is a clear case for approaches that address both financial insecurity and psychological well-being. Measures such as income support, affordable essential goods, stronger welfare systems and accessible mental health care may help lessen the harmful impact of economic shocks. Policies that integrate economic and mental health strategies are likely to offer the strongest protection for at-risk groups including informal workers, low-income households and those already facing structural disadvantage.

5. Conclusion

Unemployment and inflation have a substantial impact on mental well-being around the world, contributing to higher levels of depression, anxiety, and overall psychological distress. These effects are even more pronounced among people facing socioeconomic disadvantage, living in areas with weak social protection systems, or experiencing long-term financial instability. Protecting mental health during periods of economic disruption calls for coordinated policymaking that brings together labour protections, cost-of-living support, and a strong mental healthcare infrastructure. Without such integrated approaches, the psychological effects of future economic downturns are likely to intensify.

6. Declaration

We confirm that all the listed authors have read and approved the manuscript. We further confirm that the order of authors listed in the manuscript has been approved by all.

1. Ethics approval and consent to participate: Ethical approval was not required for the present study as it is based on secondary information.
2. Consent for publication: All the listed authors give their due consent for the publication
3. Availability of data and material: The present study is based on secondary sources, which are available at the mentioned references in the public domain. We have used data from published articles for the present study.
4. Competing interests: Authors declare no conflicts of interest.
5. Funding: The author is unaware of any affiliations, memberships, funding, or financial holdings that might be perceived as affecting the objectivity of this study.
6. Authors contribution: Kriti Malani contributed the data curation, review literature, and manuscript preparation. Ramesh Athe supervised the study and guided in manuscript preparation. Ramesh Athe and Rinshu Dwivedi developed the study protocol and manuscript preparation.
7. Acknowledgements: The authors express their sincere gratitude to The Hyderabad Public School, Begumpet, for their support and insightful input. They are also grateful to the Department of Data Sciences and Artificial Intelligence, IIIT Dharwad, for their support and encouragement, which has helped improve this study.
8. AI Statement: We confirm that the AI wasn't used to prepare the manuscript and was not approved by all the listed authors.

References

- [1] Athe, R., Dwivedi, R., Singh, K., Babusab Hulmani, S., Karadi, N., Boraiah, C., & Vasu, S. (2023). Impact of COVID-19 on the Mental Health of Healthcare Workers and Job Loss from a Gender Perspective in India: A Systematic Review and Meta-Analysis. *Cureus*, 15(11), e48219. <https://doi.org/10.7759/cureus.48219>

- [2] Athe, R., Rao, M. V., & Nair, K. M. (2014). Impact of iron-fortified foods on Hb concentration in children (<10 years): a systematic review and meta-analysis of randomized controlled trials. *Public health nutrition*, 17(3), 579–586. <https://doi.org/10.1017/S1368980013000062>
- [3] Buffel, V., Missinne, S., & Bracke, P. (2022). The mental health consequences of the economic crisis in Europe among the unemployed: A systematic literature review. *Globalization and Health*, 18(1), 17. <https://doi.org/10.1186/s12992-022-00831-6>
- [4] Coope, C., Donovan, J., Wilson, C., Barnes, M., Metcalfe, C., Hollingworth, W., Kapur, N., Hawton, K., & Gunnell, D. (2015). Characteristics of people dying by suicide after job loss, financial difficulties and other economic stressors during a period of recession (2010–2011): A review of coroners' records. *Journal of affective disorders*, 183, 98–105. <https://doi.org/10.1016/j.jad.2015.04.045>
- [5] Córdoba-Doña, J. A., Escolar-Pujolar, A., San Sebastián, M., & Gustafsson, P. E. (2016). How are the employed and unemployed affected by the economic crisis in Spain? Educational inequalities, life conditions and mental health in a context of high unemployment. *BMC public health*, 16, 267. <https://doi.org/10.1186/s12889-016-2934-z>
- [6] Economou, M., Madianos, M., Peppou, L. E., Patelakis, A., & Stefanis, C. N. (2013). Major depression in the era of economic crisis: A replication of a cross-sectional study across Greece. *Journal of Affective Disorders*, 145(3), 308–314. <https://doi.org/10.1016/j.jad.2012.08.008>
- [7] Egger, M., Davey Smith, G., Schneider, M., & Minder, C. (1997). Bias in meta-analysis detected by a simple, graphical test. *BMJ (Clinical research ed.)*, 315(7109), 629–634. <https://doi.org/10.1136/bmj.315.7109.629>
- [8] Frasilho, D., Matos, M. G., Salonna, F., Guerreiro, D., Storti, C. C., Gaspar, T., & Gaspar de Matos, M. (2016). Mental health outcomes in times of economic recession: A systematic literature review. *BMC Public Health*, 16, 115. <https://doi.org/10.1186/s12889-016-2720-y>
- [9] Jackson, D., & Turner, R. (2017). Power analysis for random-effects meta-analysis. *Research synthesis methods*, 8(3), 290–302. <https://doi.org/10.1002/jrsm.1240>
- [10] Jouriles, E. N., Vu, N. L., & McDonald, R. (2024). Stress due to inflation: Changes over time, correlates, and mental health outcome. *Frontiers in Psychology*, 15, 1357031. <https://doi.org/10.3389/fpsyg.2024.1357031>
- [11] Kim, T. J., & von dem Knesebeck, O. (2015). Is an insecure job better for health than having no job at all? A systematic review of studies investigating the health-related risks of both. *BMC Public Health*, 15, 985. <https://doi.org/10.1186/s12889-015-2313-1>
- [12] Konstantakopoulos, G., Pikouli, K., Ploumpidis, D., Bougonikolou, E., Kouyanou, K., Nystazaki, M., & Economou, M. (2019). The impact of unemployment on mental health examined in a community mental health unit during the recent financial crisis in Greece. *Psychiatrike = Psychiatriki*, 30(4), 281–290. <https://doi.org/10.22365/jpsych.2019.304.281>
- [13] Liberati, A., Altman, D. G., Tetzlaff, J., Mulrow, C., Gøtzsche, P. C., Ioannidis, J. P., Clarke, M., Devereaux, P. J., Kleijnen, J., & Moher, D. (2009). The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate health care interventions: explanation and elaboration. *PLoS medicine*, 6(7), e1000100. <https://doi.org/10.1371/journal.pmed.1000100>
- [14] Liu, Q., Fu, X., McGettigan, C. A., & Zhang, K. (2024). Unemployment and mental disorders: A global perspective across 201 countries. *BMC Public Health*, 24, 313. <https://doi.org/10.1186/s12889-024-17926-1>
- [15] Milner, A., Morrell, S., & LaMontagne, A. D. (2014). Economically inactive, unemployed and employed suicides in Australia by age and sex over a 10-year period: what was the impact of the 2007 economic recession?. *International journal of epidemiology*, 43(5), 1500–1507. <https://doi.org/10.1093/ije/dyu148>
- [16] Morton, K., Marino, L. V., Pappachan, J. V., & Darlington, A. S. (2019). Feeding difficulties in young paediatric intensive care survivors: A scoping review. *Clinical Nutrition ESPEN*, 30, 1–9.
- [17] Oyesanya, M., Lopez-Morinigo, J., & Dutta, R. (2015). The role of unemployment, financial hardship, and economic recession in suicidal behavior. *Journal of Affective Disorders*, 183, 302–308. <https://doi.org/10.1016/j.jad.2015.05.022>
- [18] Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., McGuinness, L. A., ... Moher, D. (2021).

-
- The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *Journal of clinical epidemiology*, 134, 178–189. <https://doi.org/10.1016/j.jclinepi.2021.03.001>
- [19] Paul, K. I., & Moser, K. (2009). Unemployment impairs mental health: Meta-analyses. *Journal of Vocational Behavior*, 74(3), 264–282. <https://doi.org/10.1016/j.jvb.2009.01.001>
- [20] Reeves, A., McKee, M., & Stuckler, D. (2021). Economic hardship and suicide: A review. *Social Science & Medicine*, 285, 114290. <https://doi.org/10.1016/j.socscimed.2021.114290>
- [21] Ryu, G. W., & Fan, Y. (2022). Financial stress and depression in adults: A systematic review. *International Journal of Environmental Research and Public Health*, 19(4), 2266. <https://doi.org/10.3390/ijerph19042266>
- [22] Silva, M., Loureiro, A., Rocha, V. M., & Figueiredo, B. (2021). Mental health effects of unemployment and reemployment: A systematic review and meta-analysis. *European Journal of Public Health*, 31(6), 1132–1140. <https://doi.org/10.1093/eurpub/ckab114>
- [23] Solano, P., Pizzorno, E., Gallina, A. M., Mattei, C., Gabrielli, F., & Kayman, J. (2012). Employment status, inflation and suicidal behaviour: an analysis of a stratified sample in Italy. *The International journal of social psychiatry*, 58(5), 477–484. <https://doi.org/10.1177/0020764011408651>
- [24] Spineli, L. M., & Pandis, N. (2020). Exploring heterogeneity in meta-analysis: Meta-regression analysis. *American journal of orthodontics and dentofacial orthopedics: official publication of the American Association of Orthodontists, its constituent societies, and the American Board of Orthodontics*, 158(4), 623–625. <https://doi.org/10.1016/j.ajodo.2020.07.002>
- [25] The Joanna Briggs Institute Critical Appraisal Tools for Use in JBI Systematic Reviews: Checklist for Prevalence Studies. Adelaide: Joanna Briggs Institute; 2017. Critical Appraisal Checklist for Studies Reporting Prevalence Data, Joanna Briggs Institute, Adelaide.
- [26] Wang, Y., Wang, L., & Xu, C. (2021). Unemployment and major depressive disorder: A systematic review and meta-analysis. *Journal of Affective Disorders*, 292, 528–536. <https://doi.org/10.1016/j.jad.2021.05.114>
- [27] Wu, T., Wang, H., & Huang, L. (2022). Financial hardship and psychological distress during inflation peaks: Evidence from cross-national studies. *Frontiers in Psychiatry*, 13, 886324. <https://doi.org/10.3389/fpsy.2022.886324>