

## Supplementary Materials

**Table 1.** Results of the bibliographic corpus analysis.

| Ref. | Title                                                                                                                      | Year | Type of Study | Population                                                                                                         | Main Purpose                                                                                                                                | Methodology                                                                                          | Specific Tools/Method                                                                                                                                       | Key Results                                                                                                                                                                                                                | Conclusions                                                                                                                                                                                                        |
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| (51) | <b>Depressive Symptoms Among Older Adults Pre- and Post-COVID-19 Pandemic.</b>                                             | 2021 | Longitudinal  | >3,000 community-dwelling adults aged 60+ from The Irish Longitudinal Study on Ageing (TILDA).                     | Analyze trends in depressive symptoms before and during the COVID-19 pandemic.                                                              | Observational follow-up of older adults for 6 years (waves 4, 5, and the COVID period).              | <b>Center for Epidemiologic Studies Depression Scale (CES-D)</b> (pontuação $\geq 9$ ). Questionnaires, clinical interviews, and self-reported health data. | Clinically significant depressive symptoms doubled (from 7.2% to 19.8%) during the pandemic. Older age ( $\geq 70$ ) and living alone were associated with higher depressive symptoms in the COVID period.                 | There was a major increase in depressive symptoms among older adults during COVID-19, especially in those $\geq 70$ and/or living alone. Importance of improving access to age-appropriate mental health care.     |
| (23) | <b>Impact of physical activity intensity on longitudinal trajectories of cognitive function and depressive symptoms...</b> | 2022 | Longitudinal  | 5,025 middle-aged and older adults (mean age 57) from the China Health and Retirement Longitudinal Study (CHARLS). | Describe how different intensities of physical activity impact the longitudinal trajectories of cognitive function and depressive symptoms. | Nationally representative household study of Chinese population 45+. Data every 2 years (2011–2018). | <b>10-item CES-D</b> ; Telephone Interview of Cognitive Status (TICS); ADL measures; self-reported medical data.                                            | Cognitive function decreased by $\sim 0.17$ points every 2 years; depressive symptoms rose by 0.23 points. Frequent moderate/light PA was linked with slower cognitive decline and slower increase in depressive symptoms. | Regular PA ( $\geq 6$ dias/semana) was associated with benefits in cognitive function and delayed rise in depressive symptoms among middle-aged and older adults, suggesting a personalized PA intensity approach. |
| (50) | <b>Depression and anger across 25 years: changing vulnerabilities in the VSA model.</b>                                    | 2014 | Longitudinal  | 341 Canadians (178 women, 163 men) from a 25-year prospective study starting in                                    | Analyze the association of mental health trajectories (depressive symptoms, expressed anger) from ages 18 to 25 with life                   | 25-year prospective longitudinal data, starting at age 18, with follow-ups at 25, 32, 43 years, etc. | Self-reported mental health scales (anger, depression), plus perceived stress scales; no single                                                             | Depressive symptoms and anger at age 18 predicted higher life stress and relationship risk at age 43                                                                                                                       | Mental health deficits or strengths in the transition to adulthood can                                                                                                                                             |

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|      |                                                                                                               |      |                 | late adolescence/young adulthood.                                                                        | stress and relationship outcomes later on.                                                                      |                                                                                                                                                                             | named depression scale cited.                                                                          | (controlling for concurrent mental health).                                                                                                                                                            | influence stress perception and intimate relationship outcomes decades later.                                                                            |
| (28) | <b>The predictors of depression in a longitudinal cohort of community dwelling rural adults in Australia.</b> | 2019 | Longitudinal    | 2,639 rural/remote community residents from the Australian Rural Mental Health Study (5-year).           | Explore the contribution of individual, social, and community factors on the trajectory of depressive symptoms. | 4 waves of data from a 5-year longitudinal study; generalized linear mixed models.                                                                                          | <b>PHQ-9</b> ; social support measures; employment/financial variables; community-level factors.       | ~6.3% had moderate/severe depression at baseline. Financial difficulties and unemployment raised future depression risk significantly; interpersonal support was protective.                           | Targeting those with financial/employment difficulties may reduce depression. Interpersonal support at community level protects against future episodes. |
| (52) | <b>Development of a prognostic model for predicting depression severity... (diamond longitudinal study).</b>  | 2018 | Longitudinal    | 593 primary care patients with depressive symptoms from 30 Australian general practices (diamond study). | Develop a tool to predict future depression severity in primary care patients at 3 months follow-up.            | Prospective cohort (diamond) of patients who screened positive on PHQ-9 ( $\geq 1$ item from first 2 questions). Multivariable linear regression to build prognostic model. | <b>PHQ-9</b> for depression screening; structured patient questionnaires; 20 predetermined predictors. | Model included 8 baseline predictors (sex, baseline depression, anxiety, history of depression, self-rated health, chronic illness, living alone, perceived income). Good discrimination ( $c=0.74$ ). | A brief algorithm can help clinicians tailor treatment for depressed patients in primary care.                                                           |
| (17) | <b>Age and sex trends in depressive symptoms across middle and older adulthood...</b>                         | 2021 | Cross sectional | ~138,000 adults 45–95 from national cohorts in Canada, Europe, and the US.                               | Compare differences in depressive symptoms with age and sex across three international cohorts.                 | Cross-sectional observational design combining data from the Canadian Longitudinal Study on Aging, US (CES-D), and European (EURO-D) cohorts.                               | <b>CES-D</b> (Canada/US) and <b>EURO-D</b> (Europe).                                                   | Non-linear age trend in depression; women reported more symptoms than men. The gap was larger after age 70 (Canada, US) or around 60 (Europe).                                                         | Characterizing depression patterns in mid-late adulthood for men and women helps focus interventions and resource allocation.                            |
| (27) | <b>The effect of childhood and current</b>                                                                    | 2016 | Longitudinal    | 9,645 adults aged $\geq 20$ from Korean Welfare Panel                                                    | Investigate how current and childhood economic status influences                                                | Data from KOWEPS (2010–2013); individuals without                                                                                                                           | <b>CES-D 11</b> ; self-reported economic status (childhood and                                         | Low–low childhood/current status $\rightarrow$ higher odds of                                                                                                                                          | Mental health inequalities exist across economic                                                                                                         |

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|      | <b>economic status on depressive symptoms... in South Korean individuals: a longitudinal study.</b>      |      |              | Study (KOWEPS), analyzed 2010–2013.                                                             | likelihood of depressive symptoms.                                                                                              | depression at baseline. Subgroup analyses by education level.                                                   | current); logistic regression.                                                                                            | depression (OR ~1.88). High–high group → lower odds (OR ~0.45). Prolonged poverty has adverse mental health effects.                                                                                                                                | strata; low-income individuals need targeted mental health approaches.                                                                                        |
| (42) | <b>Latent class growth modeling of depression and anxiety in older adults... (8-year follow-up)</b>      | 2021 | Longitudinal | 3,983 adults aged 65+ from the Korean Health Panel Study (2008–2015).                           | Identify trajectories of depression and anxiety in older adults and assess interrelationships + predictors of each trajectory.  | 8-year follow-up. Latent class growth modeling to classify depression/anxiety trajectories.                     | Depression/anxiety “scores” from Korean Health Panel data; classification using growth-based trajectory modeling (GBDTM). | 4 trajectory groups for depression (low-flat, low-medium, low-high, high-stable) and for anxiety (low-flat, low-medium, high-low, high). Women, ≥3 chronic diseases, and no income-generating activity increased risk.                              | Depression and anxiety frequently co-occur, especially in higher-risk demographic groups. Data can inform strategies to prevent late-life depression/anxiety. |
| (20) | <b>How do different chronic condition comorbidities affect changes in depressive symptoms...</b>         | 2020 | Longitudinal | 11,457 adults aged 45+ from CHARLS (2011–2015).                                                 | Examine how different chronic conditions impact trajectories of depressive symptoms over time.                                  | National survey data (CHARLS) across multiple waves (2011–2015) to track comorbidities and depressive symptoms. | Repeated CHARLS measures for depressive symptoms; analysis of comorbidity patterns across waves.                          | Certain comorbidities (dyslipidemia, asthma, arthritis, stroke, etc.) significantly worsened or hindered improvement in depressive symptoms.                                                                                                        | Specific physical health conditions can notably affect mental health trajectories over time, suggesting integrated care.                                      |
| (36) | <b>Psychosocial predictors of trajectories of mental health distress during the COVID-19 pandemic...</b> | 2023 | Longitudinal | 3,931 Italian adults assessed for depressive, anxiety, and stress symptoms (Apr 2020–May 2021). | Examine joint trajectories of depression, anxiety, and stress during COVID-19 and identify psychosocial predictors of distress. | Four-wave panel data. Latent Class Growth Analysis (LCGA) + multinomial regression for predictors.              | Standardized questionnaires for depression/anxiety/stress (unnamed). LCGA used to identify distinct symptom trajectories. | 54% had a “resilient” trajectory; two subgroups had elevated or worsening combined depression/anxiety/stress. Risk factors included expressive suppression, intolerance of uncertainty, fear of COVID-19, female gender, younger age, unemployment. | Mental distress trajectories were heterogeneous. Recognizing subgroups at risk can guide targeted support during pandemics.                                   |

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| (24) | <b>Physical activity mediates the effect of education on mental health trajectories in older age.</b>                       | 2023 | Longitudinal    | 54,818 adults aged 50+ from Survey of Health, Ageing and Retirement in Europe (SHARE).                       | Test whether physical activity mediates the relationship between education and later-life mental health (depressive symptoms, well-being). | SHARE dataset with multiple waves; path analysis to see how PA mediates effect of education on depressive symptoms/well-being.                            | Validated scales (depressive symptoms, well-being) in SHARE; repeated measures of PA.                        | Lower education → lower PA levels over time → higher depressive symptoms and lower well-being. PA explained ~26.8% of the variance in depressive symptoms.                                | Physical activity is crucial for mitigating mental health disparities linked to low educational attainment in older adults.                                   |
| (18) | <b>Associations between trajectories of depressive symptoms and rate of cognitive decline... 8-year longitudinal study.</b> | 2022 | Longitudinal    | 9,264 middle-aged/older adults from CHARLS (2011–2018).                                                      | Investigate link between different depressive symptom trajectories and cognitive decline rate.                                             | Population-based cohort with assessments in 2011, 2013, 2015, 2018. Growth mixture modeling identified 5 depression trajectories.                         | <b>CES-D</b> or a variant used in CHARLS; episodic memory and executive function tests.                      | “Increasing” depressive symptom group had the fastest decline in global cognition and episodic memory. Consistently medium/high groups also declined faster vs. consistently low group.   | Escalating depressive symptoms may coincide with accelerated cognitive decline; targeting those with worsening depression could slow cognitive deterioration. |
| (16) | <b>Exploring the relationship between depression and multimorbidity in Chinese middle-aged and older people...</b>          | 2023 | Cross sectional | 19,761 adults aged 45+ from the 2018 wave of the China Longitudinal Study of Health and Retirement (CHARLS). | Explore the association between depression and multimorbidity using propensity score matching.                                             | Single-wave cross-sectional analysis (2018 CHARLS) with PSM to compare depressed vs. non-depressed groups; logistic regression, restricted cubic splines. | One-time assessment using CHARLS data (self-reported depression symptoms), PSM for adjusting confounders.    | Prevalence of multimorbidity was 1.49 times higher in depressed vs. non-depressed. Higher depression scores → higher likelihood of multimorbidity.                                        | Middle-aged/older adults with depressive symptoms are more likely to have multiple chronic conditions, highlighting the need for integrated care.             |
| (22) | <b>The trajectories of depressive symptoms and subsequent incident dementia, coronary heart diseases...</b>                 | 2022 | Longitudinal    | 7,810 US adults ≥50 from the Health and Retirement Study (HRS), free of dementia/CHD/stroke at baseline.     | Evaluate how mid/late-life depressive symptom trajectories relate to incident dementia, CHD, stroke, mortality over ~10+ years.            | Longitudinal cohort from HRS (1994–2000 baseline CES-D, followed 2000–2018). Identified 5 depression symptom trajectory groups.                           | <b>CES-D</b> (HRS standard); tracking incident dementia, CHD, stroke using follow-up interviews/health data. | Worsening/persistent depressive symptoms → elevated risk for dementia, CHD, stroke, mortality. Improved symptoms group did not show higher CHD risk. Even mild subthreshold symptoms were | Persistent or increasing depression in mid-late life is linked to higher long-term risk of multiple diseases and mortality.                                   |

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|      |                                                                                                                   |      |                 |                                                                                                       |                                                                                                                                                                   |                                                                                                                             |                                                                                                                                                           | associated with diseases of aging.                                                                                                                                                                                               |                                                                                                                                                                                     |
| (15) | <b>Sociodemographic dynamics and age trajectories of depressive symptoms... a cohort perspective.</b>             | 2023 | Longitudinal    | US adults from the 1994–2016 HRS (multiple birth cohorts).                                            | Explore how depressive symptom trajectories differ by age/cohort and by sociodemographic factors in middle and late adulthood.                                    | Data from the Health and Retirement Study across birth cohorts, using repeated CES-D measures from 1994–2016.               | <b>CES-D</b> from HRS (repeated waves 1994–2016).                                                                                                         | Later-born cohorts had higher depression levels at given ages vs. earlier cohorts. Large sociodemographic disparities persist.                                                                                                   | The findings suggest persistent inequality and partial “age-as-leveler” effects. Gender gap in depression remains consistent; partnership gap narrows with age.                     |
| (32) | <b>Changes in mental health outcomes in the general population 14 months into the COVID-19 pandemic in Italy.</b> | 2023 | Longitudinal    | Italian adults (N=18,147 baseline; 5,501 followed up) via web survey (Mar–Apr 2020 and Apr–May 2021). | Investigate trajectories of depression, anxiety, post-traumatic stress over 14 months in the general population; identify sociodemographic/contextual predictors. | Two time-point follow-up survey. Symptoms considered clinically relevant if above cutoff in depression/anxiety/PTSD scales. | Validated scales for depression, anxiety, PTSD (exact names not provided). Two-wave longitudinal survey design.                                           | 52% showed resilience (no distress both times), 20.7% persistent distress, 6.8% new-onset, 20.5% remitting. Persistent distress more frequent in women, younger, prior MH history, low resilience, fewer social contacts.        | Overall distress decreased in the population, but a substantial subset continued experiencing clinically relevant symptoms. Suggests need for targeted mental health interventions. |
| (44) | <b>Trajectories of depressive symptoms among community-dwelling Korean older adults...</b>                        | 2022 | Longitudinal    | 2,016 adults aged 65+ from the Korean Longitudinal Study of Aging (KLoSA), 2006–2016.                 | Identify distinct 10-year trajectories of depressive symptoms and predictive variables.                                                                           | KLoSA panel data over a decade (2006–2016). Growth mixture modeling to classify symptom trajectories.                       | <b>KLoSA</b> depression items (likely CES-D or adapted scale); Mini-Mental State Examination for cognition, social activity measures, repeated over time. | Five trajectories: None (28.9%), Slowly Worsening (24.3%), Rapidly Worsening (17.5%), Improving (12.4%), Persistently Severe (16.9%). Education level, chronic diseases, social activity predicted higher/lower symptom courses. | Tailored interventions based on specific symptom trajectories are critical for preventing/treating late-life depression.                                                            |
| (48) | <b>The changing relationship</b>                                                                                  | 2022 | Cross sectional | 88,675 Canadian adults aged 65+                                                                       | Analyze how physical inactivity, smoking,                                                                                                                         | Repeated cross-sectional data from                                                                                          | <b>Composite International</b>                                                                                                                            | Physical inactivity and smoking strongly                                                                                                                                                                                         | Behavioral risk factors for                                                                                                                                                         |

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|      | <b>between health risk behaviors and depression among birth cohorts of Canadians 65+, 1994-2014.</b>                                        |      |              | born between 1910–1914 and 1945–1949, from 11 national health surveys (1994–2014).                   | alcohol use relate to depression risk among older Canadians across different birth cohorts.                                            | 11 nationally representative surveys by Statistics Canada (CIDI-SF for depression).                       | <b>Diagnostic Interview – Short Form (CIDI-SF)</b> for depression; repeated cross-sectional design across multiple surveys. | associated with depression, more so in recent cohorts; moderate alcohol use was protective in older cohorts but not in the most recent cohort.                                                                                                               | depression vary across birth cohorts; these findings can inform prevention strategies.                                                                         |
| (41) | <b>Trajectories of social isolation and depressive symptoms in mid- and later life...</b>                                                   | 2023 | Longitudinal | 7,890 middle-aged/older adults from the 2006–2018 US Health and Retirement Study (HRS).              | Examine how changes in objective and subjective social isolation relate to levels and changes in depressive symptoms.                  | Parallel latent growth curve modeling of repeated HRS data (2006–2018) to track isolation and depression. | <b>CES-D</b> for depressive symptoms in HRS; measures of social contact (objective) and loneliness (subjective).            | Objective isolation increased slightly over time, subjective isolation decreased, depression was relatively stable. Higher isolation was associated with higher depression levels, but only changes in subjective isolation predicted changes in depression. | Early detection of social isolation (especially subjective) could prevent or lessen depressive symptoms in middle-aged/older adults.                           |
| (26) | <b>A life course view on depression: Social determinants of depressive symptom trajectories over 25 Years of Americans' Changing Lives.</b> | 2022 | Longitudinal | 3,617 American adults (≥25) from the Americans' Changing Lives study, followed 1986–2011 (25 years). | Investigate heterogeneity in long-term depressive symptom trajectories and social determinants shaping them.                           | National sample with up to 25-year follow-up, using 11-item CES-D.                                        | <b>Abbreviated 11-item CES-D</b> ; repeated measures over 25 years in ACL study.                                            | Identified a U-shaped curve overall, with two latent classes (60% normative, 40% persistently high). Women, racial/ethnic minorities, lower SES more likely persistent.                                                                                      | Confirms a U-shaped lifespan pattern; a large subgroup shows persistently high depression, implying focus on social determinants of mental health disparities. |
| (14) | <b>Simultaneous employment and depressive symptom trajectories around retirement age in Chile.</b>                                          | 2022 | Longitudinal | 2,927 Chilean adults aged 18–75, focusing on two subgroups (56–65, 66–75 at baseline).               | Examine employment/depression trajectories before/after standard retirement age, identifying links with social/health characteristics. | Population-representative panel data with longitudinal statistical methods to identify trajectory types.  | Self-reported depressive symptom scale (not named), combined with employment status over multiple waves.                    | Those who remained employed had lower depressive symptoms overall, but that pattern was tied mainly to individuals with favorable social/health                                                                                                              | Policies promoting later-life employment might inadvertently pressure disadvantaged people to keep working, possibly                                           |

|      |                                                                                                                                           |      |              |                                                                                                                                 |                                                                                                                      |                                                                                                                                                                  |                                                                                                                                                  | conditions from the start.                                                                                                                                                                                                                                                          | affecting mental health.                                                                                                                                                                                  |
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| (39) | <b>Pre-pandemic trajectories of depressive symptomatology and their relation to depression during the COVID-19 pandemic...</b>            | 2023 | Longitudinal | 3,925 English older adults (50+) from ELSA waves 4–9 (2008–2009 to 2018–2019), with depression assessed again in June/Nov 2020. | Investigate how long-term depression trajectories before COVID-19 relate to depression risks during the pandemic.    | Group-based trajectory modeling identified distinct elevated depressive symptom patterns pre-pandemic, then logistic models tested pandemic depression outcomes. | <b>CES-D</b> (ELSA standard) over multiple waves; group-based trajectory modeling (GBTM), then pandemic follow-up of depression in 2020.         | Four classes: Long-lasting EDS (5%), Increasing EDS (8%), Decreasing EDS (10%), Absence of EDS (77%). Those with persistent or increasing EDS pre-pandemic were likelier to be depressed during COVID-19. Frequency of prior EDS was more predictive than how recently it occurred. | Knowing an older adult's pre-pandemic depression trajectory (especially if persistent/increasing) is key to identifying those at higher risk during crises like COVID-19.                                 |
| (29) | <b>Heterogeneity in the trajectories of depressive symptoms among elderly adults in rural China: The role of housing characteristics.</b> | 2020 | Longitudinal | 1,984 individuals aged 45+ in rural China from the 2011 baseline of CHARLS (growth mixture modeling).                           | Analyze how rural housing and living conditions influence varying depression trajectories among older adults.        | Panel data from CHARLS (multiple waves) with growth mixture modeling to identify trajectory classes.                                                             | <b>CHARLS</b> depression measure (adapted from CES-D); housing/living arrangement variables; growth mixture modeling of depression trajectories. | Stable high-quality multi-story housing correlated with remaining in a low depression trajectory class. Home ownership and space were less relevant, but multi-story environment had psychosocial benefits in rural China.                                                          | The built environment in rural contexts can affect mental health through specific social/psychological mechanisms. Interventions may need to address housing quality to reduce long-term depression risk. |
| (45) | <b>Late-life depressive symptoms: prediction models of change.</b>                                                                        | 2013 | Longitudinal | 7,882 community-dwelling elderly ( $\geq 60$ ), baseline + 2 more assessments (attrition 29.4%).                                | Determine predictors of change in depressive symptoms among older adults with/without significant baseline symptoms. | Longitudinal design with a 30-item Geriatric Depression Scale (cutoff $\geq 11$ for "significant" depression). Analyzed changes over time.                       | <b>Geriatric Depression Scale (GDS-30)</b> (cutoff $\geq 11$ ). Stratified analyses for those with/without baseline significant symptoms.        | Overall downward trend in depressive symptoms. Among those initially depressed, social support, chronic pain, and locus of control strongly influenced changes. Among non-depressed, anxiety and                                                                                    | Highlights nuanced factors influencing depressive symptom changes, depending on baseline status (significant vs. non-significant depression).                                                             |

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|      |                                                                                                                                  |      |              |                                                                                                                                  |                                                                                                                                              |                                                                                                                                              |                                                                                                                                | locus of control were strongest predictors.                                                                                                                                                                                                 |                                                                                                                                                                                                       |
| (35) | <b>Predictors of longer-term depression trajectories during the COVID-19 pandemic: a longitudinal study in four UK cohorts.</b>  | 2022 | Longitudinal | 16,978 participants aged ~20, 30, 50, 62 at baseline from four UK cohorts (Millennium Cohort, Next Steps, British Cohort, NCDS). | Examine individual trajectories of depressive symptoms from May 2020 to early 2021, across different age cohorts, and identify risk factors. | Three-wave data collection (May 2020, Sep/Oct 2020, Feb/Mar 2021). Depressive symptoms measured by self-report questionnaires (unspecified). | Self-reported depression scales (not named) repeated in 3 waves; multi-cohort analysis controlling for baseline mental health. | Depression was higher in younger groups; overall stable from May–Autumn 2020 but rose by Spring 2021. Loneliness was the strongest predictor. Pre-pandemic mental health issues, long-term illness also associated with increased symptoms. | Fostering social connection is key; social distancing compliance didn't predict depression changes, but loneliness did. Strategies to address isolation may reduce worsening mental health in crises. |
| (30) | <b>Instrumental support primarily provided by adult children and trajectories of depressive symptoms among older adults...</b>   | 2023 | Longitudinal | 1,466 older adults (≥60) with disabilities in rural China, from 3 waves of CHARLS (2011–2015).                                   | Analyze 5-year depressive symptom trajectories in disabled older adults, focusing on duration of instrumental support from adult children.   | Repeated measures of depression in CHARLS; instrumental support coded by how many waves participants received help from children.            | <b>CES-D</b> from CHARLS (3 waves); measure of instrumental support from adult children; longitudinal trajectory analysis.     | Two main trajectories: high-but-decreasing and persistently low. Longer-term child-provided support was associated with elevated but decreasing symptoms over time.                                                                         | Family support (particularly from children) in rural areas influences depression trajectories of older disabled adults. However, formal long-term care programs remain scarce in rural China.         |
| (25) | <b>Using digital platform for physical activity practice attenuated the trajectory of depressive symptoms... (PAMPA cohort).</b> | 2023 | Longitudinal | 663 adults from the PAMPA cohort (southern Brazil), baseline in June–July 2020 + two follow-ups (6-month intervals).             | Examine how physical activity (in-person vs. digital) correlates with incidence of self-reported depression diagnoses during COVID-19.       | Online self-administered questionnaire about depression diagnosis, physical activity habits, at baseline and follow-ups.                     | Self-report of clinical depression diagnosis. PA measured in minutes/week. Incidence rates tracked over 2 follow-up points.    | 21.8% were diagnosed with depression over follow-up. Inactive participants had the highest incidence; even insufficient PA (<150min/week) reduced incidence compared to no PA. Doing PA both indoors and outdoors was protective.           | Any level of physical activity lowered depression incidence vs. inactivity. Digital platforms for PA might help mitigate depressive symptom trajectories in pandemic contexts.                        |

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| (19) | <b>The longitudinal relationship between mental health disorders and chronic disease for older adults: a population-based study.</b> | 2017 | Longitudinal | 86,000 older adults (≥65) from Kaohsiung City, Taiwan, completing 6 waves of research interviews. | Investigate changes in mental disorders and chronic diseases over time, and their reciprocal interrelationship. | 6-wave data; mental health disorders scored via Short Psychiatric Assessment Schedule; chronic illness recorded every 2 years. Autoregressive latent trajectory + parallel LGCM. | Short Psychiatric Assessment Schedule | Pre-existing mental health disorders predispose to more chronic diseases, and vice versa, in a reciprocal relationship. Monitoring/treating both is crucial to improve overall health and life quality. | <b>Short Psychiatric Assessment Schedule</b> for mental health disorders; repeated measures every 2 years to track interplay with chronic illnesses. |
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**Table 2.** Systematic Overview of the Bibliographic Corpus.

| Ref  | Year | Study Design    | Sample Size (Population)                                                | Setting/Country     | Type of Depression                                | Diagnosis Method                                                      |
|------|------|-----------------|-------------------------------------------------------------------------|---------------------|---------------------------------------------------|-----------------------------------------------------------------------|
| (51) | 2021 | Longitudinal    | >3,000 community-dwelling adults (≥60 years)                            | Ireland             | Depressive symptoms (clinically significant)      | CES-D (cutoff ≥9)                                                     |
| (23) | 2022 | Longitudinal    | 5,025 middle-aged/older adults (mean age = 57)                          | China               | Depressive symptoms                               | 10-item CES-D (CHARLS)                                                |
| (50) | 2014 | Longitudinal    | 341 Canadians (25-year follow-up, starting at age 18)                   | Canada              | Depressive symptoms                               | Self-reported mental health scales (no single named scale)            |
| (28) | 2019 | Longitudinal    | 2,639 rural/remote residents (5-year study)                             | Australia           | Depressive symptoms (including “moderate/severe”) | PHQ-9                                                                 |
| (52) | 2018 | Longitudinal    | 593 primary care patients with depressive symptoms (diamond study)      | Australia           | Depressive symptoms                               | PHQ-9                                                                 |
| (17) | 2021 | Cross Sectional | ~138,000 adults (ages 45–95) from national cohorts in three regions     | Canada, Europe, USA | Depressive symptoms                               | CES-D (Canada/US), EURO-D (Europe)                                    |
| (27) | 2016 | Longitudinal    | 9,645 adults (≥20 years) from the Korean Welfare Panel Study (KOWEPS)   | South Korea         | Depressive symptoms                               | CES-D 11                                                              |
| (42) | 2021 | Longitudinal    | 3,983 older adults (≥65) from the Korean Health Panel Study (2008–2015) | South Korea         | Depressive symptoms (various trajectories)        | Depression score from Korean Health Panel (exact scale not specified) |
| (20) | 2020 | Longitudinal    | 11,457 adults (≥45) from CHARLS (2011–2015)                             | China               | Depressive symptoms                               | CHARLS standard (CES-D type, unspecified)                             |

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| (36) | 2023 | Longitudinal    | 3,931 Italian adults, 4-wave panel (COVID-19 period)                                   | Italy          | Depressive, anxiety, and stress symptoms     | Standardized questionnaires (names not cited)                       |
| (24) | 2023 | Longitudinal    | 54,818 adults (≥50) from the Survey of Health, Ageing and Retirement in Europe (SHARE) | Europe         | Depressive symptoms / well-being             | Validated scales in SHARE (names not specified)                     |
| (18) | 2022 | Longitudinal    | 9,264 middle-aged/older adults (CHARLS, 2011–2018)                                     | China          | Depressive symptoms                          | CES-D or adapted version in CHARLS                                  |
| (16) | 2023 | Cross Sectional | 19,761 adults (≥45) from CHARLS 2018                                                   | China          | Depressive symptoms                          | Self-reported (single-wave data), CHARLS                            |
| (22) | 2022 | Longitudinal    | 7,810 adults (≥50) from HRS, free of dementia/CHD/stroke at baseline                   | USA            | Depressive symptoms (mild, persistent, etc.) | CES-D (HRS)                                                         |
| (15) | 2023 | Longitudinal    | US adults from HRS (1994–2016), multiple birth cohorts                                 | USA            | Depressive symptoms                          | CES-D (HRS)                                                         |
| (32) | 2023 | Longitudinal    | 5,501 Italian adults in follow-up (baseline n=18,147), web survey (2020 & 2021)        | Italy          | Depression, anxiety, PTSD-stress symptoms    | Validated scales (names not specified)                              |
| (44) | 2022 | Longitudinal    | 2,016 older adults (≥65) from the Korean Longitudinal Study of Aging (2006–2016)       | South Korea    | Depressive symptoms                          | Likely a scale similar to CES-D (KLoSA), exact name not specified   |
| (48) | 2022 | Cross Sectional | 88,675 Canadians (≥65) from 11 national surveys (1994–2014)                            | Canada         | Depression                                   | CIDI-SF (Composite International Diagnostic Interview – Short Form) |
| (41) | 2023 | Longitudinal    | 7,890 middle-aged/older adults (HRS 2006–2018)                                         | USA            | Depressive symptoms                          | CES-D (HRS)                                                         |
| (26) | 2022 | Longitudinal    | 3,617 US adults (≥25) from Americans' Changing Lives (1986–2011)                       | USA            | Persistent vs. normative depressive symptoms | 11-item CES-D (abbreviated)                                         |
| (14) | 2022 | Longitudinal    | 2,927 Chilean adults (18–75), with focus on ages 56–65 and 66–75                       | Chile          | Depressive symptoms                          | Self-reported scale (no specific name)                              |
| (39) | 2023 | Longitudinal    | 3,925 older English adults (≥50) from ELSA (2008–2019), reassessed during 2020         | England        | Elevated Depressive Symptoms (EDS)           | CES-D (ELSA)                                                        |
| (29) | 2020 | Longitudinal    | 1,984 older adults (≥45) in rural China (CHARLS, baseline 2011)                        | China          | Depressive symptoms                          | CHARLS (CES-D-based scale)                                          |
| (45) | 2013 | Longitudinal    | 7,882 older adults (≥60) in three assessments (29.4% attrition)                        |                | Late-life depression                         | Geriatric Depression Scale (GDS-30, cutoff ≥11)                     |
| (35) | 2022 | Longitudinal    | 16,978 participants across 4 UK cohorts (ages ~20, 30, 50, 62)                         | United Kingdom | Depressive symptoms                          | Self-reported questionnaires (unnamed)                              |

|             |      |              |                                                                              |        |                                                |                                                |
|-------------|------|--------------|------------------------------------------------------------------------------|--------|------------------------------------------------|------------------------------------------------|
| <b>(30)</b> | 2023 | Longitudinal | 1,466 older adults (≥60) with disabilities in rural China (CHARLS 2011–2015) | China  | Depressive symptoms                            | CES-D (CHARLS)                                 |
| <b>(25)</b> | 2023 | Longitudinal | 663 adults (PAMPA cohort, southern Brazil)                                   | Brazil | Self-reported diagnosed depression             | Single question about prior clinical diagnosis |
| <b>(19)</b> | 2017 | Longitudinal | 86,000 older adults (≥65) from Kaohsiung City, Taiwan (6 waves)              | Taiwan | Mental health disorders (including depression) | Short Psychiatric Assessment Schedule          |