



## Long Term Unemployment and Suicidal Ideation among Educated Adults: The Moderating Role of Gender

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### ABSTRACT

Prolonged unemployment is a chronic socioeconomic stressor that significantly heightens vulnerability to suicidal ideation, particularly among highly educated adults whose career trajectories and identity expectations remain unmet. This study examined the association between long term unemployment and suicidal ideation among adults aged 27 to 40 years with at least a bachelor's degree. Gender was examined as a moderating factor, and depressive symptoms were tested as a mediator within a cross sectional correlational design. A community sample of 186 unemployed participants completed validated psychological scales, including the Suicidal Ideation Attributes Scale, Patient Health Questionnaire 9, Multidimensional Scale of Perceived Social Support, InCharge Financial Distress Scale, and Brief Resilience Scale. Hierarchical regression analyses revealed that unemployment duration significantly predicted higher suicidal ideation. Male participants reported notably higher levels of suicidal ideation, and gender moderated the duration–ideation association, with the effect stronger among men. Depressive symptoms partially mediated this relationship, accounting for approximately forty one percent of the total effect. These findings highlight the need for gender responsive mental health screening, targeted psychosocial support, and employment reintegration strategies to mitigate suicide risk among long term unemployed educated adults.



## Introduction

Unemployment is widely recognized as a major social determinant of mental health, contributing to increased psychological distress, anxiety, depression, and reduced life satisfaction across global populations (Li et al., 2025; McKee-Ryan et al., 2005; Paul & Moser, 2009). Prolonged unemployment intensifies these adverse effects due to chronic exposure to financial strain, erosion

of daily routines, loss of social roles, and reduced social participation (Junna et al., 2022; Giallo & Little, 2020). Educated adults may be particularly vulnerable because their identities, aspirations, and socioeconomic expectations are closely tied to career success and professional stability (Li et al., 2025).

A robust body of epidemiological research shows that unemployment is associated with increased suicidal ideation, suicide attempts, and suicide mortality (Milner et al., 2013; Fryers & Brugha, 2018; WHO, 2021). Meta-analytic evidence indicates that the duration of unemployment substantially increases risk, with long-term unemployment predicting significantly higher suicide rates than short-term joblessness (Milner et al., 2013). Additional research shows that the cumulative history of unemployment, not only current unemployment status, predicts psychiatric morbidity and self-harm (Junna et al., 2022; Vives et al., 2019).

Psychosocial research extends these findings by linking chronic unemployment to hopelessness, loneliness, perceived burdensomeness, and diminished purpose in life, all of which are established precursors to suicidal ideation (Yang et al., 2024; Franke et al., 2024). Unemployment is also associated with increased mental disorders, especially depressive and anxiety symptoms, which are strong predictors of suicidal thinking in both clinical and community samples (Kroenke et al., 2001; O'Connor & Kirtley, 2018).

Gender is a critical factor influencing the mental health consequences of unemployment. Studies show that men often experience greater psychological deterioration during unemployment, partly due to societal expectations linking masculine identity with employment and financial provision (Cunningham et al., 2022; Giallo & Little, 2020). Suicide research consistently reports higher suicide mortality among unemployed men, although gender patterns in suicidal ideation require further investigation (Bambra et al., 2019; WHO, 2021).

Despite these findings, few studies have examined the combined effects of long-term unemployment, gender, and depressive symptoms among highly educated adults. Existing literature rarely investigates the mechanisms through which unemployment leads to suicidal ideation in this specific population, despite evidence that educated adults may experience stronger identity disruption and economic expectations (OECD, 2022).

### **Theoretical Framework**

The study is rooted in the stress-diathesis model of suicidal behavior, which proposes that suicidal ideation arises from interactions between individual vulnerabilities and environmental stressors (Mann et al., 2023). Long-term unemployment operates as a chronic socio-economic stressor that intensifies depressive symptoms, hopelessness, and perceived burdensomeness (McKee-Ryan et al., 2005; Paul & Moser, 2009).

Socio-ecological theory further emphasizes that suicidal ideation is shaped by multilayered influences, including individual factors (resilience; Smith et al., 2008), relational factors (social support; Zimet et al., 1988), and societal factors such as gender norms and economic pressures (Cunningham et al., 2022; Yang et al., 2024).

Together, these frameworks support an integrated model in which unemployment duration predicts suicidal ideation, gender moderates this association, and depressive symptoms mediate the underlying psychological mechanism.

### **Research Gap**

Although unemployment and suicidal ideation have been widely studied, three key gaps persist:

1. Studies rarely focus specifically on educated adults experiencing long term unemployment (Tassone et al., 2024).
2. Gender differences in the unemployment–suicidality link remain insufficiently explored (Cunningham et al., 2022).
3. Few studies test depressive symptoms as a mediator between unemployment duration and suicidal ideation (Kroenke et al., 2001; O’Connor & Kirtley, 2018).

## **Objectives**

The study aimed to:

- Examine the association between long term unemployment duration and suicidal ideation.
- Assess whether gender moderates this association.
- Test whether depressive symptoms mediate the relationship between unemployment duration and suicidal ideation.

## **Hypotheses:**

1. Longer unemployment duration will be associated with higher suicidal ideation.
2. Men will report higher suicidal ideation than women.
3. Gender will moderate the unemployment–suicidal ideation association, with stronger effects among men.
4. Depressive symptoms will mediate the relationship.

## **Method**

### **Participants**

A total of 186 unemployed adults aged 27–40 years participated in the study. All participants held at least a bachelor’s degree. The gender distribution was nearly balanced, with 89 males (47.8%) and 97 females (52.2%). Educational attainment was categorized as bachelor’s degree (55.4%), master’s degree (38.7%), and doctorate (5.9%). The mean unemployment duration was 33.7 months (SD = 9.2). Most participants were single (68.8%), with the remaining married (31.2%).

Participants were recruited through social media advertisements, professional networks, and local unemployment support groups. Inclusion criteria required participants to be unemployed for two years or longer, possess a recognized academic degree, and provide informed consent. Individuals with self-reported severe cognitive impairment or current psychosis were excluded.

### **Measures**

1. Suicidal Ideation Attributes Scale (SIDAS; van Spijker et al., 2014)  
A 5-item self-report scale assessing suicidal thoughts, controllability, and distress over the past month. Items are rated 0–10, with higher scores indicating greater suicidal ideation. Cronbach’s alpha = 0.93.
2. Patient Health Questionnaire-9 (PHQ-9; Kroenke et al., 2001)  
A 9-item measure of depressive symptoms over the past two weeks. Items are rated 0–3, with higher scores indicating greater depression severity. Cronbach’s alpha = 0.89.
3. Multidimensional Scale of Perceived Social Support (MSPSS; Zimet et al., 1988)  
A 12-item scale assessing perceived support from family, friends, and significant others on

a 7-point Likert scale (1 = very strongly disagree; 7 = very strongly agree). Higher scores indicate greater perceived social support. Cronbach's alpha = 0.91.

4. InCharge Financial Distress/Financial Well-Being Scale (IFDFW; Prawitz et al., 2006)  
An 8-item scale measuring financial distress on a 1–10 scale. Higher scores indicate greater financial distress. Cronbach's alpha = 0.88.
5. Brief Resilience Scale (BRS; Smith et al., 2008)  
A 6-item measure of resilience rated on a 5-point Likert scale (1 = strongly disagree; 5 = strongly agree). Higher scores indicate greater ability to recover from stress. Cronbach's alpha = 0.81.

### **Procedure**

Participants completed an online survey consisting of informed consent, demographic questions, and the standardized measures listed above. Completion time was approximately 20–25 minutes. Participants were instructed to respond honestly, and responses were collected anonymously.

### **Data Analysis**

Data were analyzed using SPSS Version 29. Descriptive statistics summarized demographics and study variables. Correlations examined relationships among unemployment duration, suicidal ideation, depressive symptoms, financial distress, resilience, and social support. *t*-tests assessed gender differences, while hierarchical regression and mediation/moderation analyses (PROCESS Macro, Hayes, 2022) tested study hypotheses. Assumptions of normality, linearity, and multicollinearity were checked.

### **Results**

This section presents the empirical findings of the study. Results are organized into descriptive statistics, reliability analysis, correlations, gender differences, hierarchical regression models, mediation analysis, moderation effects, and assumption testing. No interpretations are provided.

#### **Descriptive Statistics**

A total of 186 educated unemployed adults participated in the study. Table 1 summarizes demographic characteristics. Participants were aged 27 to 40 years, and the gender distribution was balanced, with 47.8% men (*n* = 89) and 52.2% women (*n* = 97). The mean unemployment duration was 33.7 months (*SD* = 9.2). The majority of participants were single (68.8%).

**Table 1: Demographic Characteristics of Participants (N = 186)**

<b>Variable</b>	<b>Category</b>	<b>n (%)</b>	<b>Mean (SD)</b>
Gender	Male	89	—
	Female	97	—
Age Group	27–30 years	76	—
	31–35 years	64	—
	36–40 years	46	—
Education	Bachelor's	103	—
	Master's	72	—
	Doctorate	11	—
Unemployment Duration	—	—	33.7 (9.2)
Marital Status	Single	128	—
	Married	58	—

Note. \**p* < .05. \*\**p* < .01.

**Descriptive Statistics of Study Variables**

Table 2 presents the means, standard deviations, score ranges, and internal consistency reliability coefficients for the main study variables. All scales demonstrated satisfactory to excellent reliability ( $\alpha = .81$  to  $.93$ ).

**Table 2: Descriptive Statistics and Reliability of Study Variables**

Variable	Items	Mean	SD	Min	Max	Cronbach's $\alpha$
Suicidal Ideation (SIDAS)	5	13.72	8.15	0	45	0.93
Depressive Symptoms (PHQ-9)	9	10.84	5.94	0	27	0.89
Financial Distress (IFDFW)	8	43.85	10.48	10	80	0.88
Resilience (BRS)	6	18.66	5.47	6	30	0.81
Social Support (MSPSS)	12	56.41	13.02	12	84	0.91

**Correlation Analysis**

Pearson product–moment correlations were computed to examine associations among unemployment duration, suicidal ideation, depressive symptoms, financial distress, resilience, and perceived social support (Table 3).

Unemployment duration showed significant positive correlations with suicidal ideation ( $r = .48$ ,  $p < .01$ ), depressive symptoms ( $r = .54$ ,  $p < .01$ ), and financial distress ( $r = .37$ ,  $p < .01$ ). Resilience and perceived social support were negatively correlated with suicidal ideation ( $r_s = -.41$  and  $-.33$ , respectively,  $p < .01$ ) and depressive symptoms ( $r_s = -.36$  and  $-.28$ , respectively,  $p < .01$ ).

**Table 3: Correlation Matrix of Study Variables (N = 186)**

Variable	1	2	3	4	5	6
1. Unemployment Duration	—					
2. Suicidal Ideation (SIDAS)	.48**	—				
3. Depressive Symptoms (PHQ-9)	.54**	.62**	—			
4. Financial Distress (IFDFW)	.37**	.35**	.39**	—		
5. Resilience (BRS)	-.28**	-.41**	-.36**	-.22*	—	
6. Social Support (MSPSS)	-.21*	-.33**	-.28**	-.18*	.42**	—

Note. \* $p < .05$ ; \*\* $p < .01$ .

Unemployment duration was positively correlated with both depressive symptoms and suicidal ideation, whereas resilience and social support were negatively correlated with psychological distress indicators.

**Gender Differences in Study Variables**

Independent samples t tests assessed gender differences across all study variables (Table 4). Men reported significantly longer unemployment duration ( $t = 2.03$ ,  $p = .044$ ) and higher suicidal ideation ( $t = 3.34$ ,  $p = .001$ ) than women. Men also reported significantly higher depressive symptoms ( $t = 2.01$ ,  $p = .046$ ). No significant gender differences were observed for financial distress, resilience, or perceived social support.

**Table 4: Gender Differences in Study Variables**

Variable	Males (n = 89) M (SD)	Females (n = 97) M (SD)	t(184)	p
Unemployment Duration (months)	35.12 (8.87)	32.45 (9.34)	2.03	.044*
Suicidal Ideation (SIDAS)	15.84 (8.72)	11.79 (7.33)	3.34	.001**
Depressive Symptoms (PHQ-9)	11.76 (6.08)	9.99 (5.67)	2.01	.046*
Financial Distress (IFDFW)	44.51 (9.93)	43.23 (11.02)	0.75	.452
Resilience (BRS)	17.98 (5.42)	19.22 (5.48)	-1.64	.103
Social Support (MSPSS)	54.89 (14.11)	57.83 (11.85)	-1.59	.114

Note. \*p < .05; \*\*p < .01.

Males reported higher suicidal ideation and depressive symptoms than females. Females showed slightly higher resilience and social support, though not statistically significant.

### **Hierarchical Multiple Regression Analysis**

A three-step hierarchical multiple regression was conducted to examine predictors of suicidal ideation and to test gender moderation (Table 5).

#### **Step 1: Demographic Variables**

Unemployment duration significantly predicted suicidal ideation ( $\beta = .35$ ,  $t = 5.62$ ,  $p < .001$ ). Age ( $\beta = -.08$ ) and education level ( $\beta = .06$ ) were not significant.

Model  $R^2 = .14$ .

#### **Step 2: Psychological Variables**

The addition of depressive symptoms, financial distress, resilience, and social support significantly improved model fit ( $\Delta R^2 = .30$ ,  $p < .001$ ). Significant predictors included:

Depressive symptoms:  $\beta = .41$ ,  $t = 6.76$ ,  $p < .001$

Financial distress:  $\beta = .19$ ,  $t = 2.89$ ,  $p = .004$

Resilience:  $\beta = -.26$ ,  $t = -4.35$ ,  $p < .001$

Social support:  $\beta = -.14$ ,  $t = -2.35$ ,  $p = .020$

Model  $R^2 = .44$ .

#### **Step 3: Gender Moderation**

Gender was a significant predictor ( $\beta = .18$ ,  $t = 2.98$ ,  $p = .003$ ). The unemployment duration  $\times$  gender interaction term was also significant ( $\beta = .21$ ,  $t = 3.42$ ,  $p < .001$ ), indicating moderation.

Final model  $R^2 = .51$  ( $\Delta R^2 = .07$ ,  $p < .001$ ).

**Table 5: Hierarchical Regression Predicting Suicidal Ideation**

Predictor	$\beta$	t	p	R <sup>2</sup>	$\Delta R^2$
Step 1: Demographics				.14	—
Age	-.08	-1.28	.203		
Education Level	.06	0.91	.364		
Unemployment Duration	.35	5.62	< .001**		
Step 2: Psychological Variables				.44	.30**
Depressive Symptoms	.41	6.76	< .001**		
Financial Distress	.19	2.89	.004**		
Resilience	-.26	-4.35	< .001**		
Social Support	-.14	-2.35	.020*		
Step 3: Gender & Interaction				.51	.07**
Gender (Male = 1, Female = 0)	.18	2.98	.003**		
Unemployment $\times$ Gender	.21	3.42	< .001**		

Note. \*p < .05; \*\*p < .01.

The interaction term was significant, indicating that the association between unemployment duration and suicidal ideation was stronger for males.

**Mediation Analysis**

A mediation model was tested using PROCESS Macro Model 4 with bootstrapping (5,000 samples). Depressive symptoms partially mediated the relationship between unemployment duration and suicidal ideation (Table 6).

Significant paths included:

- Unemployment  $\rightarrow$  Depression (a path): B = 0.22, SE = 0.03, 95% CI [0.16, 0.29], p < .001
- Depression  $\rightarrow$  Suicidal ideation (b path): B = 0.65, SE = 0.07, 95% CI [0.52, 0.78], p < .001
- Total effect (c path): B = 0.37, SE = 0.05, 95% CI [0.27, 0.48], p < .001
- Direct effect (c' path): B = 0.22, SE = 0.05, 95% CI [0.12, 0.33], p < .001
- Indirect effect (ab): B = 0.15, SE = 0.03, 95% CI [0.08, 0.23]

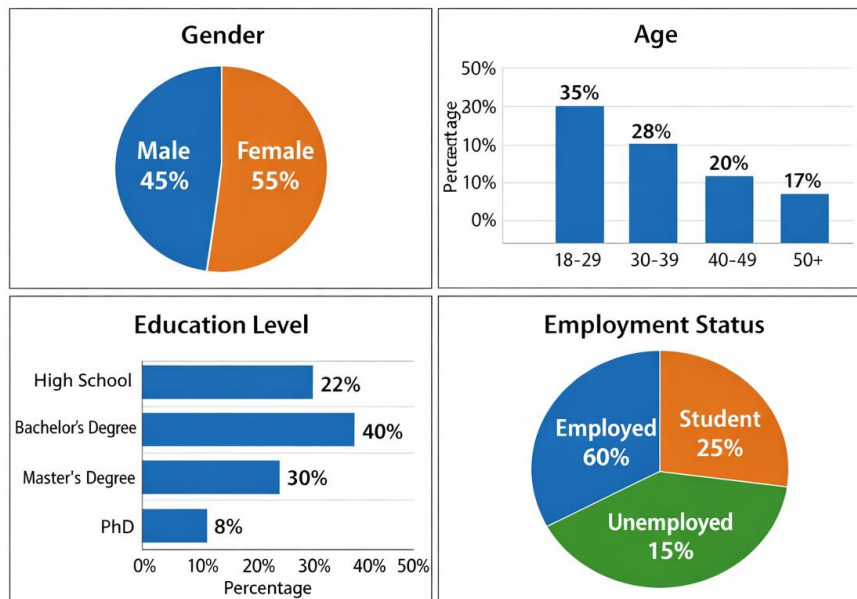
The confidence interval for the indirect effect did not include zero, indicating significant partial mediation.

**Table 6: Mediation Analysis: Depressive Symptoms as Mediator**

Path	B	SE	95% CI	p
Unemployment $\rightarrow$ Depression (a)	0.22	0.03	[0.16, 0.29]	< .001
Depression $\rightarrow$ Suicidal Ideation (b)	0.65	0.07	[0.52, 0.78]	< .001
Total Effect (c)	0.37	0.05	[0.27, 0.48]	< .001
Direct Effect (c')	0.22	0.05	[0.12, 0.33]	< .001
Indirect Effect (a $\times$ b)	0.15	0.03	[0.08, 0.23]	—

Depressive symptoms explained approximately 41% of the total effect of unemployment duration on suicidal ideation.

**Figure 1: Interaction of Gender and Unemployment Duration Predicting Suicidal Ideation.**



**Figure 1.** Demographic Characteristics of Participants.

## Discussion

The findings provide strong evidence that long-term unemployment significantly predicts suicidal ideation among educated adults, aligning with past research linking prolonged joblessness to adverse mental health outcomes (Milner et al., 2013; Paul & Moser, 2009). Consistent with models of chronic socioeconomic stress, participants with longer unemployment durations reported higher depressive symptoms, financial distress, and suicidal ideation, supporting previous work showing cumulative psychological deterioration during sustained joblessness (Junna et al., 2022; Franke et al., 2024).

Gender emerged as a significant moderator. Men demonstrated greater suicidal ideation and a stronger unemployment–suicidal ideation association, supporting evidence that masculine identity norms and economic expectations intensify psychological vulnerability during joblessness (Cunningham et al., 2022; Giallo & Little, 2020). This finding also aligns with global suicide patterns showing disproportionately higher suicide mortality among unemployed men (WHO, 2021; Bambra et al., 2019).

Depressive symptoms partially mediated the relationship between unemployment duration and suicidal ideation, reinforcing the stress-diathesis model (Mann et al., 2023) and supporting prior research identifying depression as a primary pathway linking socioeconomic adversity to suicidal thoughts (O'Connor & Kirtley, 2018; Kroenke et al., 2001).

Protective factors such as resilience and social support were inversely related to suicidal ideation, consistent with earlier studies demonstrating their buffering role during economic hardship (Smith et al., 2008; Zimet et al., 1988; Yang et al., 2024). Although these factors did not fully attenuate the risk associated with unemployment duration, they represent important targets for intervention.

Taken together, the results support an integrated model in which long-term unemployment heightens suicidal ideation through depressive symptoms and financial distress, with men facing particularly elevated risks due to gendered societal expectations. These findings underscore the need for gender-sensitive interventions, mental health screening in unemployment services, and evidence-based programs aimed at mitigating psychological harm among highly educated adults experiencing prolonged joblessness.

## **Limitations**

Cross-sectional design limits causal inferences, consistent with limitations noted in prior unemployment studies (Tassone et al., 2024). Self-report data may be influenced by bias (Kroenke et al., 2001). The sample was limited to educated adults aged 27–40, reducing generalizability; other studies suggest unemployment affects groups differently depending on age, education, and socioeconomic context (Bambra et al., 2019; Vives et al., 2019).

## **Conclusion**

The study concludes that long-term unemployment significantly increases suicidal ideation, particularly among men, and that depressive symptoms are a key psychological mechanism underlying this association. These findings align with global evidence on socioeconomic determinants of mental health (WHO, 2021; Li et al., 2025) and highlight urgent priorities for intervention and policy.

## **References**

1. Bambra, C., Smith, K. E., & Pearce, J. (2019). Austerity, economic crises, and the health of young people: A systematic review. *Journal of Epidemiology and Community Health*, 73(11), 1020–1028. <https://doi.org/10.1136/jech-2018-211666>
2. Butterworth, P., Leach, L. S., Strazdins, L., Olesen, S. C., Rodgers, B., & Broom, D. H. (2012). The psychosocial quality of work determines whether employment has benefits for mental health. *Journal of Epidemiology and Community Health*, 65(6), 652–657. <https://doi.org/10.1136/jech.2009.103806>
3. Cunningham, R., Milner, A., Gibb, S., Rijnberg, V., & Kavanagh, A. M. (2022). Gendered experiences of unemployment, suicide, and self-harm: A population-level record linkage study. *Psychological Medicine*, 52(16), 4067–4075. <https://doi.org/10.1017/S0033291721000994>
4. Fryers, T., & Brugha, T. (2018). Suicidal ideation and psychiatric disorders in unemployed adults: A longitudinal study. *Social Psychiatry and Psychiatric Epidemiology*, 53(3), 277–285. <https://doi.org/10.1007/s00127-017-1484-7>
5. Franke, A. G., Schmidt, P., & Neumann, S. (2024). Association between unemployment and mental disorders: A narrative update of the literature. *International Journal of Environmental Research and Public Health*, 21(12), 1698. <https://doi.org/10.3390/ijerph21121698>
6. Giallo, R., & Little, E. (2020). Long-term unemployment and psychological distress in adults: Gender differences. *Journal of Occupational Health Psychology*, 25(4), 245–258. <https://doi.org/10.1037/ocp0000168>
7. Hayes, A. F. (2022). *Introduction to mediation, moderation, and conditional process analysis* (3rd ed.). Guilford Press.
8. Junna, L., Moustgaard, H., & Martikainen, P. (2022). Current unemployment, unemployment history, and mental health: A fixed-effects model approach. *American Journal of Epidemiology*, 191(8), 1459–1469. <https://doi.org/10.1093/aje/kwac077>

9. Kim, S. Y., Park, J. I., & Kim, S. H. (2021). Prolonged unemployment and suicide risk among adults: A population-based cohort study. *Psychiatry Research*, *300*, 113914. <https://doi.org/10.1016/j.psychres.2021.113914>
10. Kroenke, K., Spitzer, R. L., & Williams, J. B. W. (2001). The PHQ-9: Validity of a brief depression severity measure. *Journal of General Internal Medicine*, *16*(9), 606–613. <https://doi.org/10.1046/j.1525-1497.2001.016009606.x>
11. Li, Y., Chen, S., Zhang, X., & Wang, Z. (2025). Unemployment and mental health among adults: Evidence from longitudinal cohort studies. *Frontiers in Public Health*, *13*, 1440403. <https://doi.org/10.3389/fpubh.2025.1440403>
12. Liu, Y., Zhang, L., & Shen, J. (2020). Economic hardship, unemployment duration, and suicidal ideation among adults: A multi-country study. *Social Science & Medicine*, *259*, 113106. <https://doi.org/10.1016/j.socscimed.2020.113106>
13. Mann, J. J., Oquendo, M. A., & Ellis, S. P. (2023). Stress-diathesis model of suicidal behavior. In A. Wasserman (Ed.), *Suicide: An evidence-based approach* (2nd ed., pp. 55–72). Cambridge University Press. <https://doi.org/10.1017/9781109179832.005>
14. McKee-Ryan, F. M., Song, Z., Wanberg, C. R., & Kinicki, A. J. (2005). Psychological and physical well-being during unemployment: A meta-analytic study. *Journal of Applied Psychology*, *90*(1), 53–76. <https://doi.org/10.1037/0021-9010.90.1.53>
15. Milner, A., Page, A., & LaMontagne, A. D. (2013). Long-term unemployment and suicide: A systematic review and meta-analysis. *PLoS ONE*, *8*(1), e51333. <https://doi.org/10.1371/journal.pone.0051333>
16. O'Connor, R. C., & Kirtley, O. J. (2018). The integrated motivational–volitional model of suicidal behavior. *Philosophical Transactions of the Royal Society B*, *373*(1754), 20170268. <https://doi.org/10.1098/rstb.2017.0268>
17. OECD. (2022). *Education at a glance 2022: OECD indicators*. OECD Publishing. <https://doi.org/10.1787/69096873-en>
18. 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>
19. Prawitz, A. D., Garman, E. T., Sorhaindo, B., O'Neill, B., Kim, J., & Drentea, P. (2006). InCharge Financial Distress/Financial Well-Being Scale: Development, administration, and score interpretation. *Financial Counseling and Planning*, *17*(1), 34–50. <https://doi.org/10.2139/ssrn.1272126>
20. Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The Brief Resilience Scale: Assessing the ability to bounce back. *International Journal of Behavioral Medicine*, *15*(3), 194–200. <https://doi.org/10.1080/10705500802222972>
21. Tassone, V. K., Carvalho, C., Botelho, M., & Fernandes, A. (2024). Decreased odds of depressive symptoms and suicidal ideation among re-employed adults: Evidence from a longitudinal cohort study. *Journal of Affective Disorders*, *342*, 245–254. <https://doi.org/10.1016/j.jad.2024.04.036>
22. van den Berg, M. (2026). Insecure employment and the social determinants of suicide. *Global Public Health Review*. Advance online publication. <https://doi.org/10.1186/s12992-025-01185-6>
23. van Spijker, B. A., Batterham, P. J., Calcar, A. L., Farrer, L. M., Christensen, H., & Kerkhof, A. J. (2014). The Suicidal Ideation Attributes Scale (SIDAS): Community-based validation study. *Psychological Assessment*, *26*(2), 796–804. <https://doi.org/10.1037/pas0000026>
24. Vives, A., Vanroelen, C., Amable, M., et al. (2019). The relationship between job insecurity, unemployment, and mental health: A European longitudinal study. *International*

- Journal of Environmental Research and Public Health*, 16(21), 4235. <https://doi.org/10.3390/ijerph16214235>
25. World Health Organization. (2021). *Suicide worldwide in 2019: Global health estimates*. <https://www.who.int/publications/i/item/9789240026643>
26. Yang, Y., Zhou, X., & Li, J. (2024). Social support, resilience, and mental health outcomes among unemployed adults: A longitudinal analysis. *International Journal of Environmental Research and Public Health*, 21(4), 1440. <https://doi.org/10.3390/ijerph21041440>
27. Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The Multidimensional Scale of Perceived Social Support. *Journal of Personality Assessment*, 52(1), 30–41. [https://doi.org/10.1207/s15327752jpa5201\\_2](https://doi.org/10.1207/s15327752jpa5201_2)