

Mental health literacy and resilience as predictors of psychological well-being among university students: The mediating role of perceived social support

Ulifa Rahma^{1*}

¹ Faculty of Psychology, Universitas Brawijaya, Malang, Jawa Timur, Indonesia

Received October 25, 2025 | Accepted December 26, 2025 | Published December 30, 2025

Abstract: This study aimed to examine the role of mental health literacy (MHL) and resilience in predicting psychological well-being (PWB) among university students, with perceived social support (PSS) as a mediating factor. A quantitative correlational design with mediation analysis was employed, involving 600 undergraduate students recruited through purposive sampling. Data were collected using validated self-report instruments, namely the Mental Health Literacy Questionnaire for Young Adults (MHLq), the Connor–Davidson Resilience Scale (CD-RISC), the Multidimensional Scale of Perceived Social Support (MSPSS), and the Psychological Well-Being Scale (PWB). Mediation modeling was conducted in JASP using linear regression and bootstrapped indirect effect testing. The results showed that both MHL and resilience significantly and positively predicted PWB, with resilience emerging as the stronger predictor. Moreover, PSS partially mediated the relationships between both predictors and PWB, although the indirect effect of MHL through PSS was relatively small. These findings highlight the importance of integrating psychoeducation on mental health literacy with resilience training and peer support systems in higher education. Theoretically, this study enriches the positive psychology framework by demonstrating the interplay between internal strengths and external supports in fostering student well-being.

Keywords: mental health literacy; resilience; psychological well-being; social support; university students



Copyright ©2025. The Authors. Published by Psikoislamika: Jurnal Psikologi dan Psikologi Islam. This is an open access article under the CC BY NC SA. Link: [Creative Commons — Attribution-NonCommercial-ShareAlike 4.0 International — CC BY-NC-SA 4.0](https://creativecommons.org/licenses/by-nc-sa/4.0/)

Introduction

Mental health issues among university students have increasingly gained global attention. Recent data indicate a rising prevalence of mental health problems within this population. International studies from 2022–2023 reported that approximately 30–40% of university students experienced mild to moderate symptoms of anxiety or depression, particularly during the transition to post-pandemic in-person learning (OECD, 2023). In Indonesia, local research conducted between 2022 and 2024 similarly confirmed high levels of academic stress, mental fatigue, and decreased psychological well-being among students due to academic pressure, economic uncertainty, and lifestyle changes. For instance, Pratiwi, Handayani, and Sutanto (2024) found that academic stress remains a significant issue among Indonesian students, largely

* Corresponding Author: Ulifa Rahma, email: ulifa.rahma@ub.ac.id, Faculty of Psychology, Universitas Brawijaya, Veteran Street 10-11, Ketawanggede, Malang, Jawa Timur 65145, Indonesia

driven by environmental factors and academic demands. Widiyawati et al. (2025) further revealed that about 50% of students experienced mental fatigue despite limited physical activity, suggesting cognitive exhaustion caused by academic stressors. Similarly, Siagian (2024) reported that participants of the *Merdeka Belajar Kampus Merdeka* (MBKM) program faced academic and social challenges that affected their psychological well-being.

As young adults, university students are in a developmental transition marked by high academic and social demands, making them more vulnerable to mental health problems that impact their overall well-being (Santrock, 2020). One important determinant of students' mental health is mental health literacy (MHL) the ability to understand, recognize, and seek help for mental health problems (Jorm, 2012). A high level of MHL enables students to proactively manage stress and psychological issues, thereby enhancing psychological well-being (PWB), which refers to individuals' ability to live optimally, including self-acceptance, positive relationships, and purpose in life (Ryff, 1989).

Resilience has also been recognized as a crucial predictor of psychological well-being besides MHL. It is defined as an individual's capacity to recover from adversity and adapt to life's challenges (Connor & Davidson, 2003). Empirical studies demonstrate that highly resilient students are better able to manage academic and social stressors, leading to greater well-being (Pidgeon et al., 2014). A meta-analysis by Hu et al. (2015) further supported a strong association between resilience and mental health outcomes.

Meanwhile, perceived social support (PSS) serves as an external protective factor that may mediate the relationship between MHL, resilience, and PWB. PSS refers to the degree to which individuals feel supported by family, friends, and significant others (Zimet et al., 1988). Social support has long been identified as a buffer against stress (Cohen & Wills, 1985). Studies by Hefner and Eisenberg (2009) and Lakey and Orehek (2011) confirmed that students with higher perceived social support exhibit better coping abilities and mental health outcomes.

Despite these findings, empirical studies examining the integrated effects of MHL, resilience, and PSS on PWB among Indonesian university students remain limited. Thus, this study aims to examine the mediating role of perceived social support in the relationships between mental health literacy, resilience, and psychological well-being among university students. The findings are expected to contribute theoretically by enriching the positive psychology and resilience frameworks, and practically by providing recommendations for psychoeducation programs and the strengthening of social support systems in universities to enhance students' psychological well-being.

Research Hypotheses:

- H1. Mental health literacy (MHL) positively predicts psychological well-being (PWB) among university students.
- H2. Resilience positively predicts psychological well-being (PWB) among university students.
- H3. Perceived social support (PSS) mediates the relationship between MHL and PWB.
- H4. Perceived social support (PSS) mediates the relationship between resilience and PWB.
- H5. The total effects of MHL and resilience on PWB are positive and significant, with resilience demonstrating a stronger contribution than MHL.

Method

This study adopted a quantitative correlational design with a cross-sectional approach to investigate the relationships among Mental Health Literacy (MHL), Resilience, Perceived Social Support (PSS), and Psychological Well-Being (PWB) in university students. The quantitative design was selected to enable objective evaluation of associations between variables through numerical data and statistical analyses. Data were collected at a single point in time using a structured self-report survey administered online. This design allowed for efficient measurement of multiple psychological constructs simultaneously and provided a snapshot of the interrelationships among the studied variables.

Operational Definitions of Variables

The independent variables in this study were Mental Health Literacy (MHL) and Resilience. Mental Health Literacy (X_1) was defined as the ability of individuals to obtain, understand, and apply information related to mental health, including recognition of symptoms, preventive strategies, and help-seeking behaviors. It reflects both cognitive understanding and behavioral competence that contribute to maintaining and promoting mental well-being. Resilience (X_2) was conceptualized as the capacity to recover, adapt, and grow positively following stress or adversity, representing internal strength, coping ability, and flexibility in managing psychological challenges.

Perceived Social Support (PSS) served as the mediating variable. It referred to the perception of being valued, cared for, and supported by family, friends, and significant others. This construct encompassed both emotional and instrumental aspects of support perceived as available and reliable. In the present study, PSS was hypothesized to mediate the relationship between mental health literacy, resilience, and psychological well-being.

The dependent variable was Psychological Well-Being (PWB), which represented optimal psychological functioning, life satisfaction, and personal growth. PWB was operationalized through six dimensions: self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth. Higher scores indicated greater levels of psychological well-being.

Population and Sample

The population comprised active undergraduate students enrolled at public and private universities across Indonesia. The sample was determined using G*Power 3.1 for multiple regression with three predictors (MHL, resilience, and PSS), with $\alpha = .05$, power = .80, and medium effect size ($f^2 = 0.15$). The minimum required sample size was 77 participants, but 600 respondents were obtained to ensure adequate statistical power. Participants aged between 18–25 years were selected using purposive sampling, meeting the inclusion criteria of being active undergraduate students and participating voluntarily.

Instruments

Four standardized instruments were employed to measure the study variables. Mental Health Literacy was assessed using the Mental Health Literacy Questionnaire for Young Adults (MHLq) developed by Dias et al. (2018). This instrument consists of 29 items, including 23 favorable and 6 unfavorable statements, distributed across four dimensions: knowledge of mental health problems, erroneous beliefs or stereotypes, first aid skills and help-seeking behavior, and self-help strategies. Responses were rated on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), with higher scores indicating greater mental

health literacy. The reliability coefficient of the MHLq in previous studies was reported as Cronbach's $\alpha = 0.84$.

Psychological well-being was measured using the Ryff's Psychological Well-Being Scale (Short Version) developed by Ryff and Keyes (1995) and adapted into Indonesian by Rachmayani and Ramdhani (2014). This scale comprises 18 items covering six dimensions: autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance. Items were rated on a 7-point Likert scale (1 = strongly disagree to 7 = strongly agree). The Indonesian adaptation demonstrated high internal consistency with Cronbach's $\alpha = 0.91$.

Resilience was assessed using the Brief Resilience Scale (BRS) developed by Smith et al. (2008) and adapted by Faizah et al. (2020). The BRS consists of six items, equally divided into favorable and unfavorable statements, rated on a 5-point Likert scale. Higher scores reflect greater resilience, with reported reliability of Cronbach's $\alpha = 0.75$.

Perceived social support was measured using the Multidimensional Scale of Perceived Social Support (MSPSS) developed by Zimet et al. (1988) and modified by Ikhwaningrum et al. (2022). This instrument includes 12 favorable items assessing perceived support from family, friends, and significant others. Responses were rated on a 4-point Likert scale (1 = strongly disagree to 4 = strongly agree), with higher scores indicating stronger perceived support. The MSPSS demonstrated good reliability with Cronbach's $\alpha = 0.89$.

Procedure

Data collection was conducted online via Google Form. Participants were informed about the study objectives, confidentiality, and voluntary participation. Electronic informed consent was obtained before completing the questionnaire. The survey took approximately 10–15 minutes.

Data Analysis

Data analysis was conducted using JASP (version 0.18) based on data from 600 participants. Descriptive statistics, normality, linearity, and multicollinearity checks were performed before hypothesis testing. Pearson correlation analysis was used to examine the relationships among variables. Mediation analyses were performed using the bootstrapping resampling method to estimate direct and indirect effects. The analysis was conducted on the actual dataset of 600 respondents with 5,000 bootstrap resampling iterations to produce bias-corrected 95% confidence intervals for indirect effects. This resampling process does not increase the number of participants; rather, it statistically resamples the existing data to improve the precision and stability of estimates. Regression-based mediation models were employed to test the hypothesized pathways from MHL and resilience to PWB through PSS, controlling for age and gender. Statistical significance was determined at a two-tailed $\alpha = .05$.

Result

Data were analyzed using JASP. The analyses included reliability testing, descriptive statistics, correlation analysis, and mediation testing to assess the role of resilience as a mediator between mental health literacy (MHL) and psychological well-being (PWB), as well as the role of perceived social support (PSS) as a mediator. The results are presented in a logical sequence corresponding to the research hypotheses.

Table 1
Direct Effects of MHL and Resilience on Psychological Well-Being (PWB)

Path	Estimate (β)	Std. Error	z-value	p	95% CI (Lower–Upper)
MHL → PWB	0.142	0.023	6.056	< .001	[0.096, 0.188]
Resilience → PWB	0.712	0.064	11.124	< .001	[0.587, 0.838]

Table 1 presents the direct effects of MHL and resilience on PWB. Both predictors were significant, with MHL exerting a modest positive effect ($\beta = 0.142$, $p < .001$). In contrast, resilience demonstrated a substantially stronger effect ($\beta = 0.712$, $p < .001$), underscoring its role as the dominant factor in predicting psychological well-being. This finding suggests that while knowledge and skills related to mental health contribute to well-being, the capacity to adapt and recover from adversity is far more influential in determining students' psychological outcomes.

Table 2
Indirect (Mediating) Effects via Perceived Social Support (PSS)

Path	Estimate (β)	Std. Error	z-value	p	95% CI (Lower–Upper)
MHL → PSS → PWB	0.010	0.004	2.237	.025	[0.001, 0.019]
Resilience → PSS → PWB	0.037	0.015	2.433	.015	[0.007, 0.066]

Table 2 shows the mediating role of PSS. The indirect effect of MHL on PWB through PSS was statistically significant but small ($\beta = 0.010$, $p = .025$), indicating that mental health literacy enhances well-being partly by increasing perceptions of social support. However, the mediation effect was more pronounced in the resilience–PWB pathway ($\beta = 0.037$, $p = .015$). This suggests that resilient students not only cope effectively with stress but also perceive and mobilize social support, which further strengthens their psychological well-being.

Table 3
Total Effects of MHL and Resilience on Psychological Well-Being (PWB)

Path	Estimate (β)	Std. Error	z-value	p	95% CI (Lower–Upper)
MHL → PWB (Total)	0.152	0.023	6.520	< .001	[0.106, 0.198]
Resilience → PWB (Total)	0.749	0.063	11.879	< .001	[0.625, 0.873]

Table 3 shows both MHL and resilience showed significant positive total effects on PWB. Although MHL contributes modestly, its overall influence remains significant. Resilience demonstrated a stronger total effect ($\beta = 0.749$, $p < .001$), reinforcing its role as the dominant predictor of psychological well-being.

Table 4
Path Coefficients among Variables

Path	Estimate (β)	Std. Error	z-value	p	95% CI (Lower–Upper)
MHL → PSS	0.054	0.020	2.755	.006	[0.016, 0.093]
Resilience → PSS	0.671	0.129	5.187	< .001	[0.418, 0.925]
PSS → PWB	0.184	0.048	3.832	< .001	[0.090, 0.277]

Table 4 details the path coefficients among variables. MHL significantly predicted PSS ($\beta = 0.054$, $p = .006$), indicating that students with higher mental health literacy tend to perceive greater social support. Resilience strongly predicted PSS ($\beta = 0.671$, $p < .001$), suggesting that resilient individuals are more likely to build and recognize social support. In turn, PSS positively predicted PWB ($\beta = 0.184$, $p < .001$), confirming its mediating role in improving students' well-being.

The findings provide robust support for all hypotheses. MHL and resilience both positively predicted PWB, with resilience emerging as the strongest determinant. Importantly, PSS mediated both relationships, although its role was more substantial in the resilience-PWB pathway. This highlights the dual importance of individual coping capacity and social resources in promoting psychological well-being. The relatively small mediation effect of PSS in the MHL—PWB relationship suggests that knowledge alone is insufficient unless accompanied by supportive social contexts. In contrast, resilience appears to operate synergistically with social support, amplifying its impact on well-being.

Summary of Findings

H1 supported: MHL positively predicts PWB.

H2 supported: Resilience positively predicts PWB.

H3 supported: PSS mediates the MHL—PWB relationship (small effect).

H4 supported: PSS mediates the Resilience—PWB relationship (moderate effect).

H5 supported: Both predictors show positive total effects, with Resilience as the stronger predictor.

Discussion

The results of this study showed that mental health literacy (MHL) significantly and positively predicted psychological well-being (PWB) among university students ($\beta = 0.142$, $p < .001$). This finding aligns with Jorm's (2000, 2012) framework, emphasizing that MHL is not limited to knowledge but includes recognizing symptoms, understanding preventive strategies, and having help-seeking competence. Students with higher MHL are better equipped to identify mental health issues and take adaptive actions that promote their well-being. This aligns with the Theory of Planned Behavior (Ajzen, 1991), which suggests that knowledge and belief influence attitudes and behavioral intentions. Students with higher MHL are more likely to adopt positive mental health behaviors and apply effective coping strategies that enhance their psychological well-being.

Empirical evidence supports this result. Tang et al. (2024) found that MHL positively influenced well-being through emotional self-efficacy and resilience, while Zhang et al. (2023) observed that MHL reduced psychological distress in adolescents via resilience mechanisms. Yang et al. (2024) reported that higher MHL fosters help-seeking intentions through perceived social support and reduced stigma. Collectively, these findings highlight that MHL contributes to well-being both directly and indirectly by enhancing social connectedness. However, literacy alone may not suffice; its benefits are maximized when accompanied by adaptive coping and supportive environments. Therefore, interventions to improve students' mental health should integrate psychoeducation, skill development, and social support enhancement.

The mediating role of perceived social support (PSS) was also confirmed. PSS significantly mediated the relationship between MHL and PWB ($\beta = 0.010$, $p = .025$) and between resilience and PWB ($\beta = 0.037$,

$p = .015$). These findings support the Social Support Buffering Hypothesis (Cohen & Wills, 1985), which posits that social support mitigates the adverse impact of stress. Students with higher literacy are more aware of the importance of seeking help and thus perceive greater social support, which contributes to their psychological well-being (Yang et al., 2024). Similarly, resilient students tend to establish stronger interpersonal connections and perceive greater support, which further strengthens their well-being (Zhou et al., 2021). Studies by Li et al. (2023), Wang et al. (2022), and Yildirim and Arslan (2022) consistently found that social support mediates the relationship between stress, resilience, and well-being among students. These findings collectively suggest that both internal (MHL and resilience) and external (social support) resources play synergistic roles in promoting psychological well-being.

The total effect analysis revealed that both MHL and resilience positively influence PWB, with resilience emerging as the stronger predictor ($\beta = 0.749$, $p < .001$). This indicates that while mental health knowledge provides the cognitive foundation for psychological well-being, adaptive capacities such as resilience have a more substantial impact on sustaining mental health in the face of challenges. This result supports the Resilience Framework (Hobfoll, 1989; Masten, 2001), which emphasizes the interaction between personal and environmental resources. Consistent with Positive Psychology (Seligman, 2011), the study reinforces that well-being develops through a balance of internal strengths and external supports. Similar results were reported by Hu et al. (2015) and Dong et al. (2023), showing that resilience contributes more robustly to life satisfaction and emotional balance than cognitive or informational factors alone.

Conclusions

This study concludes that both mental health literacy (MHL) and resilience significantly predict psychological well-being (PWB) among university students, with resilience serving as the stronger determinant. Perceived social support (PSS) mediates the relationships between MHL, resilience, and PWB, underscoring the importance of both internal and external resources in fostering well-being. These findings extend existing theories of positive psychology and resilience by showing that mental health literacy and resilience interact dynamically through social mechanisms that promote psychological adjustment.

The study's findings have important practical implications for higher education settings. Universities should develop comprehensive mental health programs that not only increase MHL but also cultivate resilience and strengthen students' social support systems. Psychoeducational interventions may combine mental health awareness, coping and stress management training, and peer mentoring initiatives to enhance well-being. In policy terms, higher education institutions should foster a supportive campus climate that normalizes mental health discussions and facilitates access to psychological resources.

This study is limited by its cross-sectional design, which restricts causal inference. Future research should adopt longitudinal or experimental designs to examine long-term relationships among MHL, resilience, and PSS. Additionally, cross-cultural investigations could enrich understanding of contextual differences influencing students' well-being. In conclusion, integrating cognitive knowledge, adaptive strength, and social connectedness provides a holistic foundation for promoting sustainable psychological well-being among university students.

References

- Abdelrahman, H. (2025). Academic resilience and its relationship with emotional well-being among university students. *International Journal of Adolescence and Youth*, 30(1), 22–34. <https://pmc.ncbi.nlm.nih.gov/articles/PMC12012252/>
- Abulfaraj, M., Upsher, R., Zavos, H., & Dommett, E. J. (2024). The impact of resilience interventions on university students' mental health and well-being: A systematic review. *Education Sciences*, 14(5), 510. <https://doi.org/10.3390/educsci14050510>
- Alinejad-Tilaki, H., Omidvar, S., Kheirkhah, F., et al. (2025). Health literacy and its relationship with mental health and quality of life in freshmen students. *BMC Public Health*, 25(1), 21202. <https://doi.org/10.1186/s12889-024-21202-4>
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Arslan, G., Yıldırım, M., & Zangeneh, M. (2022). Resilience and flourishing in college students: Examining the mediating role of affective balance. *Educational and Developmental Psychologist*, 39(1), 1–12. <https://doi.org/10.1080/20590776.2021.1879934>
- Bagdžiūnienė, D., Pakrošnis, R., & Šimkutė, J. (2025). Study and personal resources of university students' academic resilience, engagement, and well-being. *Frontiers in Psychology*, 16, 1517359. <https://doi.org/10.3389/fpsyg.2025.1517359>
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Harvard University Press.
- Burns, R. A., Sargent, K., & Crisp, D. A. (2024). Mental health and wellbeing literacy: A cross-national comparison. *Applied Research in Quality of Life*, 19(5), 2331–2356. <https://doi.org/10.1007/s11482-024-10330-z>
- Chye, S. M., Tan, L. H., & Ho, E. C. (2024). Building resilience among undergraduate health professions students: A mixed-methods study. *BMC Medical Education*, 24(1), 6127. <https://doi.org/10.1186/s12909-024-06127-1>
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98(2), 310–357. <https://doi.org/10.1037/0033-2909.98.2.310>
- Connor, K. M., & Davidson, J. R. T. (2003). Development of a new resilience scale: The Connor-Davidson Resilience Scale (CD-RISC). *Depression and Anxiety*, 18(2), 76–82. <https://doi.org/10.1002/da.10113>
- Dias, P., Campos, L., Almeida, H., & Palha, F. (2018). Mental health literacy in young adults: Adaptation and psychometric properties of the Mental Health Literacy Questionnaire (MHLq). *International Journal of Environmental Research and Public Health*, 15(7), 1318. <https://doi.org/10.3390/ijerph15071318>

- Dong, Y., Yu, G., & Wang, X. (2023). Academic stress and life satisfaction among Chinese college students: The mediating role of resilience and social support. *Current Psychology*. Advance online publication. <https://doi.org/10.1007/s12144-023-04219-5>
- Faizah, A., Rahayu, L., & Fitri, N. (2020). *Adaptasi The Brief Resilience Scale pada mahasiswa Indonesia*. Universitas Brawijaya.
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513–524. <https://doi.org/10.1037/0003-066X.44.3.513>
- Hu, T., Zhang, D., & Wang, J. (2015). A meta-analysis of the trait resilience and mental health. *Personality and Individual Differences*, 76, 18–27. <https://doi.org/10.1016/j.paid.2014.11.039>
- Ikhwaningrum, N., Nur'aeni, A., & Anindyajati, A. (2022). *Modifikasi skala Multidimensional Scale of Perceived Social Support (MSPSS) untuk populasi mahasiswa Indonesia*. Fakultas Psikologi Universitas Airlangga.
- Jorm, A. F. (2000). Mental health literacy: Public knowledge and beliefs about mental disorders. *British Journal of Psychiatry*, 177(5), 396–401. <https://doi.org/10.1192/bjp.177.5.396>
- Jorm, A. F. (2012). Mental health literacy: Empowering the community to take action for better mental health. *American Psychologist*, 67(3), 231–243. <https://doi.org/10.1037/a0025957>
- Laufer, A., Solomon, Z., & Horesh, D. (2024). Mental health literacy and resilience: The mediating role of social support in young adults. *Journal of Affective Disorders*, 354, 112–120. <https://doi.org/10.1016/j.jad.2024.01.045>
- Li, J., Wang, Y., & Xu, L. (2023). Academic stress and well-being among Chinese college students: The mediating role of perceived social support. *Current Psychology*. Advance online publication. <https://doi.org/10.1007/s12144-023-04412-6>
- Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist*, 56(3), 227–238. <https://doi.org/10.1037/0003-066X.56.3.227>
- OECD. (2023). *Mental health and well-being of students: Trends and challenges*. Organisation for Economic Co-operation and Development.
- Pidgeon, A. M., Pickett, S. M., & Hartsough, C. S. (2014). Resilience and well-being in college students: The role of social support and coping strategies. *Journal of College Student Development*, 55(5), 499–514. <https://doi.org/10.1353/csd.2014.0054>
- Rachmayani, D., & Ramdhani, N. (2014). *Adaptasi skala Ryff's Psychological Well-Being versi pendek pada mahasiswa Indonesia*. Fakultas Psikologi Universitas Gadjah Mada.
- Rosenstock, I. M. (1974). Historical origins of the health belief model. *Health Education Monographs*, 2(4), 328–335. <https://doi.org/10.1177/109019817400200403>
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57(6), 1069–1081. <https://doi.org/10.1037/0022-3514.57.6.1069>

- Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, 69(4), 719–727. <https://doi.org/10.1037/0022-3514.69.4.719>
- Santrock, J. W. (2020). *Adolescence* (17th ed.). McGraw-Hill Education.
- 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>
- Song, P., Li, J., & Wang, L. (2024). Analyzing psychological resilience in college students: Determinants and outcomes. *Heliyon*, 10(8), e086146. <https://doi.org/10.1016/j.heliyon.2024.e086146>
- Tang, Y., Zhao, Y., Jin, Z., Wu, S., Zhang, Z., Zhou, J., & Chen, H. (2024). Association between mental health literacy and workplace well-being of Chinese grassroots civil servants: The chain mediating effects of regulatory emotional self-efficacy and resilience. *International Journal of Mental Health Promotion*, 26(7), 559–568. <https://doi.org/10.32604/ijmhp.2024.050822>
- Wang, X., Zhang, Y., & Chen, H. (2022). Emotion regulation, perceived social support, and psychological well-being among university students: A mediation model. *Journal of Affective Disorders*, 307, 1–9. <https://doi.org/10.1016/j.jad.2022.03.050>
- Widyawati, S., Gandakusumah, A. R. P., Asyifa, N., & Yuaridha, R. (2025). Faktor-faktor yang berhubungan dengan kesehatan mental (depresi) pada mahasiswa di Universitas Muhammadiyah Aceh. *Journal of Public Health*, 19(1), 34–51. <https://doi.org/10.59680/jph.v19i1.2534>
- Yang, X., Hu, J., Zhang, B., Ding, H., Hu, D., & Li, H. (2024). The relationship between mental health literacy and professional psychological help-seeking behavior among Chinese college students: Mediating roles of perceived social support and psychological help-seeking stigma. *Frontiers in Psychology*, 15, 1356435. <https://doi.org/10.3389/fpsyg.2024.1356435>
- Yildirim, M., & Arslan, G. (2022). Resilience and flourishing: The mediating role of social support in the relationship between psychological health and well-being during the COVID-19 pandemic. *International Journal of Mental Health and Addiction*, 20(1), 801–812. <https://doi.org/10.1007/s11469-020-00476-2>
- Zhao, L., Zhao, H., Bean, R., Robbins, S. B., & Mahrer, N. E. (2025). Well-being interventions in U.S. colleges: A scoping review from a positive higher education perspective. *Frontiers in Psychology*, 16, 1242677. <https://doi.org/10.3389/fpsyg.2025.1242677>
- Zhang, X., Yue, H., Hao, X., Liu, X., & Bao, H. (2023). Exploring the relationship between mental health literacy and psychological distress in adolescents: A moderated mediation model. *Preventive Medicine Reports*, 33, 102199. <https://doi.org/10.1016/j.pmedr.2023.102199>
- Zhou, X., Zhu, H., Zhang, B., & Cai, T. (2021). Perceived social support as moderator of resilience in relation to loneliness and psychological well-being among Chinese college students.

Personality and Individual Differences, 170, 110457.

<https://doi.org/10.1016/j.paid.2020.110457>

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

Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (2019). The multidimensional scale of perceived social support (MSPSS): Revalidation in diverse college student populations. *Journal of Personality Assessment*, 101(2), 204–210.

<https://doi.org/10.1080/00223891.2018.1454643>