**Supplementary Table 1.** Quality of cross-sectional studies included in this systematic review.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | (Yao et al., 2023) | (Amin et al., 2022) | (Asad et al., 2022) | (Sagrera et al., 2022) | (Hendrikse & Limniou, 2024) | (Al-Garni et al., 2024) | (Masciantonio et al., 2021) | (Landa-Blanco et al., 2024) |
| 1. Were the criteria for inclusion in the sample clearly defined? | √ | X | X | √ | √ | √ | √ | √ |
| 2. Were the study subjects and the setting described in detail? | √ | √ | X | √ | √ | √ | √ | √ |
| 3. Was the exposure measured in a valid and reliable way? | √ | √ | X | X | √ | X | X | X |
| 4. Were objective, standard criteria used for measurement of the condition? | √ | √ | X | X | √ | X | X | X |
| 5. Were confounding factors identified? | X | X | X | √ | √ | √ | X | X |
| 6. Were strategies to deal with confounding factors stated? | X | X | X | √ | √ | √ | X | X |
| 7. Were the outcomes measured in a valid and reliable way? | √ | X | √ | X | √ | √ | √ | √ |
| 8. Was appropriate statistical analysis used? | √ | √ | √ | √ | √ | √ | √ | √ |
| **Total quality** | Moderate | Moderate | Poor | Moderate | Good | Moderate | Moderate | Moderate |

A score of 7-8 points indicates good quality, a score of 4-6 points indicates moderate quality and a score ≤3 indicates poor quality.

**Supplementary Table 1 (cont.).** Quality of cross-sectional studies included in this systematic review.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | (Blackburn & Hogg, 2024) | (Rogowska & Cincio, 2024) | (Yang et al., 2023) | (López-Gil et al., 2023) | (Williams et al., 2024) | (Sha & Dong, 2021) | (Sarman & Tuncay, 2023) | (Nasidi et al., 2024) |
| 1. Were the criteria for inclusion in the sample clearly defined? | √ | √ | X | √ | √ | X | √ | X |
| 2. Were the study subjects and the setting described in detail? | √ | √ | X | √ | √ | X | √ | X |
| 3. Was the exposure measured in a valid and reliable way? | X | √ | √ | X | √ | √ | X | X |
| 4. Were objective, standard criteria used for measurement of the condition? | X | √ | √ | X | √ | X | X | X |
| 5. Were confounding factors identified? | X | √ | X | X | √ | X | X | X |
| 6. Were strategies to deal with confounding factors stated? | X | √ | X | X | √ | X | X | X |
| 7. Were the outcomes measured in a valid and reliable way? | √ | √ | √ | √ | √ | √ | √ | X |
| 8. Was appropriate statistical analysis used? | √ | √ | √ | √ | √ | √ | √ | √ |
| **Total quality** | Moderate | Good | Moderate | Moderate | Good | Poor | Moderate | Poor |

A score of 7-8 points indicates good quality, a score of 4-6 points indicates moderate quality and a score ≤3 indicates poor quality.

References

Al-Garni, A. M., Alamri, H. S., Asiri, W. M. A., Abudasser, A. M., Alawashiz, A. S., Badawi, F. A., Alqahtani, G. A., Ali Alnasser, S. S., Assiri, A. M., Alshahrani, K. T. S., Asiri, O. A. S., Moalwi, O. H., Alqahtani, M. S., & Alqhatani, R. S. (2024). Social Media Use and Sleep Quality Among Secondary School Students in Aseer Region: A Cross-Sectional Study. *International Journal of General Medicine*, *17*, 3093–3106. https://doi.org/10.2147/IJGM.S464457

Amin, S., Iftikhar, A., & Meer, A. (2022). Intervening Effects of Academic Performance between TikTok Obsession and Psychological Wellbeing Challenges in University Students. *Online Media and Society*, *3*, 244–255.

Asad, K., Ali, F., & Awais, M. (2022). Personality Traits, Narcissism and TikTok Addiction: A Parallel Mediation Approach. *International Journal of Media and Information Literacy*, *7*(2), 293–304. https://doi.org/10.13187/ijmil.2022.2.293

Blackburn, M. R., & Hogg, R. C. (2024). #ForYou? The impact of pro-ana TikTok content on body image dissatisfaction and internalisation of societal beauty standards. *PLOS ONE*, *19*(8), e0307597. https://doi.org/10.1371/journal.pone.0307597

Hendrikse, C., & Limniou, M. (2024). The Use of Instagram and TikTok in Relation to Problematic Use and Well-Being. *Journal of Technology in Behavioral Science*. https://doi.org/10.1007/s41347-024-00399-6

Landa-Blanco, M., García, Y. R., Landa-Blanco, A. L., Cortés-Ramos, A., & Paz-Maldonado, E. (2024). Social media addiction relationship with academic engagement in university students: The mediator role of self-esteem, depression, and anxiety. *Heliyon*, *10*(2), e24384. https://doi.org/10.1016/j.heliyon.2024.e24384

López-Gil, J. F., Chen, S., Jiménez-López, E., Abellán-Huerta, J., Herrera-Gutiérrez, E., Royo, J. M. P., Mesas, A. E., & Tárraga-López, P. J. (2023). Are the Use and Addiction to Social Networks Associated with Disordered Eating Among Adolescents? Findings from the EHDLA Study. *International Journal of Mental Health and Addiction*. https://doi.org/10.1007/s11469-023-01081-3

Masciantonio, A., Bourguignon, D., Bouchat, P., Balty, M., & Rimé, B. (2021). Don’t put all social network sites in one basket: Facebook, Instagram, Twitter, TikTok, and their relations with well-being during the COVID-19 pandemic. *PLOS ONE*, *16*(3), e0248384. https://doi.org/10.1371/journal.pone.0248384

Nasidi, Q. Y., Norde, A. B., Dahiru, J. M., & Hassan, I. (2024). Tiktok Usage, Social Comparison, and Self-Esteem Among the Youth: Moderating Role of Gender. *Galactica Media: Journal of Media Studies*, *6*(2), 121–137. https://doi.org/10.46539/gmd.v6i2.467

Rogowska, A. M., & Cincio, A. (2024). Procrastination Mediates the Relationship between Problematic TikTok Use and Depression among Young Adults. *Journal of Clinical Medicine*, *13*(5), 1247. https://doi.org/10.3390/jcm13051247

Sagrera, C. E., Magner, J., Temple, J., Lawrence, R., Magner, T. J., Avila-Quintero, V. J., McPherson, P., Alderman, L. L., Bhuiyan, M. A. N., Patterson, J. C., & Murnane, K. S. (2022). Social media use and body image issues among adolescents in a vulnerable Louisiana community. *Frontiers in Psychiatry*, *13*, 1001336. https://doi.org/10.3389/fpsyt.2022.1001336

Sarman, A., & Tuncay, S. (2023). The relationship of Facebook, Instagram, Twitter, TikTok and WhatsApp/Telegram with loneliness and anger of adolescents living in Turkey: A structural equality model. *Journal of Pediatric Nursing*, *72*, 16–25. https://doi.org/10.1016/j.pedn.2023.03.017

Sha, P., & Dong, X. (2021). Research on Adolescents Regarding the Indirect Effect of Depression, Anxiety, and Stress between TikTok Use Disorder and Memory Loss. *International Journal of Environmental Research and Public Health*, *18*(16), 8820. https://doi.org/10.3390/ijerph18168820

Williams, M., Lewin, K. M., & Meshi, D. (2024). Problematic use of five different social networking sites is associated with depressive symptoms and loneliness. *Current Psychology*, *43*(24), 20891–20898. https://doi.org/10.1007/s12144-024-05925-6

Yang, Y., Adnan, H., & Sarmiti, N. (2023). The Relationship Between Anxiety and TikTok Addiction Among University Students in China: Mediated by Escapism and Use Intensity. *International Journal of Media and Information Literacy*, *8*(2). https://doi.org/10.13187/ijmil.2023.2.458

Yao, N., Chen, J., Huang, S., Montag, C., & Elhai, J. D. (2023). Depression and social anxiety in relation to problematic TikTok use severity: The mediating role of boredom proneness and distress intolerance. *Computers in Human Behavior*, *145*, 107751. https://doi.org/10.1016/j.chb.2023.107751