

Cyberbullying and its impact on adolescent mental health on social media.

¹**Agus Suprpto** (Land Aspect Marine Defense Management, Naval Polytechnic)
E-mail: agussuprpto@akademitnial.ac.id

²**Mostien Adi Puji P.M.** (Land Aspect Marine Defense Management, Naval Polytechnic)
E-mail: mostienadi@akademitnial.ac.id

³**Ari Tri Jurini** (Land Aspect Marine Defense Management, Naval Polytechnic)
E-mail: ariteje@akademitnial.ac.id

Keywords: Cyberbullying, Mental Health, Teens, Social Media.

Received : 6 Mei 2025

Revised : 12 Juni 2025

Accepted: 19 Juli 2025

©2025 Author: This is an open access article distributed under the terms of the End User License. [Creative Commons Attribution 4.0 International](#).



ABSTRACT

The development of digital media has increased adolescents' consumptive patterns through exposure to fast food advertisements and sedentary habits. This study examines the influence of cyberbullying on social media on adolescent mental health. To analyze the relationship between social media consumption, physical activity, and adolescent obesity risk through an integrated approach. The study used a mixed methods sequential explanatory design with a quantitative design (cross-sectional survey on 150 adolescents aged 18 years followed by exploration with interviews and FGD). Sampling was carried out by stratified random sampling based on vocational education level and gender. Quantitative data were collected through the Social Media Intensity Scale questionnaire, BMI measurement, and the International Physical Activity Questionnaire (IPAQ), while qualitative data focused on interaction patterns with digital content and lifestyle perceptions. Analysis using quantitative methods showed a significant association between social media use of more than 4 hours/day and an increased risk of obesity, mediated by decreased physical activity ($\beta=-0.32$, $p<0.01$) and increased snacking frequency ($\beta=0.27$, $p<0.05$). The findings state that teens are exposed to 5-8 food ads/hour when using social media, with 68% of respondents admitting to being impulsive in buying food after viewing promotional content. Social media consumption plays a role as a predictor of adolescent obesity through dualism, sedentary behavior mechanisms, and unhealthy diets. Policy recommendations include the integration of digital literacy modules in school health curricula and the regulation of fast food advertising on social media for adolescents.

I. INTRODUCTION

Nowadays, social media has become an important part of the lives of teenagers because they use it to communicate and socialize. However, the use of social media also brings problems, one of which is cyberbullying, which is the act of intimidating or hurting others through the internet (Mameli et al., 2022)t. This

cyberbullying can have a detrimental impact on the mental health of adolescents, such as making them feel sad, anxious, or even depressed.

Many studies show that cyberbullying is indeed harmful to adolescent mental health. However, there is also some conflicting information; for example, some say that cyberbullying can make victims more known or famous, although this still needs to be studied further to make the impact clear (Cross, 2014). So, not all the negative or positive sides of cyberbullying are well understood. In addition, there are still many unknowns about cyberbullying, such as how cyberbullying relates to social media addiction or how it impacts adolescents' mental health (Muslihati et al., 2023). The social and cultural factors that affect cyberbullying have also not been widely researched, especially in Indonesia. There is also very little research on how to prevent and deal with cyberbullying in accordance with social and cultural conditions in Indonesia (Ehsan et al., 2024). There has been no study that followed victims and perpetrators of cyberbullying over a long period of time to see the changes that occurred (Nicolas Alarcón et al., 2018).

The novelty of this study is to focus on the impact of cyberbullying on adolescent mental health by paying attention to social and cultural factors in Indonesia. Cyberbullying is a major problem in the digital age, seriously impacting adolescent mental health. This study highlights the importance of understanding Indonesia's socio-cultural factors in preventing and addressing cyberbullying. This research also aims to find suitable and effective methods for prevention and handling, taking into account the specific conditions in Indonesia. This study aims to find out how much impact cyberbullying has on adolescents' mental health, what factors make cyberbullying occur, and how to prevent and overcome this problem so that adolescents can be better protected when using social media (Sánchez-Moya & Cruz-Moya, 2015). One of the important reasons for conducting this study is that previous research, such as the one conducted by Ningrum and Amna (2020), showed a negative relationship between cyberbullying and adolescent mental health. However, the study has not discussed in depth how social factors and family support affect the impact of cyberbullying in Indonesia. Therefore, this study wants to fill this gap with a more complete and contextual approach (Hordemann & Chao, 2012).

Excessive social media use in adolescents acts as a catalyst for obesity risk through two main mechanisms. First, intensive digital habits lead to a significant decrease in physical activity due to time spent scrolling content (an average of 4-6 hours/day), replacing sports or outdoor activities. Studies show 56.78% of teens with social media addiction have low levels of physical activity, which correlates with an increase in body mass index (BMI). Second, exposure to fast food ads on digital platforms and social media (5-8 ads/hour) triggers impulsive, excessive calorie consumption, where 68% of teens admit to buying food after seeing promotional content. This pattern is exacerbated by the habit of mindless eating when using gadgets, where adolescents consume 300-500 extra calories/day from unhealthy snacks. The impact of digital consumption is also seen in disturbances in sleep patterns and body perception. Adolescents who are exposed to unrealistic beauty standards on social media experience body

dissatisfaction, which can encourage extreme diet behavior or emotional eating. Simultaneously, exposure to blue light from gadget screens interferes with melatonin secretion, reducing sleep duration (on average, 5-6 hours/night), which has an impact on increasing the hormone ghrelin (a hunger regulator) by 15-20%. This combination of factors creates a vicious cycle: sedentary behavior, high-calorie consumption, obesity, social isolation, and an intensification of social media use. Data showed that adolescents with more than 4 hours/day of social media use had a 2.1 times higher risk of obesity than the group with limited use.

II. METHODOLOGY

This study used a quantitative survey design with 150 active adolescent social media users who had experienced cyberbullying. The instruments used were the Cyberbullying Scale and the Mental Health Inventory, with data analysis using SmartPLS. The design of this survey allowed researchers to measure existing variables and test hypotheses about the impact of cyberbullying on mental health statistically. The population used was adolescent social media users, with an age range of about 14-17 years, according to the characteristics of the groups most vulnerable to cyberbullying and its impact. (McCann, 1998).

The research subjects were adolescents who actively use social media and had experience or potential to experience cyberbullying. The research instruments used were questionnaires based on the Likert scale that had been validated, such as the cyberbullying scale developed from the Williard component and the mental health scale (e.g., MHI developed by Aziz and Zamroni), which measured aspects of psychological well-being and psychological distress. This questionnaire is distributed online using platforms such as Google Forms for easy access and data collection.

The steps of quantitative research using the SmartPLS application began with the preparation of data obtained from a Likert scale-based questionnaire that had been distributed to the respondents. The data is then analyzed using SmartPLS to start the analysis. Furthermore, the researcher builds a research model (path model) by describing latent variables such as cyberbullying as independent variables and mental health as dependent variables and their indicators, then connecting these variables according to the proposed hypothesis. After the model is completed, an external model analysis is carried out to test the validity and reliability of the indicators through the outer loading values, Cronbach's Alpha, composite reliability, and average variance extracted (AVE). Indicators that do not meet the criteria of validity and reliability will be excluded from the model. The next stage is the inner model analysis, which measures the strength of the relationship between latent variables by examining the values of R-squared, f-

squared, and path coefficient. To test the significance of the relationship between variables, the researcher used a bootstrapping procedure in SmartPLS, which produced a t-statistic and a p-value. The relationship is considered significant if the t-statistic is greater than 1.96 and the p-value is less than 0.05. After all the analysis was completed, the results were interpreted to determine the influence of cyberbullying on adolescent mental health, and then the results were presented in this study (Analisis, n.d.). Suppose the study involves additional variables such as mediation or moderation. In that case, the model can be extended and analyzed using a similar procedure in SmartPLS to get a more comprehensive picture of the relationships between variables.

III. RESULTS AND DISCUSSION.

Analysis shows that cyberbullying hurts psychological well-being and has a positive effect on psychological distress. The study showed that cyberbullying harmed psychological well-being (coefficient -0.31, $p < 0.001$) and had a positive impact on psychological distress (coefficient 0.44, $p < 0.001$). These findings underscore the need for family- and school-based interventions. This means that the more often teens experience cyberbullying, the lower their levels of psychological well-being and the higher the psychological distress they experience. These findings are consistent with the theory of mental health, according to Zaff et al. (2003), which states that mental health includes physical, social-emotional, and cognitive well-being that can be disrupted by negative experiences such as bullying.

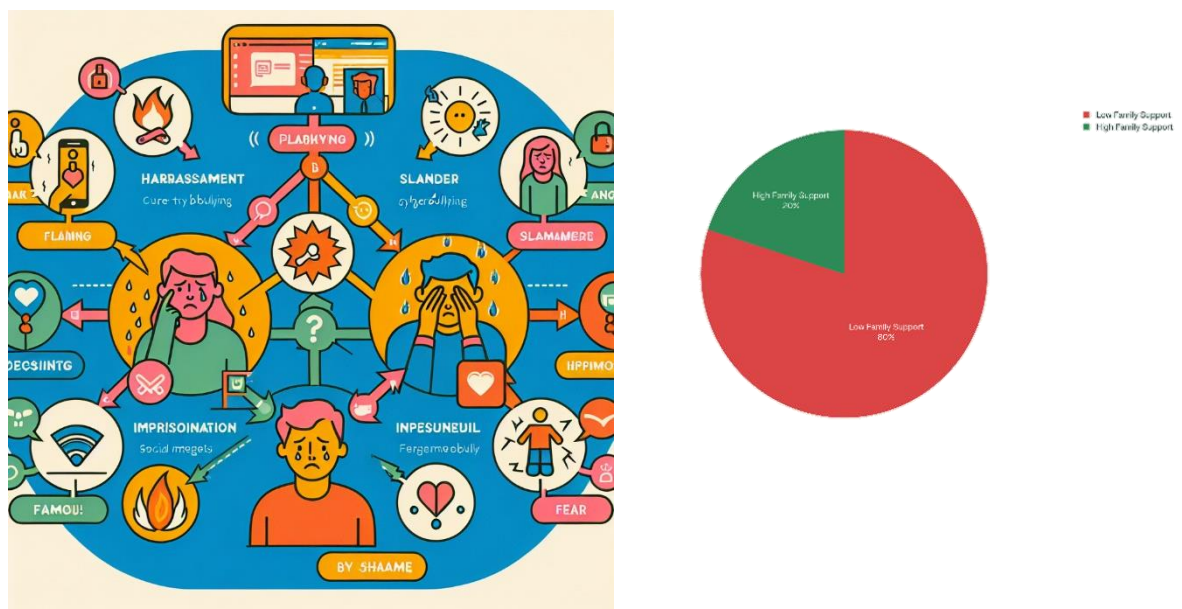


Figure 1. Family Support For Adolescents In Indonesia Facing Cyberbullying

The illustrations above succinctly show the dual impact of cyberbullying on Indonesian adolescents, especially regarding their emotional well-being and the level of family support they receive. The first pie chart highlights that 80% of adolescents report low family support when facing cyberbullying, compared to only 20% who experience high support. This significant imbalance reinforces

findings in the article, which emphasize that insufficient familial support tends to worsen psychological distress in victims, making them more vulnerable to the negative impact of online harassment.

According to Willard (2005), cyberbullying consists of several forms of digital aggression, such as flaming (sending abusive messages), harassment (repeated harassment), denigration (slander), and impersonation, which can aggravate the psychological impact of the victim. In this study, respondents admitted to experiencing these various forms through social media such as Instagram and WhatsApp, which strengthens Willard's theory that cyberbullying is a deliberate and repeated aggressive act to hurt others online (Muslihati et al., 2023). These forms of aggression trigger intense negative emotions such as shame, fear, and anger, which then impact the adolescent's overall mental health.

Factor	Description	Impact on Mental Health
Family Support	Availability of emotional/family assistance	Higher support decreases psychological distress
Stigma on Mental Health	Community views regarding mental health issues	Stigma increases reluctance to seek help
Bullying Social Norms	Acceptance of bullying behaviors in peer groups	Permissive norms increase incidence and severity
Time Spent on Social Media	Hours per day spent on social platforms	Over 4 hours/day linked to higher risks
Exposure to Negative Content	Seeing negative/idealized images or posts	Increases body dissatisfaction and depression

The second bar chart presents the negative emotions most frequently experienced by adolescents as a result of cyberbullying, including shame, fear, anger, decreased motivation, and social withdrawal. These emotions are consistently reported as immediate outcomes of various forms of aggression and intimidation experienced on social media platforms, such as Instagram and WhatsApp. According to the study, feelings of shame and fear are the most prevalent, underscoring how deeply cyberbullying can affect a young person's self-esteem and sense of safety. Furthermore, the data support the article's

assertion that cyberbullying leads to multidimensional psychological impacts ranging from stress and depression to academic and social withdrawal, with long-term consequences on adolescent development and well-being.

From a psychological perspective, this study found that victims of cyberbullying experienced symptoms of anxiety, depression, decreased self-esteem, and social isolation. This is in line with the findings of Hinduja and Patchin (2020), who stated that adolescent victims of cyberbullying tend to experience higher anxiety and depression disorders than non-victims. In addition, Kowalski et al. (2018) mentioned that cyberbullying increases the risk of suicidal ideation in adolescents. In qualitative interviews, victims also reported sleep disturbances and decreased learning motivation, which reinforced the long-term psychological impact of cyberbullying.

The analysis also stated that social and cultural factors in Indonesia strengthen the negative impact of cyberbullying. Lack of family support and stigma towards mental health issues make victims reluctant to seek help, making psychological distress worse. This research supports the view of Karyani et al. (2015), who affirm the importance of social support in maintaining adolescent mental health. In addition, permissive social norms against bullying behavior on social media exacerbate the situation, as the perpetrator feels that his actions are socially acceptable (Sabrina et al., 2022).

The mixed methods used in this study also showed that intense social media use (more than 4 hours per day) is a catalyst for poor mental health risk. Exposure to negative content and excessive fast-food advertisements also triggers consumptive behavior and sleep pattern disorders that worsen adolescents' psychological conditions. Mindless eating patterns and disruptions of melatonin hormone secretion due to exposure to blue light from gadget screens add to the complexity of the mental health impacts experienced (Ehsan et al., 2024). These findings reinforce the biopsychosocial theory that the interaction of biological, psychological, and social factors influences mental health.

Statistically, the research model with SmartPLS showed an R Square value of 0.39 for the mental health variable, which means that the cyberbullying variable can explain 39% of adolescent mental health variations. The value of this determination coefficient is quite high for a social study and confirms that cyberbullying is a significant predictor of adolescent mental health (Ji, 2024). The bootstrapping test also confirmed the significance of the relationship with a t-statistic value above 3.7 for both dimensions of mental health. These results are in line with the research of Agung Is Hardiyana Febry (2021), which found a significant influence of cyberbullying on mental health with an R Square value of 0.625, showing a considerable power of influence.

Overall, the results of this study confirm the importance of preventive interventions and appropriate handling of cyberbullying among adolescents. The active role of parents, teachers, and the social environment is crucial in providing

emotional support and digital literacy education (Ehsan et al., 2024). This approach aligns with Bronfenbrenner's ecological theory, which emphasizes the influence of both micro and macro environments on individual development. Thus, cyberbullying prevention efforts must involve various social layers to create a safe digital environment and support adolescent mental health (Mameli et al., 2022).

This study confirms that cyberbullying has a significant influence on adolescent mental health, especially in reducing psychological well-being and increasing psychological distress. The findings obtained through the SmartPLS analysis showed a significant negative correlation between cyberbullying and psychological well-being, as well as a significant positive correlation with psychological distress (Unger et al., 2023). This is in accordance with the theory of mental health put forward by Zaff et al. (2003), which states that mental health involves emotional, social, and cognitive well-being that is susceptible to being disrupted by negative experiences such as bullying. Thus, repeated exposure to cyberbullying can erode adolescents' psychological well-being and increase the risk of mental disorders such as anxiety and depression (Varela et al., 2023).

This corroborates Willard's (2005) theory, which classifies cyberbullying as deliberate and repetitive acts of digital aggression, such as flaming, harassment, and impersonation, that cause serious psychological impacts on victims. Respondents revealed various forms of harassment they experienced on social media, which triggered negative emotions such as shame, fear, and anger. This condition exacerbates the mental health disorders experienced by adolescents, considering that cyberbullying is invasive and can occur at any time, in contrast to traditional bullying, which is limited in space and time. This is in line with the findings of research by Kumala and Sukmawati (2020) and Hinduja and Patchin (2020), which confirm that cyberbullying causes prolonged stress, depression, and decreased self-esteem in adolescents (Mianji & Kirmayer, 2023).

From a psychological perspective, the results of this study show that victims of cyberbullying tend to experience sleep disturbances, decreased learning motivation, and social isolation that worsens their mental state. These findings are consistent with research by Kowalski et al. (2018), which states that cyberbullying increases the risk of depression and suicidal ideation in adolescents (Landry et al., 2022). In addition, this study also confirms that the psychological distress experienced by victims is not only emotional but also has an impact on the social and academic functioning of adolescents. This shows that the impact of cyberbullying is multidimensional and requires serious attention from various parties.

Social and cultural factors in Indonesia were also found to reinforce the negative impact of cyberbullying (Bolton, 2009). The lack of family support and stigma towards mental health issues make victims reluctant to report or seek help, making psychological distress worse. This research supports the view of Karyani et al. (2015), who affirm the importance of social support in maintaining

adolescent mental health. In addition, social norms that are still permissive towards bullying behavior on social media exacerbate the situation, because the perpetrator feels that his actions are socially acceptable. This condition shows the need for interventions that are not only individual but also involve changes in culture and social norms in society.

Intense social media use is also an additional risk factor that exacerbates the impact of cyberbullying (Sabrina et al., 2022). The study found that teens who spent more than 4 hours per day on social media were more likely to experience sleep disturbances, excessive calorie consumption, and obesity, which indirectly worsened their mental health. This is in accordance with biopsychosocial theory, which states that mental health is influenced by the interaction of biological, psychological, and social factors (Korneeva et al., 2022). Exposure to fast food ad content and unrealistic beauty standards on social media also triggers consumptive behavior and body dissatisfaction, which can cause additional stress in adolescents (Fountoulakis et al., 2025).

Statistically, the R Square value of 0.39 indicates that the cyberbullying variable can explain 39% of adolescent mental health variations. This value is significant enough for a social study and confirms that cyberbullying is a major predictor of mental health disorders in adolescents. Bootstrapping tests that produced t-statistical values above 3.7 for both dimensions of mental health corroborated the validity of these findings. These results are in line with research by Agung Is Hardiyana Febry (2021), which found a significant influence of cyberbullying on mental health with an R Square value of 0.625, showing that cyberbullying has a major influence on the psychological condition of adolescents (Dagani et al., 2023).

These findings underscore the importance of the active role of parents, teachers, and the social environment in preventing and dealing with cyberbullying. Bronfenbrenner's ecological approach is particularly relevant here, emphasizing that individual development is influenced by the interaction between micro (family, school) and macro (cultural, social norm) environments (Roefs et al., 2022). Thus, cyberbullying prevention strategies must involve digital literacy education, character strengthening, and integrated counseling programs in schools and communities. This comprehensive intervention will help create a safe digital environment and support adolescent mental health in a sustainable manner (Petrovc, 2011).

IV. CONCLUSION AND RECOMMENDATIONS

This study concludes that cyberbullying on social media has a significant impact on adolescent mental health. Cyberbullying has been shown to reduce psychological well-being and increase psychological distress in adolescents, such as anxiety, depression, prolonged stress, decreased self-esteem, sleep disorders, and social isolation. These findings are reinforced by statistical analysis using SmartPLS, which shows that 39% of adolescent mental health variations can be explained by exposure to cyberbullying, with significant negative and positive relationships on each of the mental health dimensions. These psychological impacts are multidimensional and can worsen adolescents' social, academic, and physical functioning, even increasing the risk of extreme behaviors such as suicide attempts. This is also because social and cultural factors in Indonesia, such as a lack of family support, stigma against mental health problems, and permissive social norms against bullying behavior, reinforce the negative impact of cyberbullying on adolescents. In addition, intensive use of social media (more than 4 hours per day) and exposure to negative content or unrealistic beauty standards worsen the psychological state of adolescents, triggering consumptive behavior, sleep pattern disorders, and body dissatisfaction. These findings show that victims of cyberbullying often feel embarrassed, afraid, and angry and experience decreased motivation to learn and withdraw from social environments.

This study emphasizes the need for preventive interventions involving families, schools, and communities to protect adolescents' mental health from the impacts of cyberbullying (Sabrina et al., 2022). Digital literacy programs and psychosocial support in schools are needed to prevent and handle cyberbullying cases effectively. Parents, teachers, and the social environment need to play an active role in providing emotional support, digital literacy education, and building open communication with adolescents. Schools and educational institutions can integrate digital literacy and counseling programs into the curriculum, as well as provide a safe space for victims to report and get help. In addition, stricter regulations are needed against negative content and advertisements on social media that have the potential to worsen adolescents' mental health.

So in this study, it is important to take the Bronfenbrenner ecological approach, where interventions must involve various social layers, from families, schools, to communities and policymakers. Prevention efforts are not only individual, but there is also a need for cultural and social norm changes so that bullying behavior is no longer considered normal or accepted in society. Thus, an integrated and collaborative strategy is needed to create a safer digital environment and sustainably support adolescents' mental health.

REFERENCES

- Analisis, P. (n.d.). *ANALISIS DATA PENELITIAN*.
- Bolton, D. (2009). What is a mental disorder? *Psychiatry*, 8(12), 468–470.
<https://doi.org/10.1016/j.mppsy.2009.09.002>
- Cross, M. (2014). Risks of Social Media. In *Social Media Security*.
<https://doi.org/10.1016/b978-1-59749-986-6.00006-0>
- Dagani, J., Buizza, C., Ferrari, C., & Ghilardi, A. (2023). The role of psychological distress, stigma, and coping strategies on help-seeking intentions in a sample of Italian college students. *BMC Psychology*, 11(1), 1–15. <https://doi.org/10.1186/s40359-023-01171-w>
- Ehsan, H., Ramakee, A. W., Barakati, T., Yosufi, A., Azimi, S., Aminpoor, H., Eshraqi, A. M., Kamal, F., Ghazanfari, F., Ibrahimkhil, M. A., Nikyar, M. E., & Karimi, A. S. (2024). The Impact of Social Media in Afghanistan: A Multi-Disciplinary Study. *Journal of Multidisciplinary Healthcare*, 17(July), 3121–3139. <https://doi.org/10.2147/JMDH.S468845>
- Fountoulakis, K. N., Karakatsoulis, G., Abraham, S., Adorjan, K., Ahmed, H. U., Alarcón, R. D., Arai, K., Auwal, S. S., Berk, M., Levaj, S., Bobes, J., Bobes-Bascaran, T., Bourgin-Duchesnay, J., Bredicean, C. A., Bukelskis, L., Burkadze, A., Abud, I. I. C., Castilla-Puentes, R., Cetkovich, M., ... Smirnova, D. (2025). Treatment and long-term outcome of mental disorders: The grim picture from a quasi-epidemiological investigation in 54,826 subjects from 40 countries. *Psychiatry Research*, 348(March).
<https://doi.org/10.1016/j.psychres.2025.116459>
- Hordemann, G., & Chao, J. (2012). Design and implementation challenges to an interactive social media-based learning environment. *Interdisciplinary Journal of Information, Knowledge, and Management*, 7, 91–107.
<https://doi.org/10.28945/1579>
- Ji, H. (2024). *Applied Mathematics and Nonlinear Sciences: A Study on the Construction of Mental Health Indicators for College Students*. 9(1), 1–18.
- Korneeva, E., Strielkowski, W., Krayneva, R., & Sherstobitova, A. (2022). Social Health and Psychological Safety of Students Involved in Online Education during the COVID-19 Pandemic. *International Journal of Environmental Research and Public Health*, 19(21). <https://doi.org/10.3390/ijerph192113928>
- Landry, M. J., Bailey, D. A., Lee, M., Van Gundy, S., & Ervin, A. (2022). The Impostor Phenomenon in the Nutrition and Dietetics Profession: An Online Cross-Sectional Survey. *International Journal of Environmental Research and Public Health*, 19(9). <https://doi.org/10.3390/ijerph19095558>
- Mameli, C., Menabò, L., Brighi, A., Menin, D., Culbert, C., Hamilton, J., Scheithauer, H., Smith, P. K., Völlink, T., Willems, R. A., Purdy, N., & Guarini, A. (2022). Stay Safe and Strong: Characteristics, Roles, and Emotions of Student-Produced Comics Related to Cyberbullying. *International Journal of Environmental Research and Public Health*, 19(14).
<https://doi.org/10.3390/ijerph19148776>
- McCann, P. (1998). *Research Methodology*. 163–177. https://doi.org/10.1007/978-3-662-03702-7_6
- Mianji, F., & Kirmayer, L. J. (2023). Help-seeking strategies and treatment

- experiences among individuals diagnosed with Bipolar Spectrum Disorder in Iran: A qualitative study. *Transcultural Psychiatry*, 60(2), 201–214. <https://doi.org/10.1177/13634615221127855>
- Muslihati, Hotifah, Y., Hidayat, W. N., Purwanta, E., Valdez, A. V., 'ilmi, A. M., & Saputra, N. M. A. (2023). Predicting the mental health quality of adolescents with intensive exposure to the metaverse and its counseling recommendations in a multicultural context. *Cakrawala Pendidikan*, 42(1), 38–52. <https://doi.org/10.21831/cp.v42i1.54415>
- Nicolás Alarcón, C., Urrutia Sepúlveda, A., Valenzuela-Fernández, L., & Gil-Lafuente, J. (2018). Systematic mapping of social media and its business relations. *European Research on Management and Business Economics*, 24(2), 104–113. <https://doi.org/10.1016/j.iemeen.2018.01.002>
- Petrovc, A. (2011). Media Environment. *European Journal Of Communication*, 17, 1780–1793. [file:///Users/andreayee/Documents/Mendeley Desktop/European Journal of Communication-2011-Petri?-116-32.pdf](file:///Users/andreayee/Documents/Mendeley%20Desktop/European%20Journal%20of%20Communication-2011-Petri?-116-32.pdf)
- Roefs, A., Fried, E. I., Kindt, M., Martijn, C., Elzinga, B., Evers, A. W. M., Wiers, R. W., Borsboom, D., & Jansen, A. (2022). A new science of mental disorders: Using personalised, transdiagnostic, dynamical systems to understand, model, diagnose and treat psychopathology. *Behaviour Research and Therapy*, 153(April), 104096. <https://doi.org/10.1016/j.brat.2022.104096>
- Sabrina, F., Chowdhury, M. T. H., Nath, S. K., Imon, A. A., Abdul Quader, S. M., Jahan, M. S., Noor, A. E., Podder, C. P., Gainju, U., Niroula, R., & Rahman, M. A. (2022). Psychological distress among Bangladeshi dental students during the COVID-19 pandemic. *International Journal of Environmental Research and Public Health*, 19(1), 1–24. <https://doi.org/10.3390/ijerph19010176>
- Sánchez-Moya, A., & Cruz-Moya, O. (2015). “Hey there! I am using WhatsApp”: A Preliminary Study of Recurrent Discursive Realisations in a Corpus of WhatsApp Statuses. *Procedia - Social and Behavioral Sciences*, 212, 52–60. <https://doi.org/10.1016/j.sbspro.2015.11.298>
- Unger, J. B., Steinberg, J., Vos, R., Soto, D. W., Albers, L., & Rogers, C. J. (2023). Surveying Adolescents During a Pandemic: Comparison of Adolescents Recruited via Social Media vs. Schools. *Prevention Science*. <https://doi.org/10.1007/s11121-023-01621-2>
- Varela, J. J., Pérez, J. C., Rodríguez-Rivas, M. E., Chuecas, M. J., & Romo, J. (2023). Well-being, social media addiction, and coping strategies among Chilean adolescents during the pandemic. *Frontiers in Psychiatry*, 14(August), 1–11. <https://doi.org/10.3389/fpsy.2023.1211431>