JISIP (Jurnal Ilmu Sosial dan Pendidikan)
Vol. 10 No. 4 November 2026
e-ISSN : 2656-6753, p-ISSN: 2598-9944
DOI: *10.36312/jisip.v10i4.11613/http://ejournal.mandalanursa.org/index.php/JISIP/index*

Digital Phubbing and Deviant Behavior of Adolescents in Monjok Timur Subdistrict, Mataram City

Shahinaz Syahira[1], Syafruddin[2], Rakhmat Nur Adhi[3]
Program Studi Pendidikan Sosiologi, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Mataram, Indonesia

Article Info
Article history:
Received: 21 October 2026
Publish: 5 November 2026

Keywords:
Digital phubbing;
Deviant behavior;
Adolescents;
Uses and gratifications;
Case study.

Abstract
Digital Phubbing and Adolescent Deviant Behavior in Monjok Timur Village, Mataram City: A Uses and Gratifications Perspective. Digital phubbing, the act of ignoring a conversation partner because of excessive attention to a mobile phone, is increasingly observed among adolescents and is associated with deviant behavior. This study analyzes the forms of digital phubbing that can lead to adolescent deviant behavior and examines its impact in Monjok Timur Village, Selaparang District, Mataram City. A qualitative case study was conducted from August to September 2026 and interpreted through uses and gratifications theory. Data were collected from adolescents aged 15–18 years, selected through purposive and snowball sampling, using moderate participant observation, semi-structured interviews, and documentation, and were analyzed with the interactive model of Miles, Huberman, and Saldaña. Validity was tested through source, technique, and time triangulation. Digital phubbing appears in three forms: academic, friend, and parental phubbing, with friend phubbing being the most frequent. These forms are associated with ignoring others, harsh language, quick temper, mocking peers on social media, and declining learning discipline. Its impacts include disrupted harmony with family and friends, indifferent and individualistic attitudes, lower communication quality, cyberbullying with reduced empathy, and weakened emotional self-control. The findings suggest that the gratification adolescents obtain from digital devices is individual and is not balanced by social responsibility in real life.

This is an open access article under the Lisensi Creative Commons Atribusi-BerbagiSerupa 4.0 Internasional

Corresponding Author:
Shahinaz Syahira
Program Studi Pendidikan Sosiologi, Universitas Mataram, Indonesia
Email Coresspondent: shahinazsyahira@gmail.com

1. INTRODUCTION

The development of information and communication technology, particularly social media, has changed the way teenagers interact and socialize. One emerging phenomenon is *phubbing*, namely the behavior of ignoring those around them because they are more focused on digital devices such as smartphones (Budiyana et al., 2024). This behavior is often perceived as impolite and socially inappropriate, even by the younger generation who do it themselves (Purnama Sari et al., 2024). Phubbing is multidimensional because it is related to addiction to cellphones, the internet, social media, and online games (Karadağ et al., 2015). On the other hand, globalization and the development of information technology influence the mindset, attitudes, and behavior of adolescents, including the emergence of increasingly complex and varied deviant behavior (Tasnimia et al., 2025). Deviant behavior is understood as actions that do not conform to social norms and values and is seen as the result of an imperfect socialization process (Fauzi et al., 2019; Hardiyanto & Romadhona, 2018).

Various studies have shown that phubbing is not just an individual habit. A study of Spanish schoolchildren confirmed that phubbing is a social phenomenon that can weaken communication quality and group cohesion (Barbed-Castrejón et al., 2024). In Indonesia, adolescents who were ignored by their conversation partners reported decreased emotional closeness with peers (Abivian, 2022), and these interactions formed two distinct roles: perpetrator (*phubber*) and the neglected party (*phubbed*) (Alamianti & Rachaju, 2021). Low self-control and high social media addiction are associated with phubbing behavior in high school students in Jakarta (Hujaema & Herdi, 2025), and self-control is negatively related to phubbing in college students (Khairunnisa & Nursanti, 2024). Literature reviews indicate that cell phone addiction, *fear of missing out*, boredom, and low self-control as triggers for phubbing in adolescents (Nabila et al., 2025). In the family realm, technological interference by parents (*technoference*) negatively correlated with adolescent mental health and positively correlated with violent behavior, including *cyberbullying* (Dixon et al., 2023). Findings are not entirely consistent: Paulus and Sarajar (2025) found a positive relationship between phubbing and the quality of adolescent friendships as long as cell phone use is managed wisely, while Hidayat et al. (2025) found a negative relationship between phubbing and social interaction.

However, these studies mostly used quantitative approaches or literature reviews, focused on psychological variables, and were conducted in college student populations or large cities. Based on the literature review in this study, qualitative studies exploring how forms of phubbing in school, friendship, and family environments are related to adolescent deviant behavior, particularly in Mataram City, are scarce. Initial observations indicate that adolescents in Monjok Timur Village admitted to frequently checking their phones while talking with friends, and some had been involved in bullying incidents after experiencing repeated phubbing. Feelings of being ignored triggered negative emotions that were then expressed through intimidation or minor vandalism.

The novelty of this article lies in the integration of the classification of forms of phubbing, namely *academic phubbing*, *friend phubbing*, and *parental phubbing* (Nazir, 2025), with the *uses and gratifications theory to* explain why phubbing is related to deviant behavior. This theory views audiences as active, selective, and goal-oriented in choosing media (Syafrina, 2022). Palmgreen and Rayburn distinguish *gratification sought* (satisfaction sought) and *gratification obtained* (satisfaction obtained); media is considered effective if the satisfaction obtained is equal to or exceeds that sought, while the gap (*discrepancy*) between the two creates dissatisfaction (Bah & Arianto, 2022). With this framework, the focus shifts from what cell phones do to adolescents to what adolescents seek from cell phones and what is displaced in real interactions. The objectives of this study are (1) to analyze the forms of digital phubbing related to adolescent deviant behavior and (2) to analyze the impact of digital phubbing on adolescent deviant behavior in Monjok Timur Village, Selaparang District, Mataram City.

2. RESEARCH METHODS

This research used a qualitative approach with a case study method. A qualitative approach was chosen to gain an in-depth understanding of the phenomenon of digital phubbing and its relationship to adolescent deviant behavior in a natural setting, while a case study allows for a detailed and comprehensive study of a real phenomenon limited by space and time (Creswell & Creswell, 2023). The research was conducted in Monjok Timur Village, Selaparang District, Mataram City, West Nusa Tenggara, from August to September 2026. The location was chosen because initial findings indicated a tendency for phubbing in the daily interactions of adolescents in the area.

The study participants were adolescents aged 15–18 years who lived in Monjok Timur Village, had experienced or committed phubbing, engaged in mild to moderate deviant behavior, and were willing to participate. The participant selection technique was used *purposive sampling* (Jailani et al., 2023) was used and expanded with *snowball sampling* until data saturation was reached. To enrich the perspective, data were also gathered from those in the adolescents' immediate social environment. Primary data were obtained directly in the field, while secondary data came from village profiles, related statistics, and scientific literature.

Data were collected through three techniques. First, moderate participant observation, in which the researcher was present where the adolescents interacted and participated in some activities without being fully involved, guided by an observation guide (Sugiyono, 2019). Second, semi-structured interviews with guidelines that allowed for the flexibility of developing questions according to field conditions. Third, documentation of adolescents' activities while gathering with friends, family, and at school. Data analysis used the interactive model of Miles, Huberman, and Saldaña, which includes data reduction, data presentation, conclusion drawing, and verification (Sugiyono, 2019). Data validity was tested through triangulation of sources, techniques, and time (Alfansyur & Mariyani, 2020), for example, by comparing adolescents' confessions, statements from those around them, and observation results.

3. RESULTS AND DISCUSSION

3.1.Research result

3.1.1 Shape *of phubbing* digital related to deviant behavior of adolescents

The results of observations and interviews show that digital phubbing in adolescents does not stand alone, but rather comes in three interrelated forms, namely: *academic phubbing*, *friend phubbing*, and *parental phubbing*. Friend phubbing is the most common form.

Academic phubbing. In the school environment, teenagers play games, watch TikTok live streams, browse social media, and reply to messages during lessons and while talking to others. Observations estimate that cellphone use lasts for approximately 5–15 minutes repeatedly during class hours, approximately 15–30 minutes during breaks, and approximately 15–20 minutes while eating in the cafeteria. Teenagers' attention is divided between academic and digital activities, leading them to be described as "less focused, less active in communicating, and more interested in digital activities." These habits are accompanied by a lack of discipline, neglect of assignments, impolite language, and teasing of peers via social media.

Friend phubbing. When hanging out with friends, teenagers open in boxes and group chats, access WhatsApp, Instagram, and TikTok, watch videos, play online games, check notifications, use *earphones*, and even live-stream their own conversations while hanging out. Observations estimate that cell phone use lasts for around 30–45 minutes during social gatherings and around 20–30 minutes during meals. The other person is also neglected: teenagers keep their eyes glued to the screen while their friend is talking, forcing them to ask questions again, answering only as needed, or not responding immediately when called upon. This use, which “starts as a short time but becomes longer and unnoticeable,” causes teenagers to forget that their friend is talking to them. Cell phones are also used when the conversation is uninteresting. In online games, losing can lead to emotional outbursts and harsh words, and in-game messaging features are used to mock other players.

Parental phubbing. In family interactions, adolescents play online games during meals, hold their phones during social gatherings, remain glued to screens when parents are talking, and open TikTok and Instagram or reply to messages during family gatherings. Adolescents are described as "almost always holding their phones" and "more focused on the screen than on the conversation around them." These habits are accompanied by behaviors such as ignoring parents, swearing when angry, and being reluctant to participate in community activities. Unsupervised and unrestricted cell phone use allows adolescents free access to any content, increasing the likelihood of these behaviors. Observations also noted adolescents intentionally watching shows that are not in line with social norms due to easy access via cell phones. It should be noted that in this study, these behaviors are viewed from the perspective of adolescents as those who ignore their parents during family gatherings, whereas the literature generally positions parents as the perpetrators (Nazir, 2025).

3.1.2 Impact of digital phubbing on adolescent deviant behavior

The impact of digital phubbing manifests in five main trends. First, it disrupts harmony with family and friends. Teenagers spend more time on their phones than chatting, act indifferent, remain silent, and don't respond to parental invitations to talk, leading to misunderstandings and arguments. This habit "can trigger arguments and strain relationships with friends or family." Teenagers also tend to argue easily, postpone household responsibilities, and are less polite when reprimanded.

Second, the emergence of apathy and individualism. Teenagers prefer "the world on their phones" to face-to-face interaction, rarely gather and chat, and are less involved in community activities. Third, the quality of communication declines. Teenagers rarely interact face-to-face with friends, are easily distracted when spoken to, have difficulty concentrating during lessons, and are less active in class discussions.

Fourth, the emergence of *cyberbullying* and decreased empathy. Teenagers argue and use abusive language on social media, becoming emotionally charged, teasing each other, and feeling "more comfortable with their phones than interacting face-to-face." Observations documented conversations in online games that were mocking and demeaning to other players. Fifth, decreased emotional self-control. Teenagers become angry and use abusive language when losing, don't answer immediately when called upon, have difficulty limiting their cell phone use, become easily angered, ignore reprimands, and show little respect for their elders. The most noticeable impact is described as "decreased self-control," accompanied by the habit of arguing when reprimanded, neglecting homework, and lacking discipline.

3.2.Discussion

3.2.1 Shape *phubbing digital* in perspective *uses and gratifications*

The three forms of *phubbing* can be read as a manifestation of the basic assumptions of the *uses and gratifications theory*, especially that audiences are active and goal-oriented, and that media competes with other sources of satisfaction (Syafrina, 2022). Teenagers are not simply exposed to media; they choose to play games, watch live broadcasts, and respond to messages while teachers are teaching, friends are talking, or family is gathering. These choices are related to the *gratification sought.* These include entertainment, social interaction, information, leisure time, and self-expression and personal identity, which are commonly sought from social media (Alhothali & Aljefree, 2023; Raji et al., 2020). In the classroom, among friends, and at home, adolescents find that the quick, easy, and self-rated satisfaction of screen time outweighs the satisfaction of learning materials, face-to-face conversations, and family togetherness.

Friend phubbing becomes the most dominant form because the competition between media and peers as sources of satisfaction occurs in the same space. When conversations are uninteresting, the satisfaction offered by friends is judged lower than that available on screens, so adolescents turn to their phones. The assumption that audiences are fully aware of their motives and media use is only partially met: adolescents are aware of the purpose of replying to messages or watching videos, but are less aware of the duration and consequences, as seen in usage that becomes prolonged and "unnoticeable." This condition aligns with the idea of media as a distraction from personal relationships (Syafrina, 2022): togetherness is only physical presence because everyone is busy with their own screens. This pattern aligns with the findings of Alamianti and Rachaju (2021) on the role of phubbers and phubbed, as well as with the study by Nabila et al. (2025), which places cellphone addiction and *fear of missing out as* a trigger for phubbing in teenagers.

In *academic* and *parental phubbing, deviant* behavior emerges when online needs are not met in accordance with real-world social norms and responsibilities. At school, instant personal gratification is achieved at the expense of academic satisfaction, leading to decreased concentration and neglect of student responsibilities. At home, unsupervised and unrestricted cell phone use leaves adolescents as the sole determinants of content and duration, thereby diminishing family norms as a controlling force. These findings align with Dixon et al. (2023), who demonstrated that parental technological interference is associated with aggressive and violent behavior in adolescents, as well as with the view that deviant behavior is rooted in imperfect socialization processes (Fauzi et al., 2019).

3.2.2 Impact of P*hubbing* in *discrepancy* concept

The five impacts can be understood through the concept of *discrepancy* between *gratification sought* and *gratification obtained* (Bah & Arianto, 2022). For adolescents, the criteria for media effectiveness are met because the sought-after entertainment and virtual interaction are adequately obtained, leading to continued use. However, this satisfaction is only enjoyed individually. Family and friends who expect attention, response, and togetherness do not receive the satisfaction they seek, and this gap in expectations gives rise to disappointment, resentment, and conflict. Reprimands are also perceived by adolescents as interruptions to the satisfaction they are enjoying, triggering emotional responses such as arguing and being impolite. The disruption of harmony, therefore, is not solely due to the device, but rather because the adolescent's satisfaction and the satisfaction of those around them are out of balance.

Indifference and individualism emerge when the sought-after satisfaction is personal, such as entertainment, relaxation, and self-expression, so that all can be achieved alone without involving others. The phrase "the world inside a cellphone" describes a private world that is sufficiently satisfying that the presence of others feels less necessary. In terms of communication quality, the need to communicate does not disappear but shifts to media channels that are easier and can be done while doing other activities, so that the remaining face-to-face communication becomes fragmented and loses depth. This shows that fulfilling the need for digital interaction does not equate to maintaining the quality of face-to-face communication, and is in line with the results of studies linking phubbing to a decline in the quality of social interactions (Hidayat et al., 2025; Rizki & Aziz, 2025; Syifa, 2020).

Cyberbullying, the decline in empathy, and the weakening of emotional control are most evident in gaming and social media. Teenagers' self-assessment of the media content they consume so debate and teasing in digital spaces can be seen as a

normal part of online interactions, not a violation of norms. The comfort of interacting through a screen also reduces the ability to read the other person's expressions and feelings, thus reducing sensitivity to the impact of words. When the pleasure and victory sought outweigh the benefits of defeat or a negative response, dissatisfaction arises, manifested in anger, harsh language, and teasing. The same pattern occurs when reprimands stop digital activities. The difficulty adolescents face in limiting cell phone use is consistent with findings that low self-control is associated with phubbing (Hujaema & Herdi, 2025; Khairunnisa & Nursanti, 2024). The immediate gratification of cell phones ultimately overrides obligations with delayed gratification, such as homework and school discipline.

In the conceptual framework of this research, ignoring the person you are talking to and using harsh words are classified as mild deviations; decreased learning discipline and interpersonal conflict are classified as moderate deviations, while *cyberbullying* is classified as a serious deviation. Bullying itself is a form of social deviation that is increasingly common among adolescents (Dewi et al., 2025). The findings of this study appear to differ from those of Paulus and Sarajar (2025), who reported a positive relationship between phubbing and friendship quality. This difference may be related to the approach: the quantitative study noted a positive relationship provided that mobile phone use was managed wisely, while this qualitative study captured uncontrolled and unsupervised use. As a case study in a single village, these findings are not intended to be generalized, but rather provide contextual explanations that can be tested in other locations and with other approaches.

4. CONCLUSION

Digital phubbing among teenagers in Monjok Timur Village comes in three forms, namely *academic phubbing*, *friend phubbing*, and *parental phubbing*, with friend phubbing being the most common form. All three are associated with behaviors like ignoring the other person, reduced communication and social awareness, impolite speech, irritability, teasing friends on social media, and decreased concentration and discipline in studying. The impacts include disrupted harmony with family and friends, indifference and individualism, decreased communication quality, and the emergence of *cyberbullying* and decreased empathy, as well as weakened self-control over emotions. In terms of *uses and gratifications, this* behavior arises because the satisfaction that teenagers obtain from digital devices is individual and is not balanced with social responsibility in real life.

Teenagers are expected to be wiser in limiting their cell phone use, especially when with family, friends, and during class, and to avoid using digital media for activities that harm others. Parents, community leaders, and the government are expected to strengthen digital literacy, social media ethics, provide guidance on cell phone use, and provide positive activities that encourage direct interaction. Future research can expand the research location and approach and examine other factors such as social media addiction, gaming addiction, self-control, peer influence, and family supervision patterns.

5. ACKNOWLEDGEMENT

The author would like to thank Prof. Dr. Drs. Syafruddin, M.S. as the first supervisor and Mr. Rakhmat Nur Adhi, S.Sos., M.Si. as the second supervisor for their extraordinary direction, guidance, and patience during the research process and the preparation of this article. Thanks also to the Sociology Education Study Program, Faculty of Teacher Training and Education, University of Mataram, for their support during this research, as well as to all parties in Monjok Timur Village who have helped smooth the data collection.

6. BIBLIOGRAPHY

Abivian, M. (2022). Gambaran perilaku phubbing dan pengaruhnya terhadap remaja pada era society 5.0. *Prophetic: Professional, Empathy, Islamic Counseling Journal, 5*(2), 155–164.

Alamianti, D., & Rachaju, R. D. K. (2021). Realitas phone snubbing pada pergaulan remaja. *Jurnal Audience, 4*(2), 209–220. https://doi.org/10.33633/ja.v4i2.4256

Alfansyur, A., & Mariyani. (2020). Seni mengelola data: Penerapan triangulasi teknik, sumber dan waktu pada penelitian pendidikan sosial. *Historis: Jurnal Kajian, Penelitian dan Pengembangan Pendidikan Sejarah, 5*(2), 146–150.

Alhothali, G. T., & Aljefree, N. M. (2023). Young adults' sought gratifications from, and perceptions of food advertising by, social media influencers: A qualitative approach. *Journal of Health, Population and Nutrition*, 1–12. https://doi.org/10.1186/s41043-023-00449-4

Bah, T., & Arianto, A. (2022). Uses and gratifications approach: Influence of COVID-19 media exposure on millennial generation in Makassar city, Indonesia. *Heliyon, 8*. https://doi.org/10.1016/j.heliyon.2022.e09704

Barbed-Castrejón, N., Navaridas-Nalda, F., Mason, O., & Ortuño-Sierra, J. (2024). Prevalence of phubbing behaviour in school and university students in Spain. *Frontiers in Psychology, 15*. https://doi.org/10.3389/fpsyg.2024.1396863

Budiyana, H., Arifianto, Y. A., & Purdaryanto, S. (2024). Phubbing dalam perspektif etis teologis: Kajian mereduksi anti sosial dalam masyarakat. *Manna Rafflesia, 10*(2), 356–370. https://doi.org/10.38091/man_raf.v10i2.405

Creswell, J. W., & Creswell, J. D. (2023). *Research design: Qualitative, quantitative, and mixed methods approaches* (6th ed.). SAGE Publications.

Dewi, B. Y. R., Hamidsyukrie, Suud, & Syafruddin. (2025). Dampak status sosial terhadap perilaku bullying pada remaja: Studi kasus di Desa Rarang Selatan. *Jurnal Studi Masyarakat dan Pendidikan, 9*(1), 70–82. https://doi.org/10.29408/sosedu.v9i1.31677

Dixon, D., Sharp, C. A., Hughes, K., & Hughes, J. C. (2023). Parental technoference and adolescents' mental health and violent behaviour: A scoping review. *BMC Public Health, 23*(1), 1–13. https://doi.org/10.1186/s12889-023-16850-x

Fauzi, R., Chasbulloh, R. R., & Tama, I. Y. (2019). Pengaruh pola asuh anak terhadap perilaku menyimpang pada usia remaja. *Social, Humanities, and Educational Studies (SHEs): Conference Series, 2*(1), 360. https://doi.org/10.20961/shes.v2i1.38434

Hardiyanto, S., & Romadhona, E. S. (2018). Remaja dan perilaku menyimpang (Studi kasus remaja di Kota Padangsidimpuan). *Jurnal Interaksi: Jurnal Ilmu Komunikasi, 2*(1), 23–32.

Hidayat, B., Reza, I. F., Arief, Y., Rizki, R. A., & Iskandar, W. (2025). Phone snubbing behavior and social interactions of Muslim students. *Al-Hikmah: Jurnal Agama dan Ilmu Pengetahuan, 22*(1), 231–239. https://doi.org/10.25299/ajaip.2025.vol22(1).21826

Hujaema, M., & Herdi. (2025). Pengaruh pengendalian diri dan adiksi media sosial terhadap perilaku phubbing pada siswa SMA di DKI Jakarta. *INSIGHT: Jurnal Bimbingan Konseling, 13*(1), 83–92. https://doi.org/10.21009/insight.131.11

Jailani, Syahran, Jeka, & Firdaus. (2023). Populasi dan sampling (kuantitatif), serta pemilihan informan kunci (kualitatif) dalam pendekatan praktis. *Jurnal Pendidikan Tambusai, 7*(3), 26320–26332.

Karadağ, E., Tosuntaş, Ş. B., Erzen, E., Duru, P., Bostan, N., Şahin, B. M., Çulha, I., & Babadağ, B. (2015). Determinants of phubbing, which is the sum of many virtual

addictions: A structural equation model. *Journal of Behavioral Addictions, 4*(2), 60–74. https://doi.org/10.1556/2006.4.2015.005

Khairunnisa, & Nursanti, A. (2024). Hubungan antara kontrol diri dengan perilaku phubbing pada mahasiswa. *WISSEN: Jurnal Ilmu Sosial dan Humaniora, 2*(4), 227–246. https://doi.org/10.62383/wissen.v2i4.387

Nabila, Aliyyah Dhiyah Ulhaq, Risma Anita Puriani, & Rizki Novirson. (2025). Perilaku phubbing pada remaja: Studi literatur. *SOSIAL: Jurnal Ilmiah Pendidikan IPS, 3*(2), 140–156. https://doi.org/10.62383/sosial.v3i2.771

Nazir, T. (2025). Phubbing in the digital age: Understanding and mitigating the impact on social interactions and relationships. *Anadolu University Journal of Education Faculty, 9*(3), 273–292. https://doi.org/10.34056/aujef.1672999

Paulus, M. S., & Sarajar, D. K. (2025). Hubungan antara phubbing dengan kualitas persahabatan remaja. *INNOVATIVE: Journal of Social Science Research, 5*(3), 4940–4954.

Purnama Sari, W., Lady Ta, Y., Kayla Riwanda, J., & Irena, L. (2024). Fenomena phubbing dalam komunikasi antar pribadi bagi generasi muda. *Jurnal Serina Abdimas, 2*(1), 221–228. https://doi.org/10.24912/jsa.v2i1.29209

Raji, R. A., Arikewuyo, O. A., & Saheed, A. (2020). Unveiling social gratifications sought and obtained from social media utilization. *The Messenger, 12*(2), 168–179. https://doi.org/10.26623/themessenger.v12i2.1818

Rizki, Z. I., & Aziz, A. K. (2025). Studi literatur: Dampak phubbing terhadap interaksi sosial. *Jurnal Psikologi dan Bimbingan Konseling, 15*(3).

Sugiyono. (2019). *Metode penelitian kuantitatif, kualitatif, dan R&D*. Alfabeta.

Syafrina, A. E. (2022). *Komunikasi massa* (R. Kusumawati, Ed.). CV Mega Press Nusantara.

Syifa, A. (2020). Intensitas penggunaan smartphone, prokrastinasi akademik, dan perilaku phubbing mahasiswa. *Counsellia: Jurnal Bimbingan dan Konseling, 10*(1), 83–96. https://doi.org/10.25273/counsellia.v10i1.6309

Tasnimia, M., Hamidsyukrie, & Nursaptini. (2025). Perubahan pola perilaku menyimpang siswa di SMAN 11 Mataram. *Jurnal Studi Masyarakat dan Pendidikan, 9*(1), 56–69. https://doi.org/10.29408/sosedu.v9i1.32515

Bardzell, M., & Bergner , J. (2013). Teacher Training and Student Assessment: At Odds? *Notices of the American Mathematical Society, 60*(6), 763-765. Retrieved from https://www.ams.org/journals/notices/201306/rnoti-p763.pdf

Beilock, S., Gunderson, E., Ramirez, G., & Levine, S. (2010). Female teachers' math anxiety affects girls' math achievement. *Psychological and Cognitive Sciences, 107*(5), 1860-1863. doi: https://doi.org/10.1073/pnas.0910967107

Darma, I. K. (2019). The effectiveness of teaching program of CIPP evaluation model. *International Research Journal of Engineering It & Scientific Research, 5*(3), 1-13. doi: https://doi.org/10.21744/irjeis.v5n3.619

Dedeoglu, N. C. (2022). Preservice Mathematics Teachers' Ability to Perform the Mathematizing Process: The Cylinder Packing Problem. *Participatory Educational, 9*(6), 130-155. doi: https://doi.org/10.17275/per.22.132.9.6

Divayana, D. H., Adiarta, A., Santiyadnya, N., Suyasa, P. A., & Andayani, M. S. (2022). Rancangan Model CIPP Berbasis WP Untuk Mengevaluasi Keefektifan Pembelajaran Online. *Jurnal Penelitian dan Pengembangan Pendidikan, 6*(2), 275-285. doi: https://doi.org/10.23887/jppp.v6i2.47894

Dumitrascu, G. (2017). Understanding the Process of Generalization in Mathematics through Activity Theory. *International Journal of Learning, Teaching and Educational Research, 16*(12), 46-69. doi: https://doi.org/10.26803/ijlter.16.12.4