



Evaluation of Online Psychological Assessment in Mental Health Services: User Perspectives and Implications for Counseling Practice

Devy Sekar Ayu Ningrum^{1*}, Sitti Rahma Zuleykha Aven Hinelo², Nazwa Rizkia Ismail³, Husnul Marhamah Ifka⁴, Indah Khairunnisa Pakaya⁵

Correspondence regarding this article should be addressed to:

* Devy Sekar Ayu Ningrum, Department of Psychology, Universitas Negeri Gorontalo, Indonesia, ✉ devysekar@ung.ac.id

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Evaluation of Online Psychological Assessment in Mental Health Services: User Perspectives and Implications for Counseling Practice

Devy Sekar Ayu Ningrum^{1*}, Sitti Rahma Zuleykha Aven Hinelo², Nazwa Rizkia Ismail³, Husnul Marhamah Ifka⁴, Indah Khairunnisa Pakaya⁵

^{1,2,3,4,5} Department of Psychology, Universitas Negeri Gorontalo, Indonesia

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ABSTRACT

Background: The rapid acceleration of digitalization has expanded the accessibility of contemporary mental health services; however, transitioning clinical assessments to virtual settings raises concerns regarding diagnostic accuracy due to the limited observation of clients' nonverbal behaviors. **Objective:** This study aimed to evaluate the effectiveness, strengths, and limitations of online psychological assessment from the perspective of university students. **Methods:** A descriptive qualitative design was employed. Data were collected through in-depth interviews with undergraduate students at Universitas Negeri Gorontalo who had experienced telemental health services, and were analyzed using thematic analysis. **Results:** Online psychological assessment is highly effective for early detection, rapid preliminary screening, and mitigating social stigma by providing anonymity that fosters client self-disclosure. However, its diagnostic efficacy is fundamentally constrained by systemic losses of nonverbal cues (such as micro-expressions and body language) and technical signal latencies. **Conclusion:** Virtual psychological assessment cannot entirely replace traditional face-to-face clinical evaluations but functions as a vital, complementary entry point within a hybrid telemental health counseling model. This approach integrates the accessibility and stigma-reducing benefits of digital platforms for initial screening with the diagnostic depth of in-person clinical observation. **Originality/Value:** This study offers novel empirical insights into the field of clinical psychology and telemental health by uncovering qualitative evaluations of virtual psychological assessments within a regional higher education context that has remained underexplored. These findings enrich empirical evidence while providing a strategic reference for university counselors and mental health practitioners in formulating and developing standardized virtual assessment protocols.

1. INTRODUCTION

The continuous evolution of technology accelerates the flow of information and communication across spatial and temporal boundaries (Maqsood et al., 2024; Zolkipli et al., 2022). This global phenomenon has triggered massive digitalization across vital sectors, driving a radical transformation in remote psychological interventions and contemporary counseling practices (Chiruvolu & Justin, 2022). This topic commands significant attention and is critical to

investigate because technological acceleration no longer merely alters administrative functions in banking or commerce, but has penetrated clinical medical and psychological environments, such as online clinical assessment procedures and virtual counseling interviews. Statistics from the Central Bureau of Statistics in 2023 indicate that 79.03 percent of individuals aged 15 to 59 possess proficient skills in information and computer technology (Badan Pusat Statistik, 2023). This contemporary landscape forces

* **Corresponding Author:** Devy Sekar Ayu Ningrum, devysekar@ung.ac.id

Department of Psychology, Universitas Negeri Gorontalo, Indonesia

Address: Jl. Jend. Sudirman No.6, Dulalowo Tim., Kec. Kota Tengah, Kota Gorontalo, Gorontalo 96128, Indonesia



the productive age group into constant coexistence with digital ecosystems, rendering the adaptation of internet-based counseling tools an urgent necessity for modern society.

According to developmental psychology theory (Koc et al., 2023) (Nakhma'ussolikah & Al-Ghazali, 2026), integrating digital technology into mental health services should align with the fulfillment of psychosocial developmental tasks and the dynamics of the therapeutic alliance in counseling practices. In Erik Erikson's developmental framework, adolescents navigating identity exploration ideally require an adaptive safe space to explore themselves while avoiding identity confusion authentically (Cirasola et al., 2024; Dhabhai, 2025). Meanwhile, for young adults, digital systems should facilitate functional needs in building close emotional bonds and overcoming isolation through flexible counseling services amidst high daily productivity demands (Bäckström et al., 2025). Grounded in telemental health service concepts, integrating telecommunication media should expand counseling reach, overcome geographical barriers, transcend time constraints, and reduce resistance from social stigma without diminishing the professional therapeutic interaction between counselor and client (Dwyer et al., 2021).

Empirical evidence in the field reveals a striking disconnect between these expected conditions and the actual reality of virtual counseling execution. A prominent behavioral issue currently widespread among adolescents is erroneous self-diagnosis resulting from unrestricted access to invalid informal assessment tools on social media, threatening the initial quality of the counseling process (Corzine & Roy, 2024; Ursula et al., 2025). This issue is corroborated by interview findings at Universitas Negeri Gorontalo, revealing that the clinical efficacy of online counseling remains fragile due to its heavy reliance on technological stability and client verbal capabilities. Internet signal latency frequently disrupts empathy flow and emotional conversation dynamics between psychologists and clients. The absence of direct physical presence significantly reduces clinical observation quality because practitioners lose the ability to capture nonverbal cues, facial microexpressions, subtle affective responses, and client body language vital for counseling success. These barriers risk producing partial and inaccurate psychological diagnoses.

Research on digital technology utilization in psychological services and guidance has expanded in recent years. Studies demonstrate that telemental health offers high flexibility for modern society, where online counseling effectively provides accessible psychological support unconstrained by geographical location (Adeghe et al., 2024; Langarizadeh et al., 2017; Nwokedi et al., 2025). Other studies emphasize that the lack of bodily movement and facial expression cues in virtual counseling interviews significantly affects clinical diagnostic validity and accuracy (Yildirim et al., 2023; Stoll et al., 2020). Other studies

indicate that the effectiveness of mental health technology in the digital era depends heavily on system quality, data security, digital literacy levels, and user readiness (Kozelka et al., 2023; Garcia, 2025; Kooli & Chakraoui, 2025). Previous scholarly literature predominantly positions online platforms as emergency alternatives or unidirectional counseling media rather than structured clinical management models.

Prior empirical studies regarding the evaluation of digital psychological services show conflicting findings. On one hand, studies indicate that digital platforms enhance user reach and service satisfaction through immediate accessibility (Ursula, 2021). On the other hand, studies report that virtual modalities fail to establish comparable diagnostic accuracy due to nonverbal data loss and technical disruptions (Adler Baeder et al., 2022; Stoll et al., 2020). These inconsistent findings indicate the necessity for further empirical testing to clarify the relationship between virtual assessment delivery and diagnostic validity. Existing evaluations remain largely limited to general satisfaction metrics without specifically examining psychosocial developmental stages among university students. Furthermore, previous counseling research heavily favors macro quantitative approaches, leaving the dynamics of empathy reduction during virtual sessions insufficiently explained. Therefore, this study applies a qualitative descriptive approach using in-depth interviews as a methodological response to clarify these complex dynamics.

An in-depth study regarding online psychological assessment evaluation in telemental health services needs to be conducted immediately because the rapid shift toward virtual counseling without standardized protocols risks compromising clinical diagnostic precision. Without efforts to address these evaluation gaps, unverified virtual assessment procedures potentially inflict broader damage by escalating misdiagnosis risks and inappropriate self-interventions among young adults. Therefore, this study offers a comprehensive qualitative evaluation model of telemental health services as an integrative framework to provide a thorough understanding and generate relevant solutions for virtual clinical practices. The novelty of this study lies in its explicit integration of student psychosocial developmental stages with technical and clinical virtual barriers in a regional university setting, distinguishing it from prior macro institutional evaluations. Consequently, these findings contribute theoretically to expanding telemental health and clinical counseling literature, while offering practical guidelines for university counseling centers and mental health practitioners to design valid, standardized virtual assessment protocols.

This study aims to evaluate the effectiveness, strengths, and limitations of executing clinical assessments online. The specific focus of this study is to explore in depth the subjective experiences of Universitas Negeri Gorontalo students who have undergone telemental health counse-

ling. Through an in-depth interview approach, this objective is achieved by examining client self-disclosure dynamics, identifying virtual technical barriers, and analyzing the extent to which digital technology complements or replaces traditional psychological modalities in supporting diagnostic validity and counseling practice effectiveness in Indonesia.

2. MATERIALS AND METHODS

2.1 Research Design

This study employed a descriptive qualitative design utilizing in-depth interviews as the primary data collection instrument. The qualitative approach was selected because it allows for a comprehensive and nuanced exploration of the complex subjective experiences, perceptions, and real-world evaluations of remote psychological service users. Through this method, researchers gathered rich, contextual descriptive data regarding clinical efficacy and practical barriers that cannot be measured through rigid numerical metrics or macro quantitative approaches.

2.2 Pareicipants

The participants in this study comprised active undergraduate students at Universitas Negeri Gorontalo. The selection of these participants was based on the premise that university students represent a productive age group constantly coexisting with rapid advancements in information technology. The inclusion criteria established for participants included individuals aged between 15 and 59 years who actively utilize digital technology in their daily lives and possess direct prior experience undergoing online psychological assessments. Meanwhile, the research object focused on the actual effectiveness, advantages, and limitations of telecommunication-based virtual clinical assessment services. Research preparation and participant recruitment were conducted from April through May 2026.

2.3 Instruments and Data Collection

The primary instruments utilized for data collection were a semi-structured interview guide and a written informed consent form. Informed consent was administered prior to each session to ensure transparent communication regarding evaluation objectives and to guarantee participant data confidentiality. Data collection was executed through focused interview sessions centered on three core

clinical questions: 1) based on your experience, to what extent do online psychological assessment results accurately reflect a client's actual condition? 2) what specific challenges do you encounter while undergoing psychological assessments online?; 3) how comfortable do you feel opening up and sharing deep personal stories through a screen compared to face-to-face meetings?.

2.4 Data Analysis

The data analysis technique applied in this study was qualitative thematic analysis. Thematic analysis represents a structured process for identifying, analyzing, organizing patterns, and reporting data into meaningful themes that yield critical interpretations and conclusions. The rationale for using thematic analysis was to uncover underlying ideas, deep insights, and hidden psychosocial barriers embedded within student narratives regarding telemental health efficacy.

2.5 Research Procedures

The execution of this research was structured systematically across three primary stages: 1) preparation stage: this phase involved drafting questions for the semi-structured interview guide, defining target participant characteristics, and preparing written informed consent forms; 2) execution stage: in-depth interview sessions were conducted in a structured manner by posing pre-validated clinical questions to eligible participants who met the inclusion criteria; 3) reporting stage: in this final phase, the research team performed data transcription, data reduction, scientific manuscript drafting, and comprehensive final reviews concerning the evaluation of online clinical assessments.

3. RESULTS AND DISCUSSION

3.1 Results

Based on the data collection conducted through in-depth interviews and literature reviews between April and May 2026, several crucial insights were identified regarding the evaluation of online psychological services. Participants in this study fell within the productive age range of 12 to 59 years, thereby providing rich perspectives regarding their real experiences during remote assessment sessions. A summary of the main findings from this evaluation is presented in Table 1 below:

Table 1. Summary of Remote Assessment Evaluation Results

Interview Dimension	Evaluation Findings
Efficacy and Accessibility	Facilitates early detection of psychological conditions without geographical barriers, aligning with the needs of productive age groups possessing high digital literacy.
Clinical Limitations	Involves nonverbal data reduction where psychologists struggle to capture emotional vibes or subtle affective responses compared to offline sessions.

Interview Dimension	Evaluation Findings
Technical Challenges	Internet signal latency frequently disrupts empathy flow and conversation dynamics between clients and practitioners.
Stigma and Privacy Factors	Online services serve as a safe space for individuals avoiding social stigma, offering anonymity that enhances self disclosure.
Modality Preferences	Clients tend to select online platforms for routine consultations while preferring face to face sessions for issues requiring high emotional depth.

Table 1 demonstrates that remote psychological assessments offer significant benefits in improving access to mental health services, particularly as an early screening tool for students without geographical constraints. However, service efficacy remains influenced by several obstacles, such as limited observation of nonverbal cues essential in clinical assessment processes and technical disruptions from unstable internet networks that reduce communication quality and therapeutic relationships between psychologists and clients. Conversely, online services effectively mitigate social stigma by providing safety, privacy, and anonymity that foster self-disclosure during counseling. Nevertheless, student modality preferences depend on problem complexity, where online assessment is favored for routine consultations and initial screening. In contrast, face-to-face assessment remains superior for cases requiring deep emotional exploration. These findings indicate that implementing a hybrid service model integrating online and offline assessments represents the most appropriate approach for enhancing university mental health services.

The following are authentic excerpts shared by informants responding to the three primary clinical questions regarding online psychological assessment implementation:

Regarding assessment alignment with the client's actual condition:

"For me, this online assessment is very helpful for knowing the initial problem I am facing, but honestly, looking through a computer screen feels like there is an uncomfortable distance between us." Informant AR (Male Student, 19 Years Old).

"In my opinion, psychologists on phone screens sometimes find it difficult to read my mood completely. They cannot see my hand gestures or facial expressions clearly due to very limited camera angles." Informant LM (Female Student, 21 Years Old)

Regarding technical challenges during sessions:

"The heaviest challenge is when the internet suddenly slows down or disconnects mid-session. Such technical glitches instantly ruin my storytelling comfort and break the empathetic atmosphere built from the start." Informant FH (Male Student, 20 Years Old)

"I am often disturbed by home environments that are noisy and lack privacy. That breaks my concentration when I want to share sensitive personal issues with the psychologist." Informant NQ (Female Student, 19 Years Old)

Regarding comfort and openness in online assessment:

"I feel online counseling becomes a safe space that liberates me from shame. Through a screen, I feel more hidden and unafraid of being judged negatively by others, allowing me to be honest about my problems." Informant NQ (Female Student, 19 Years Old).

Based on in-depth interview findings, executing psychological assessments online is considered effective for initial screening and accessible mental health care delivery. However, its actual efficacy relies heavily on technological stability and the client's verbal expression skills. For students navigating identity versus role confusion developmental phases, online assessment provides convenience in obtaining professional help independently, with higher comfort levels due to reduced shame and social stigma concerns. Nevertheless, informants expressed that limitations in observing body language, facial expressions, and other nonverbal cues leave clinical information incomplete. Consequently, psychologists must employ deeper exploration techniques and verify client information to maintain diagnostic accuracy and support sound clinical decision-making.

3.2. Discussion

Through a rigorous and nuanced interpretation of the empirical data, a critical main finding emerged that online psychological assessments serve as a highly effective instrument for early detection, rapid preliminary screening, and mitigating pervasive social stigma. However, their diagnostic validity remains fundamentally constrained by the systemic loss of nonverbal cues. The direct implication of this finding explains how remote assessment modalities cannot completely supplant conventional face-to-face diagnostic procedures, functioning instead as a vital complementary mechanism within a modern hybrid mental health service model. Rather than viewing virtual encounters as an isolated alternative, this evidence underscores that online tools establish an essential first line of defense that lowers the barrier to seeking professional help, while acknowledging that complete diagnostic precision still demands traditional clinical observation.

The empirical findings of this study can be thoroughly explained through the dynamic interaction of several internal factors and mechanisms, namely the advanced digital literacy possessed by productive-age university students, which facilitates seamless adaptation to telemental

health platforms, and the persistent geographical challenges inherent in island regions, which necessitate accessible care models. Furthermore, the perceived privacy and spatial distance provided by screen-based interactions significantly reduce anxiety, thereby reinforcing client emotional comfort and directly enhancing self-disclosure regarding sensitive psychological issues during remote clinical interviews (Lucas et al., 2017; Luxton et al., 2014). This psychological safety mechanism allows students to bypass immediate social judgment, creating a conducive environment for honest communication even when physical proximity is absent (McLeod & Gupta, 2023).

This study directly supports and refines the core assumptions of Erik Erikson's Psychosocial Development Theory (Cockerham et al., 2021; Dhabhai, 2025) which posits that adolescents and youth navigating identity exploration require secure, low-pressure environments to foster authentic self expression, whereas young adults seeking deep emotional intimacy find in person interactions more suited for complex emotional issues (Alchin et al., 2023; Cole et al., 2016). This conceptual framework aligns with the perspective of Ursula (2021), who emphasized that online counseling provides indispensable accessibility across geographical boundaries via telecommunication media. This theoretical framework demonstrates that digital technology expands clinical reach without eradicating the fundamental therapeutic connection between counselors and clients. From these synthesized assumptions, it is understood that telemental health acts as an adaptive, developmentally appropriate entry point that flexibly accommodates the evolving psychosocial developmental needs of university students.

The empirical results of this study strongly confirm prior research by Sari et al. (2020); Duraku et al. (2023); Kaligis et al. (2021), who reported that mental health service delivery in Indonesia faces severe structural and geographical barriers, particularly across archipelagic territories. Moreover, this study aligns with findings by Adler Baeder et al. (2022) and Stoll et al. (2020); Dondé et al. (2021); Степанова et al. (2024) who demonstrated that the reduction of nonverbal cues, body language, and facial microexpressions during remote interviews significantly impairs diagnostic precision. However, a fundamental difference exists regarding user adaptation patterns, where virtual spaces in this study proved to actively maximize emotional communication for individuals who typically exhibit high social anxiety during traditional offline assessments. This divergence stems from the specific contextual focus on digitally native university students whose baseline psychological comfort levels are substantially higher when communicating through digital screens rather than physical clinical environments.

This study provides substantial scientific novelty by addressing a critical empirical gap regarding the scarcity of qualitative field evidence on the subjective clinical expe-

riences of university students using telemental health services within regional higher education contexts. Although broad online counseling accessibility has been widely examined by Van Der Sluis & Van Den Broek (2025) this study presents direct empirical proof that virtual assessments excel as efficient initial screening tools but inherently require offline validation to capture subtle affective responses. The novelty of these findings enriches the broader literature by offering evidence-based insights that bridge theoretical telemental health frameworks with practical clinical psychology applications in higher education institutions.

These findings indicate a significant conceptual shift from viewing virtual counseling as a temporary emergency alternative toward recognizing it as a structured, permanent component of a hybrid clinical management framework. This critical analysis reveals that the relationship between virtual modalities and diagnostic accuracy is not linear, but rather governed by the dynamic balance between client verbal expressive capacity, technological system reliability, and practitioner digital competence. Consequently, clinical efficacy in the digital age relies on the synergy between human communication skills and technological infrastructure rather than the mere adoption of software platforms (Irawan et al., 2025; Kamene, 2025)

The overarching significance of these findings underscores the urgent necessity of adopting a hybrid counseling model as an effective evidence-based approach to enhance mental health service delivery among university students. This success proves that integrating virtual screening with in-person emotional exploration possesses strong practical applicability in resolving persistent accessibility and social stigma barriers in the field. Nevertheless, a rigorous interpretation of these data must consider factors outside the primary analyzed variables, such as private home environment quality, ambient room distraction levels, and individual psychologist communication styles (Bearse et al., 2013; Parsons et al., 2021). Beyond the primary scope of this study, likely, the pervasive digital lifestyle habits of young adults contributed secondarily to their heightened comfort during online sessions. This alternative perspective reinforces the necessity of establishing standardized virtual assessment protocols comprehensively.

The overall discussion confirms the conceptual common thread that the effectiveness of online psychological assessments is the outcome of a complex interaction between virtual delivery mechanisms and student psychosocial readiness. This integration between empirical field evidence and theoretical frameworks proves that telemental health cannot be evaluated partially, requiring a harmonious synergy between structured digital platforms and in-depth clinical validation instead. This comprehensive discussion not only confirms Erikson's Psychosocial Development Theory but also delivers a significant practical contribution by proving that mental health innovation does not

rely on replacing traditional modalities entirely to achieve optimal clinical efficacy. The final conceptual construct formed in this study emphasizes that virtual assessment should be systematically positioned as an essential gateway for early intervention. At the same time, face-to-face encounters preserve the ultimate depth of clinical diagnostic validity.

4. IMPLICATIONS AND CONTRIBUTIONS

4.1 Research Implications

The empirical findings of this study provide significant theoretical, practical, and methodological implications for the literature on online psychological assessment evaluation in student telemental health services by proving that virtual clinical assessments serve as a highly effective early detection and preliminary screening mechanism. However, their diagnostic accuracy remains constrained by nonverbal data reduction and technological instability. These findings offer practical implications for university counseling centers and clinical practitioners by demonstrating that telemental health should be structured within a hybrid service model rather than applied as a complete replacement for face-to-face clinical evaluations. Furthermore, the findings of this study successfully fill a critical empirical gap and knowledge-to-action gap regarding the scarcity of direct qualitative field evidence on student subjective experiences and practical virtual barriers during remote clinical encounters in regional higher education settings.

4.2 Research Contributions

The findings of this study contribute as a valuable source of new scientific knowledge in the field of clinical psychology and telemental health by providing a novel conceptual framework regarding online psychological assessment evaluation that can be utilized to integrate the advantages of digital reach in mitigating social stigma with conventional in-person clinical observation methods to ensure evidence-based diagnostic validity from actual field data. Additionally, this study contributes to developmental counseling literature by illustrating how virtual assessment platforms can be adapted to accommodate the specific psychosocial developmental needs and digital communication characteristics of university students.

5. LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

5.1 Research Limitations

This study possesses several limitations that should be acknowledged. First, this research relied primarily on qualitative in-depth interview methods, meaning the findings are highly dependent on the subjective views, personal experiences, and self-reported perceptions of the res-

pondents. Second, direct clinical measurements of diagnostic accuracy were not performed, preventing definitive quantitative conclusions regarding service efficacy based on empirical diagnostic success rates. Third, the age range of respondents varied across productive age brackets, which may introduce variance into the findings due to differing technological fluency levels, developmental stages, and prior familiarity with digital platforms. Finally, identified operational challenges were not inherently rooted in the qualitative methodology itself, but rather stemmed from external uncontrollable variables such as internet network latency, home environment noise, and varying practitioner online communication skills.

5.2 Recommendations for Future Research

Based on the identified limitations, future research is recommended to utilize field-based mixed methods approaches involving larger participant samples, broader geographical distribution, and more specific subpopulation characteristics. Subsequent studies should evaluate online psychological assessment efficacy across specific age cohorts or distinct clinical diagnostic categories to generate deeper, more generalizable insights. Furthermore, future efforts should focus on strengthening institutional technical infrastructure, providing specialized digital communication training for mental health professionals, and developing standardized regulatory frameworks for virtual assessment instruments to mitigate the risk of misleading self-diagnosis among young populations.

6. CONCLUSION

This study concludes that online psychological assessments represent an effective innovation for early detection and mental health service accessibility, particularly for youth and young adults possessing high digital literacy. Telemental health services successfully mitigate geographical barriers and reduce resistance caused by pervasive social stigma, thereby enhancing client self-disclosure.

However, the actual efficacy of virtual modalities does not fully equal conventional face-to-face encounters due to fundamental clinical challenges, specifically nonverbal cue reduction, such as body language and facial microexpressions, essential for diagnostic validity, alongside heavy reliance on technological stability. From a psychosocial perspective, service needs vary across developmental stages, where adolescents utilize virtual spaces for identity exploration in a secure environment. At the same time, young adults leverage them for functional efficiency amidst daily productivity demands.

The overarching significance of this research emphasizes that digital technology does not exist to replace traditional clinical meetings entirely, but functions as a vital complementary element. A hybrid model integrating virtual flexibility with the emotional depth of in-person

evaluations represents the ideal architecture for modern clinical psychology practices, where infrastructure reinforcement and practitioner digital skill enhancement serve as key drivers to ensure future assessment validity and reliability.

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CRediT Authorship Contribution Statement

All authors discussed the results, contributed to the final manuscript, and approved the final version for publication. Devy Sekar Ayu Ningrum: Conceptualization, Methodology, Supervision, Writing – review & editing. Sitti Rahma Zuleykha Aven Hinelo: Conceptualization, Investigation, Formal analysis. Nazwa Rizkia Ismail: Conceptualization, Investigation, Data curation. Husnul Marhamah Ifka MS: Conceptualization, Investigation, Writing – review & editing. Indah Khairunnisa Pakaya: Conceptualization, Investigation, Writing – review & editing.

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Conflict of Interest Statement

The authors declare that no financial, personal, or professional conflicts of interest exist that could influence the execution of this research, data analysis, interpretation of findings, or the preparation of this manuscript.

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Informed Consent Statement

The authors declare that this study was conducted in accordance with study ethics, including obtaining approval from the relevant institution. This process respects the autonomy of participants, ensures the confidentiality of their data, and prioritizes their safety and well-being, in compliance with applicable study ethics guidelines. Written and verbal informed consent, or assent for minors, was obtained from all participants involved in the study.

REFERENCES

- Adeghe, E. P., Okolo, C. A. and Ojeyinka, O. T. (2024). A review of emerging trends in telemedicine: Healthcare delivery transformations. *International Journal of Life Science Research Archive*, 6(1), 137–147. pp. <https://doi.org/10.53771/ijlsra.2024.6.1.0040>
- Adler Baeder, F., Schramm, D. G., & Guner, J. (2022). Technology in relationship education: Examining the benefits and challenges of virtual delivery. *Journal of Family Theory & Review*. <https://doi.org/10.1111/jftr.12465>
- Alchin, C. E., Machin, T., Martin, N. and Burton, L. J. (2023). Authenticity and Inauthenticity in Adolescents: A Scoping Review. *Adolescent Research Review*, 9(2), 279–315. pp. <https://doi.org/10.1007/s40894-023-00218-8>
- Bäckström, M., Girdler, S., Milbourn, B. and Lexén, A. (2025). Needs and Preferences of Swedish Young Adults for a Digital App Promoting Mental Health Literacy, Occupational Balance, and Peer Support: Qualitative Interview Study. *JMIR Formative Research*, 9. <https://doi.org/10.2196/71563>
- Badan Pusat Statistik. (2023). *Laporan indeks pembangunan teknologi informasi dan komunikasi 2022*. Jakarta: BPS RI.
- Bearse, J. L., McMinn, M. R., Seegobin, W. and Free, K. (2013). Barriers to psychologists seeking mental health care. *Professional Psychology Research and Practice*, 44(3), 150–157. pp. <https://doi.org/10.1037/a0031182>
- Chiruvolu, V. and Justin, J. (2022). Media and Technology in Counseling: Emerging Practices and Ethical Considerations in Response to COVID-19. *Journal of Counseling Research and Practice*, 7(2), 40–62. pp. <https://doi.org/10.56702/uckx8598/jcrp0702.3>
- Cirasola, A., Fonagy, P. and Midgley, N. (2024). Alliance rupture and repair in adolescent psychotherapy: What clinicians can learn from research. *Psychotherapy*, 61(4), 304–313. pp. <https://doi.org/10.1037/pst0000535>
- Cockerham, D., Lin, L., Ndolo, S. and Schwartz, M. D. (2021). Voices of the students: Adolescent well-being and

- social interactions during the emergent shift to online learning environments. *Education and Information Technologies*, 26(6), 7523–7541. pp. <https://doi.org/10.1007/s10639-021-10601-4>
- Cole, D. A., Nick, E. A., Zelkowitz, R. L., Roeder, K. M. and Spinelli, T. (2016). Online social support for young people: Does it recapitulate in-person social support; can it help? *Computers in Human Behavior*, 68, 456–464. pp. <https://doi.org/10.1016/j.chb.2016.11.058>
- Corzine, A. and Roy, A. (2024). Inside the black mirror: current perspectives on the role of social media in mental illness self-diagnosis. *Discover Psychology*, 4(1). <https://doi.org/10.1007/s44202-024-00152-3>
- Dhabhai, I. (2025). Psychosocial Challenges of Adolescents: Exploring Identity Crisis through Erikson's Theory. *RESEARCH REVIEW International Journal of Multidisciplinary*, 10(5), 322–328. pp. <https://doi.org/10.31305/rrijm.2025.v10.n5.035>
- Dondé, C., Pouchon, A., Pelluet, A., Bougerol, T. and Polosan, M. (2021). The Impact of Wearing a Face Mask on the Psychiatric Interview: a National Survey During the COVID-19 Pandemic. *Psychiatric Quarterly*, 93(2), 435–442. pp. <https://doi.org/10.1007/s11126-021-09962-3>
- Duraku, Z. H., Davis, H. and Hamiti, E. (2023). Mental health, study skills, social support, and barriers to seeking psychological help among university students: a call for mental health support in higher education. *Frontiers in Public Health*, 11, 1220614–1220614. pp. <https://doi.org/10.3389/fpubh.2023.1220614>
- Dwyer, A., Neto, A. de A., Estival, D., Li, W., Lam-Cassettari, C. and Antoniou, M. (2021). Suitability of Text-Based Communications for the Delivery of Psychological Therapeutic Services to Rural and Remote Communities: Scoping Review. *JMIR Mental Health*, 8(2). <https://doi.org/10.2196/19478>
- Garcia, G. (2025). The role of AI in transforming psychiatric-mental health care: Enhancing the role of psychiatric-mental health nurse practitioners. *Nursing Outlook*, 73(4), 102461. <https://doi.org/10.1016/j.outlook.2025.102461>
- Irawan, A. S., Alristina, A. D., Laili, R. D., Amalia, N., Muharram, A. P., Miranda, A. I., Döbrössy, B. and Girasek, E. (2025). Beyond the interface: benchmarking pediatric mobile health applications for monitoring child growth using the Mobile App Rating Scale. *Frontiers in Digital Health*, 7, 1621293–1621293. pp. <https://doi.org/10.3389/fdgth.2025.1621293>
- Kaligis, F., Ismail, R. I., Wiguna, T., Prasetyo, S., Indriatmi, W., Gunardi, H., Pandia, V. and Magdalena, C. C. (2021). Mental Health Problems and Needs among Transitional-Age Youth in Indonesia. *International Journal of Environmental Research and Public Health*, 18(8), 4046–4046. pp. <https://doi.org/10.3390/ijerph18084046>
- Kamene, K. (2025). From Physical to Virtual: The Transition of Psychological Therapy in the Digital Age. *Premier Journal of Psychology*. <https://doi.org/10.70389/pjp.100007>
- Koç, H., Kozan, H. İ. Ö., Seki, T. and Gökalp, Z. Ş. (2023). The Effect of Technological Developments on Guidance and Psychological Counseling Services: Opinions of School Counselors. *DergiPark (Istanbul University)*. <https://dergipark.org.tr/tr/pub/neueefd/issue/80589/1352124>
- Kooli, C., & Chakraoui, R. (2025). AI-driven assistive technologies in inclusive education: benefits, challenges, and policy recommendations. *Sustainable Futures*, 10, 101042. <https://doi.org/10.1016/j.sftr.2025.101042>
- Kozelka, E. E., Acquilano, S. C., Al-Abdulmunem, M., Guarino, S., Elwyn, G., Drake, R. E., & Carpenter-Song, E. (2023). Documenting the digital divide: Identifying barriers to digital mental health access among people with serious mental illness in community settings. *SSM-Mental Health*, 4, 100241. <https://doi.org/10.1016/j.ssmmh.2023.100241>
- Langarizadeh, M., Tabatabaei, M., Tavakol, K., Naghipour, M. and Moghbeli, F. (2017). Telemental Health Care, an Effective Alternative to Conventional Mental Care: a Systematic Review. *Acta Informatica Medica*, 25(4), 240–240. pp. <https://doi.org/10.5455/aim.2017.25.240-246>
- Lucas, G., Rizzo, A., Gratch, J., Scherer, S., Stratou, G., Boberg, J. and Morency, L. (2017). Reporting Mental Health Symptoms: Breaking Down Barriers to Care with Virtual Human Interviewers. *Frontiers in Robotics and AI*, 4. <https://doi.org/10.3389/frobt.2017.00051>
- Luxton, D. D., Pruitt, L. D. and Osenbach, J. E. (2014). Best practices for remote psychological assessment via telehealth technologies. *Professional Psychology Research and Practice*, 45(1), 27–35. pp. <https://doi.org/10.1037/a0034547>
- Maqsood, A., Gul, S., Zahra, T., Noureen, N. and Khattak, A. (2024). From face-to-face to screen-to-screen: exploring the multifaceted dimensions of digital mental health care. *Frontiers in Psychiatry*, 15, 1413127–1413127. pp. <https://doi.org/10.3389/fpsyt.2024.1413127>
- McLeod, E. and Gupta, S. (2023). The Role of Psychological Safety in Enhancing Medical Students' Engagement in Online Synchronous Learning. *Medical Science Educator*, 33(2), 423–430. pp. <https://doi.org/10.1007/s40670-023-01753-8>
- Nakhma'ussolikah and Al-Ghazali, M. I. (2026). Student Behavior Towards the Video Reels Algorithm for Psychosocial Development-Based

- Counseling. *International Journal of Education and Humanities*, 6(1), 167–179. pp. [https://doi.org/10.58557/\(ijeh\).v6i1.410](https://doi.org/10.58557/(ijeh).v6i1.410)
- Nwokedi, C. N., Olowe, K. J., Alli, O. I. and Iguma, D. R. (2025). The role of telehealth in psychological counseling: A comprehensive review. *World Journal of Advanced Research and Reviews*, 25(1), 1639–1649. pp. <https://doi.org/10.30574/wjarr.2025.25.1.0228>
- Parsons, M. W., Gardner, M. M., Sherman, J. C., Pasquariello, K., Grieco, J. A., Kay, C. D., Pollak, L. E., Morgan, A. K., Carlson-Emerton, B., Seligsohn, K., Davidsdottir, S., Pulsifer, M. B., Zarrella, G. V., Burstein, S. M. and Mancuso, S. M. (2021). Feasibility and Acceptance of Direct-to-Home Tele-neuropsychology Services during the COVID-19 Pandemic. *Journal of the International Neuropsychological Society*, 28(2), 210–215. pp. <https://doi.org/10.1017/s1355617721000436>
- Sari, I., Fitriani, D., & Rakhmawati, E. (2020). Tantangan pelayanan kesehatan mental di Indonesia: Perspektif geografis dan demografis. *Jurnal Kesehatan Masyarakat Indonesia*, 15(2), 77–89.
- Stoll, J., Müller, J. A., & Trachsel, M. (2020). Ethical issues in online psychotherapy: A narrative review. *Frontiers in Psychiatry*, 11, 993. <https://doi.org/10.3389/fpsy.2020.00993>
- Ursula, M. (2021). Konseling online sebagai alternatif layanan psikologis di era pandemi. *Jurnal Bimbingan Konseling Indonesia*, 6(1), 12–20.
- Ursula, P. A., Sudatha, I. G. W., Santosa, M. H. and Suartama, I. K. (2025). Trends and Developments in Cyber Counseling Among Teenagers. *International Journal of Educational and Life Sciences*, 3(6), 2109–2120. pp. <https://doi.org/10.59890/ijels.v3i6.58>
- Van Der Sluis, F., & Van Den Broek, E. L. (2025). Model interpretability enhances domain generalization in the case of textual complexity modeling. *Patterns*, 6(2). <https://doi.org/10.1016/j.patter.2025.101177>
- Yıldırım, F. B., Onaylı, S. and Taşkesen, N. (2023). Online Counseling through the Eyes of University Students. *Journal of Qualitative Research in Education*, 36, 86–106. pp. <https://doi.org/10.14689/enad.36.1694>
- Zolkipli, M. F., Said, Z. M. and Mahmuddin, M. (2022). SPKP: A Web-based Application System for Managing Mental Health in Higher Institution. *International Journal of Advanced Computer Science and Applications*, 13(4). <https://doi.org/10.14569/ijacsa.2022.0130477>
- Степанова, Е. В., Thompson, A., Yu, G. and Fu, Y. (2024). Changes in mental health services in response to the COVID-19 pandemic in high-income countries: a rapid review. *BMC Psychiatry*, 24(1), 103–103. pp. <https://doi.org/10.1186/s12888-024-05497-6>

Author Information

^{1*} **Devy Sekar Ayu Ningrum**, ✉ devysekar@ung.ac.id

Department of Psychology, Universitas Negeri Gorontalo, Indonesia

Address: Jl. Jend. Sudirman No.6, Dulalowo Tim., Kec. Kota Tengah, Kota Gorontalo, Gorontalo 96128, Indonesia

² **Sitti Rahma Zuleykha Aven Hinelo**, ✉ sittirahmazuleykhaavenhinelo@gmail.com

Department of Psychology, Universitas Negeri Gorontalo, Indonesia,

Address: Jl. Jend. Sudirman No.6, Dulalowo Tim., Kec. Kota Tengah, Kota Gorontalo, Gorontalo 96128, Indonesia

³ **Nazwa Rizkia Ismail**, ✉ nazwaismail22@gmail.com

Department of Psychology, Universitas Negeri Gorontalo, Indonesia

Address: Jl. Jend. Sudirman No.6, Dulalowo Tim., Kec. Kota Tengah, Kota Gorontalo, Gorontalo 96128, Indonesia

⁴ **Husnul Marhamah Ifka**, ✉ hunsulmarhamah44@gmail.com

Department of Psychology, Universitas Negeri Gorontalo, Indonesia

Address: Jl. Jend. Sudirman No.6, Dulalowo Tim., Kec. Kota Tengah, Kota Gorontalo, Gorontalo 96128, Indonesia

⁵ **Indah Khairunnisa Pakaya**, ✉ indahpakaya312@gmail.com

Department of Psychology, Universitas Negeri Gorontalo, Indonesia

Address: Jl. Jend. Sudirman No.6, Dulalowo Tim., Kec. Kota Tengah, Kota Gorontalo, Gorontalo 96128, Indonesia