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Exploring the Implementation of Effective Virtual Counseling: A Systematic Review

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A B S T R A C T

Virtual counseling, as a new approach in the field of counseling services, is gradually replacing face-to-face counseling due to its accessibility and the possibility of communication at any time. However, the client experience in this modality may differ from that of traditional in-person counseling. In this documentary study using a systematic review, key facilitators and barriers influencing the implementation of virtual counseling processes were examined. A total of 860 documents were retrieved from domestic databases such as Noormags, IranDoc, Civilica, ElmNet, and Human Sciences Portal within the time span of 2019 to 2023. Based on the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) checklist indicators, 12 documents were selected for review. Additionally, 540 documents were retrieved from international databases including ERIC, Sage, Elsevier, Scopus, and Taylor & Francis from 2000 to 2024, from which 28 documents were selected for analysis using the PRISMA checklist. Data analysis was conducted using the Altheide method. The findings revealed four facilitating factors, including technological infrastructure, counselor training and competence, client engagement strategies, and organizational support, as well as four inhibiting factors, namely technological barriers, concerns about privacy and confidentiality, client resistance, and lack of standardization.

Keywords: *Virtual counseling, counselor training, privacy and confidentiality, client resistance, documentary method, PRISMA*

1. Introduction

Currently, an increasing number of individuals are choosing to access professional psychological assistance through therapeutic websites and the internet rather than visiting physical clinics. Virtual counseling is defined as a dialogue-based therapy conducted in a non-face-to-face format using various methods, including phone counseling, social media groups, channels, and websites. This therapeutic modality has proven to be more effective for many clients and a wide range of disorders. Like all traditional counseling methods, virtual counseling has its

advantages and disadvantages. In her study titled *"Virtual Counseling and Its Advantages and Disadvantages,"* Kargari (2020) noted the advantages of virtual counseling, including lower costs, greater convenience, and anonymity. However, she also identified several drawbacks such as the absence of nonverbal cues, technical and technological issues, concerns about confidentiality and security, and questions surrounding its effectiveness (Kargari, 2020).

In the field of virtual counseling within educational settings, several studies have been conducted. For instance, Javadi Azad (2023), in the article *"The Importance of Implementing Online Counseling in Schools to Address Educational Challenges,"* examined the impact of psychologists and social workers in schools on academic achievement indicators among lower secondary students in District 4 of Isfahan. This research employed a multilevel secondary analysis using official records of non-teaching counselors working as school staff, student performance scores from the provincial standardized progress assessment test, and dropout rates. The findings indicated that schools employing psychologists and social workers had lower dropout rates. Moreover, a higher number of school counselors was positively associated with improved mathematics achievement. Conversely, a decrease in the number of psychologists and counselors correlated with a decline in academic performance scores. The presence of social workers also significantly contributed to improved mathematics test outcomes. The author advocates for a 24-hour online intervention and prevention strategy to improve student well-being and emphasizes the importance of designing prevention and intervention strategies based on collective behavior observation and comprehensive guidelines as integral components of the educational program (Javadi Azad, 2023).

Regarding the ethical and legal consequences of using technology in online counseling, Heydari Nia (2023), in a systematic article, examined the ethical and legal challenges as well as the benefits of virtual counseling. The study addressed issues such as accessibility, anonymity, cybersecurity, informed consent, licensing challenges, liability, and regulatory considerations in the professional practice of online counseling (Heydari Nia, 2023).

This review aims to investigate the implementation of effective virtual counseling processes by identifying key facilitating and inhibiting factors.

2. Methods and Materials

In review studies, the goal is to examine and analyze existing research and literature within a specific domain. These studies aim to collect and analyze findings from multiple investigations in order to provide a comprehensive overview of the subject under inquiry. In this study, both qualitative and quantitative research documents were reviewed across the period from 2001 to 2023 (corresponding to 1380 to 1402 in the Iranian calendar). Domestic databases included Noormags, IranDoc, Civilica, ElmNet, and the Human Sciences Portal. International databases reviewed between 2000 and 2024 included ERIC, Sage, Elsevier, Scopus, and Taylor & Francis. Keywords used for the search included: "مشاوره مجازی" (Virtual Counseling), "مشاوره آنلاین" (Online Counseling), " پلتفرم‌های اجرای مشاوره مجازی" (Virtual Counseling Platforms), " عوامل مجازی" (Implementation of Virtual Counseling), " مزایا و تسهیل‌گر و بازدارنده" (Facilitators and Inhibitors), " مشاوره مجازی چالش‌ها" (Advantages and Challenges), and " کارامد" (Effective Virtual Counseling). The equivalent English keywords used in international sources included: "Virtual Counseling" AND "Online Counseling" AND "Virtual Counseling Platforms" AND "Implementation of Virtual Counseling" AND "benefits OR advantages" OR "Facilitators OR Inhibitors OR challenges OR barriers OR issues" AND "Effective Virtual Counseling."

The search strategy employed in academic databases followed this logic:

KEY ((Online Counseling OR Virtual Counseling OR Web-based Counseling) NOT "Face-to-face Counseling") AND ((benefits OR advantages) OR (Facilitators OR Inhibitors OR challenges OR barriers OR issues))

Inclusion criteria for documents required the presence of keywords either in the title or in the study's keywords section, to assess the relevance of the documents to the research topic. One essential step alongside inclusion and exclusion criteria was the evaluation of the quality of retrieved studies. In this study, PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) checklist indicators were used to assess the quality of the retrieved studies.

Initially, based on title screening, 650 studies with weak relevance were excluded. Subsequently, the abstracts of all remaining domestic and international sources were reviewed, and 350 more studies were eliminated. Following that, a full-text analysis was conducted, leading to the exclusion of 260 additional documents due to weak thematic relevance or invalidity (e.g., duplicate data, academic misconduct, editorials, or poorly substantiated data). Finally,

40 studies that met the criteria of credibility and direct relevance to the topic were selected for qualitative synthesis.

Identified records through database search: 1400

Records after duplicates removed: 1300

Records screened: 1300

Records excluded: 1000

Full-text articles assessed for eligibility: 300

Full-text articles excluded with reasons: 260

Studies included in qualitative synthesis: 40

Studies included in quantitative synthesis (meta-analysis): 40

The above evaluation process of the studies is presented in the PRISMA flow diagram.

Figure 1

PRISMA Checklist Evaluation Indicators

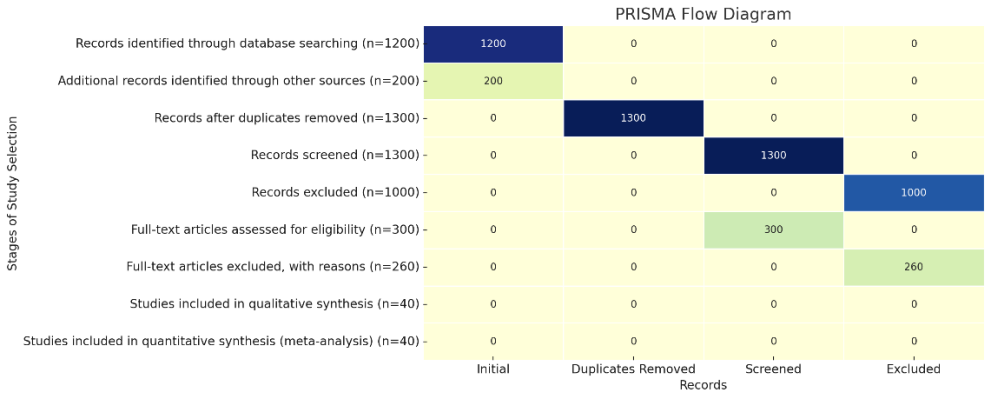
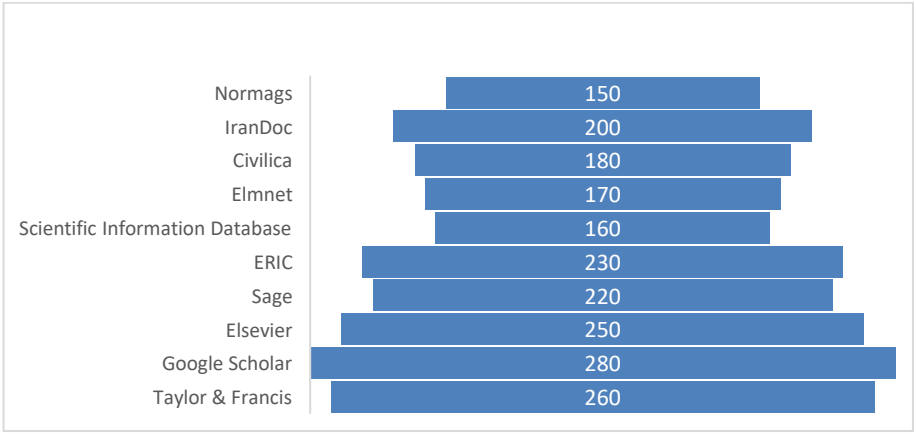


Figure 2

Records Retrieved from Various Databases



The key stages in the PRISMA flowchart include: Identification (locating records via database and other sources), Screening (reviewing relevance based on title and abstract), Eligibility (assessing quality and suitability of full-text articles for inclusion), and Inclusion (studies incorporated into qualitative and quantitative synthesis).

To analyze the remaining studies, the researcher first prioritized the documents based on their relevance and significance to the topic. For data analysis, Altheide's qualitative content analysis strategy was employed.

The studies were reviewed in a targeted manner, based on their level of relevance—from most to least. During the reading process, special attention was paid to core insights, and key points were extracted to create a synthesized file for each study. As the review progressed, strengths and weaknesses in each source were noted due to the thematic alignment with the current study. All collected data were aggregated and then categorized through coding. Due to the large volume of data, two rounds of summarization were conducted, where redundant themes were eliminated in each

round. Finally, data were compiled and classified based on the research question.

3. Findings and Results

The following tables clearly categorize the facilitating and inhibiting factors along with their indicators, criteria, themes, and sub-themes.

Table 1

Facilitators

Sub-Themes	Themes	Criteria	Indicators	Facilitators
Use of secure and high-speed platforms	Easy and rapid accessibility	Service availability, communication quality	Internet speed, appropriate equipment, advanced software	Technological Infrastructure
Offering specialized training courses for counselors	Increased counseling efficiency	Counselor knowledge and skill levels	Training programs, counselor experience and expertise	Counselor Training and Competence
Application of interactive and motivational techniques	Active and constructive engagement	Client interaction and satisfaction	Effective communication, client motivation	Client Engagement Strategies
Provision of financial and technical resources; establishment of supportive policies	Enhancement of facilities and resources	Level of support and available resources	Financial and technical support, supportive policies	Organizational Support

Table 2

Inhibitors

Sub-Themes	Themes	Criteria	Indicators	Inhibitors
Need for infrastructure improvement	Reduced counseling quality	Service stability and quality	Internet disruption, equipment incompatibility, software issues	Technological Barriers
Increased concerns regarding data security	Security threats	Level of security and confidentiality	Data disclosure, lack of data security	Privacy and Confidentiality Concerns
Need to shift attitudes and build trust in virtual counseling	Decreased client engagement	Client acceptance and satisfaction	Low willingness to use technology, negative perceptions of virtual counseling	Client Resistance
Need for developing comprehensive and specific laws and standards	Insufficient service coordination and coherence	Coordination and coherence in service delivery	Lack of clear regulations, diversity in approaches and standards	Lack of Standardization

The findings of the study revealed several key facilitators that enhance the effectiveness of virtual counseling. First, technological infrastructure emerged as a critical enabler, as the use of secure and high-speed platforms facilitated easy and rapid access to counseling services. Indicators such as internet speed, appropriate technological equipment, and advanced software contributed to improved communication quality and service availability. Second, the training and competence of counselors played a major role, with specialized training programs and accumulated professional experience significantly increasing the efficiency and effectiveness of the counseling process. Third, client engagement strategies, including the use of interactive techniques and motivational tools, were shown to foster active and constructive communication between clients and counselors, enhancing client satisfaction and promoting commitment to the counseling process. Lastly, organizational support, including financial and technical backing and the formulation of supportive policies, was found to strengthen the resource base and infrastructure required for successful virtual counseling implementation.

Conversely, the study also identified key barriers that inhibit the successful delivery of virtual counseling. Technological barriers, such as internet disruptions, incompatibility of equipment, and software issues, were found to reduce the stability and overall quality of counseling services. Privacy and confidentiality concerns were another major obstacle, with participants expressing fears about data breaches and inadequate information security. In addition, client resistance emerged as a significant challenge, with limited willingness to adopt virtual counseling and prevailing negative attitudes toward technology-based therapeutic services leading to decreased participation and engagement. Finally, the lack of standardization in virtual counseling practices was identified as a structural issue, as the absence of comprehensive regulations, uniform methods, and clear professional standards hindered coordination and consistency in service

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delivery. These findings underscore the importance of addressing both technological and human factors in the design and implementation of effective virtual counseling systems.

4. Discussion and Conclusion

The findings of this study shed light on a range of critical enablers and barriers affecting the implementation of effective virtual counseling. Among the most salient facilitators identified was technological infrastructure, which plays a foundational role in ensuring the reliability, accessibility, and functionality of virtual counseling services. Reliable internet connectivity, user-friendly and secure platforms, and adequate technical support emerged as essential components in delivering uninterrupted and high-quality virtual sessions. This aligns with the work of Shorey et al. (2023), who evaluated a virtual counseling program utilizing artificial intelligence and 3D avatars to support communication skills development among nursing students and demonstrated how advanced technology enhances engagement and therapeutic outcomes (Shorey, Ang, Ng, et al., 2023; Shorey, Ang, Yap, et al., 2023). In addition, the integration of mobile-accessible platforms was found to improve flexibility and accessibility for clients—findings corroborated by Cohen, Graham, and Lattie (2020), who emphasized the role of mobile technology in expanding mental health support to a wider audience (Cohen et al., 2020). Similarly, Yu and Ji (2022) underscored the importance of data analytics and feedback systems in optimizing therapeutic experiences and outcomes by enabling counselors to personalize interventions based on real-time progress tracking (Yu & Ji, 2022).

Another key facilitator identified was the competence and training of counselors. Ensuring that counselors are well-prepared for the digital environment through synchronous and asynchronous training models is vital. Chen et al. (2021) demonstrated that targeted training in virtual environments can significantly enhance clinical skill competencies in learners, particularly when instructional strategies are well-aligned with technological tools (Chen et al., 2021). Effective training not only strengthens counselors' technical capabilities but also equips them with essential soft skills needed for navigating the nuances of online therapeutic interactions.

Client engagement strategies were also emphasized as a pillar of successful virtual counseling. Effective engagement requires counselors to use motivational techniques and maintain active interactions. Johnson and Lee (2023) developed an annotation framework to analyze client responses in virtual sessions, concluding that the ability to understand and adapt to client feedback enhances therapeutic alliance and promotes positive outcomes (Johnson & Lee, 2023). These findings suggest that dynamic communication and sensitivity to client needs are crucial for sustaining participation in online contexts.

Organizational support emerged as another key enabler. Well-structured administrative policies ensure that counselors operate within a defined framework and clients receive reliable services. Jaber and Al-Hroub (2023), in their qualitative investigation of school counselors' experiences with virtual counseling in Lebanon, found that institutional policies addressing privacy and workplace dynamics significantly enhanced virtual service delivery (Jaber & Al-Hroub, 2023). Furthermore, Hanley et al. (2021) presented a theory of change for web-based therapy that highlighted the importance of continuous professional development in optimizing outcomes (Hanley et al., 2021). Technical resourcing is equally vital. Chiu (2022), in establishing a virtual counseling network for Taiwanese soldiers during the COVID-19 pandemic, showed how adequate technological infrastructure and support mechanisms contributed to continuity and effectiveness in service delivery (Chiu, 2022). Importantly, supportive work cultures and collaborative networks allow counselors to share best practices, receive peer support, and improve service quality. Agoncillo (2023), in a phenomenological study of Filipino counselors during the pandemic, emphasized that such organizational backing is crucial for navigating the unique challenges of online counseling (Agoncillo, 2023).

However, several key barriers also emerged. Technological obstacles, including weak internet connections and incompatible devices, were cited as major impediments to service quality. Without stable infrastructure, sessions are prone to disruptions, reducing therapeutic efficacy. Additionally, privacy and confidentiality concerns are particularly pronounced in virtual settings. Data breaches and lack of compliance with legal standards can erode client trust. Hara et al. (2022) proposed a blockchain-based, privacy-preserving framework for mental health chatbots that illustrates the necessity of secure technological solutions in protecting sensitive client data (Tian et al., 2022). Likewise, Olafsson et al. (2023) cautioned that third-party platforms can introduce further vulnerabilities if not aligned with data protection regulations (Olafsson et al., 2023). Anonymous

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engagement in online counseling, while offering enhanced privacy, must be balanced with transparency about data usage and storage, as emphasized in prior research (Hidjayanti, 2023).

Client resistance was another barrier observed. Several factors contribute to resistance in virtual environments, including lack of trust, discomfort with technology, and low perceived effectiveness. Liu et al. (2020) explored resistance in community-based drug treatment in China and identified strategies such as showing empathy, peer influence, and enhancing client autonomy as effective in managing such resistance (Liu et al., 2020). Schwartz et al. (2021) further highlighted that hostile resistance in CBT often stems from a lack of therapeutic rapport, emphasizing the need for counselors to be empathetic and transparent in their approach (Schwartz et al., 2021). Motivational Interviewing (MI) has been proposed as an effective strategy in this regard. Hara et al. (2021) found that integrating MI with CBT in the treatment of generalized anxiety disorder improved outcomes and reduced resistant behaviors (Hara et al., 2021). In addition, Kawakita et al. (2021) demonstrated how virtual environments can be designed to support openness and self-disclosure, thereby mitigating resistance and fostering more effective engagement (Kawakita et al., 2021)`.

Finally, the lack of standardized protocols was identified as a structural weakness in virtual counseling services. The absence of unified guidelines creates inconsistencies in care delivery. Standardized protocols offer a structured framework that ensures continuity and quality across different counselors and platforms. Sajn et al. (2020) developed a structured intervention protocol—"5-4-3-2-1 Go!"—that improved goal-setting and follow-up adherence among pediatric patients, underscoring the utility of standardized approaches in counseling contexts (Sajn et al., 2020). Furthermore, Reger et al. (2021) highlighted the role of virtual standardized patients (VSPs) in maintaining consistent training environments, supporting both pedagogical effectiveness and clinical fidelity in mental health education (Reger et al., 2021). Addressing regulatory and ethical compliance is equally important, with protocols needing to align with frameworks such as HIPAA and GDPR to ensure both client safety and legal accountability.

Altogether, the findings of this study underscore the importance of a multi-dimensional approach to virtual counseling that incorporates advanced technology, counselor competency, client-centered strategies, robust organizational backing, and adherence to ethical and legal standards. Virtual counseling holds immense potential to expand mental health services, but its effectiveness hinges on systematically addressing its technical, relational, and institutional challenges.

This study, although comprehensive in its synthesis of existing literature, has several limitations. First, the scope of reviewed articles was limited to those accessible through specified domestic and international databases, potentially omitting relevant grey literature or unpublished studies. Second, most studies included in the review were conducted in specific regional contexts and may not be generalizable across different cultural or socio-economic settings. Third, the quality assessment relied on PRISMA checklist indicators, which, while rigorous, may not fully capture the nuanced contributions of qualitative studies. Additionally, the rapidly evolving nature of technology and virtual counseling tools means that some findings may become outdated as new innovations emerge.

Future studies should explore the effectiveness of specific virtual counseling interventions across diverse populations, including marginalized and underserved communities. Longitudinal research designs would also help to evaluate the sustained impact of virtual counseling over time. There is a need for empirical work that examines the interplay between technological design features (e.g., AI-driven personalization) and client outcomes. Furthermore, cross-cultural comparative studies could offer insights into how contextual factors influence both facilitator and barrier dynamics in virtual counseling. Finally, research should aim to co-develop standardized protocols with practitioners and clients to ensure relevance, feasibility, and cultural appropriateness.

Practitioners should be trained not only in digital literacy but also in client engagement strategies tailored for virtual environments. Counseling organizations should invest in secure, high-speed technological infrastructure and provide continuous professional development opportunities. Developing comprehensive protocols and privacy frameworks will enhance both consistency and client trust. Additionally, organizations should prioritize creating a supportive culture where feedback loops, peer collaboration, and ongoing evaluation are integral parts of practice. By integrating these strategies, mental health services can better harness the potential of virtual counseling to meet the complex and evolving needs of diverse client populations.

Authors' Contributions

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Authors contributed equally to this article.

Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

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Declaration of Interest

The authors report no conflict of interest.

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Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

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