

Transforming Mental Health Care: The Efficacy and Impact of Online Counselling in the Digital Age

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***Abstract:** The effectiveness, simplicity, and accessibility of mental health treatments are all greatly improved by the approach of online counselling. This research investigates why online therapy should be used for the purpose of mental health services. We examined data from 452 participants using semi-structured questionnaires and 'Partial Least Squares Structural Equation Modelling' (PLSSEM). Our findings show that the measuring model has good internal reliability, discriminant validity, and convergent validity. Significant predictive value for online therapy in enhancing mental well-being was shown through structural model analysis. It was discovered that both synchronous and asynchronous modes were successful, underscoring their capacity for transformation. These findings back up the standardisation of online therapy, guaranteeing easily accessible and efficient mental health care.*

***Key words:** Online therapy, mental health, digital therapies, PLS-SEM, accessibility, efficacy, synchronous, asynchronous, teletherapy, and mental health*

I. INTRODUCTION

A significant improvement in the field of mental health services is the addition of online counselling, which has several advantages for therapeutic treatments' accessibility, convenience, and efficacy [1]. The goal of this research is to investigate the rationale behind using online counselling in the subject of mental health services. The accessibility of online counselling allows people to seek help from the ease of their homes, avoiding the busy schedule and location constraints that sometimes restrict in-person therapy [2]. Furthermore, the seclusion and anonymity offered by internet platforms can lessen the fear of being labelled as a psychiatric patient and motivate people to get help for delicate matters [3]. The affordability, increased accessibility to a wider range of therapists, flexible approaches to communication, and quick crisis management are further benefits of online counselling. Online counselling accommodates the preferences of clients by delivering mental health treatment through the use of technology [4] [5]. In today's fast-changing world, counselling needs to keep up with

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innovations. Counsellors must embrace technology and work hard to succeed. Using digital tools is essential for counsellors to manage their tasks and provide services effectively [6] [7]. While some changes are welcomed by counsellors, others bring challenges like needing better skills and training. Dealing with crises like Covid-19 requires special techniques for counsellors. This way, counsellors can use modern methods to meet needs in all areas—academic, social, and emotional—leading to positive outcomes.

II. RELATED WORK

In the research paper by S. Java et al. [1], an investigation was conducted to gather the viewpoints of over a hundred mental health specialists with relation to web counselling services. The survey results revealed that approximately 72% of these professionals expressed willingness to transition to virtual platforms when assisting clients facing difficult circumstances. This highlights a significant openness among mental health professionals towards utilizing online counselling, particularly during challenging situations. The aim of a study by Wan-Chen Chen et al. [3] was to find out how therapists were prepared to use online counselling (OC) in the days following the pandemic and how they actually went about applying it in practice. This has been done by creating scales that are meant to measure these factors. A whole group of 306 Taiwanese certified therapists (246 with previous experience of counselling clients online) engaged in the study; comprised 75 men and 231 women. The study's two scales—the OC scale for implementation and the OC scale for preparation—showed positive reliability and validity, based on psychometric analysis. This indicates that the metrics are a useful instrument to assess how ready and really using online counselling therapists are in the post-pandemic period. In a study conducted by Zaida Nor Zainudin et al. [5], the focus was on understanding the abilities and practices of e-counsellors in Malaysia and how these connect to their perceptions when offering e-counselling. The researchers aimed to fill the gap in existing literature concerning e-counselling in the Malaysian context. They particularly looked into the connections between e-counsellors' self-efficacy in counselling and their e-counselling abilities, ethics, and constraints. 159 e-counsellors from different Malaysian institutions participated in the study, who partaken in an online survey. The participants were chosen through the pure random sampling approach. To collect data, researchers adopted the 'Counselling Self-Estimate Inventory' and utilized 3 independently developed scales in a study made by Békés, V., et al. [6]. Correlation analysis revealed significant relationships among the counselling self-efficacy, e-counselling constraints, e-counselling ethics, and e-counselling skills. In particular, it was discovered that e-counselling constraints, e-counselling ethics, and e-counselling skills were significantly correlated with counselling self-efficacy in other studies made by various researchers [8][9][10].

Based on these the conceptual frame work, this study is designed to figure out how online counselling has an impact over our daily life which has become volatile more than ever in the post-covid days.

III. METHODOLOGY EMPLOYED

We used semi-structured questionnaires using a seven-point Likert scale to investigate the impacts of online counselling using cross-sectional and exploratory research designs. In order to ensure a diversity of perspectives, we used purposeful non-probability sampling to pick 452 participants for our study. Our survey was modified through pilot research, and at a 5% significance level, the G* Power test verified a minimum sample size of 115. To investigate causal links among latent variables, data were analysed using partial least squares structural equation modelling (PLS-SEM) and Smart PLS (v4.0.8.4). In order to gather demographic data and important responder characteristics, we created both general and targeted questions, emphasising topics like communication strategies, accessibility, and time-saving. Our research goals were linked with strong, valid, and reliable measures thanks to this meticulous approach.

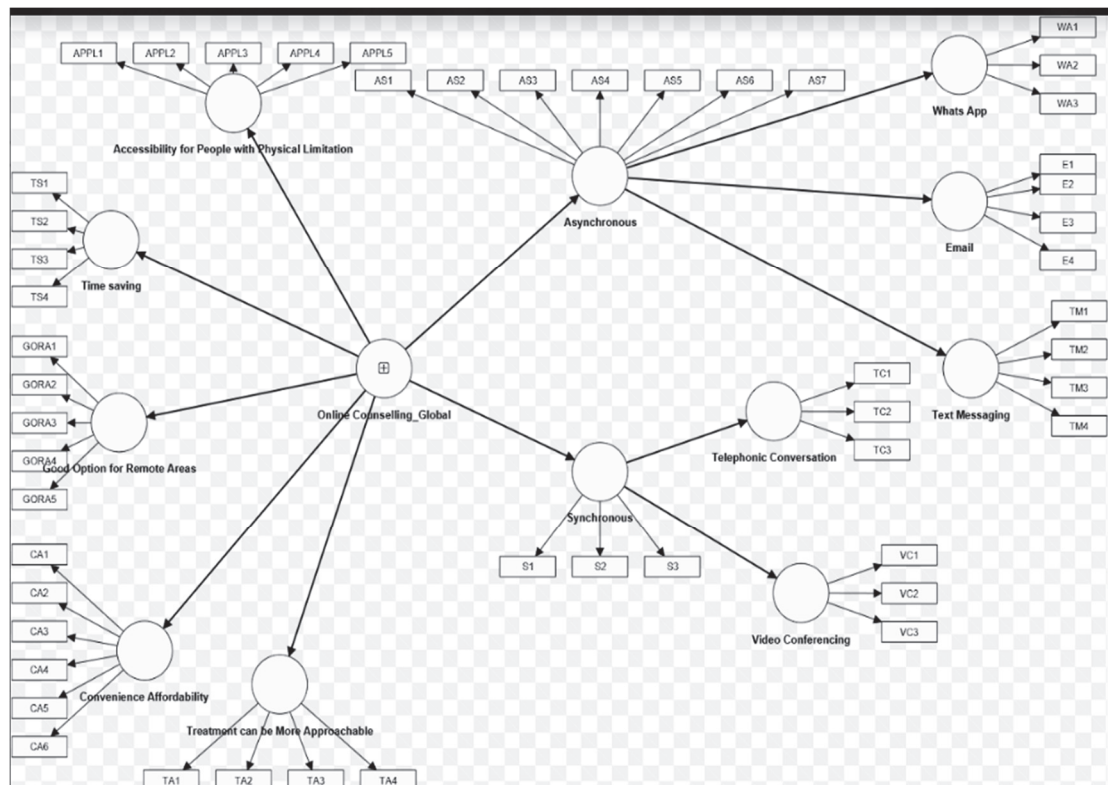


Figure 1: Proposed Model

IV. ANALYSIS OF RESULT

In line with Schuberth et al. (2018) and Nitzl et al. (2016), our work investigated convergent validity and internal reliability using partial least squares structural equation modelling (PLS-SEM). We started with a reflective formative assessment of the aspects of online counselling, evaluating the second-order construct of the formative model and computing latent variable scores. Strong internal reliability was suggested by metrics such as 'Cronbach's Alpha', 'Dijkstra' and 'Henseler's rho', and 'Composite Reliability', all of which had values above the conventional cutoff of 0.70. Convergent validity was validated by the 'Average Variance Extracted' (AVE) values, which were consistently above 0.50. Further evidence of the durability of our measurement model came from Composite Reliability ratings above 0.8. Tables 2 and 3 provide more information on these validity and reliability findings, highlighting each construct's unique qualities and dependability.

We employed the Heterotrait-Monotrait ratio of correlations (HTMT), keeping values below 1 in accordance with Henseler et al. (2015), to guarantee discriminant validity. This threshold was marginally exceeded by a few variables, but our research maintained the integrity of construct distinctiveness. Using bootstrapping, we assessed the structural model's viability and collinearity using Variance Inflation Factors (VIF). Significant connections were shown by Path Coefficients and Coefficient of Determination (R²) studies; R² values for purchase intention and brand loyalty were 0.472 and 0.512, respectively. An SRMR value of 0.76 for the model fit verified that our analysis was successful. Online counselling has an significant role in promoting mental health, as seen by Table 5, where synchronous and asynchronous modes are equally helpful. These results highlight how transformational internet platforms can be.

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Measurement of Structural Model								
Hypothesis	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T statistics ((O/STDEV))	2.50 %	97.50 %	P values	Supported /Not Supported
Asynchronous -> Email	0.608	0.608	0.026	23.122	0.554	0.658	0	Supported
Asynchronous -> Text Messaging	0.506	0.507	0.036	13.976	0.434	0.578	0	Supported
Asynchronous -> Whats App	0.666	0.666	0.024	28.171	0.619	0.711	0	Supported
Online Counselling -> Asynchronous	0.729	0.731	0.022	33.826	0.687	0.771	0	Supported
Online Counselling -> Synchronous	0.628	0.629	0.03	20.951	0.568	0.684	0	Supported
Synchronous -> Telephonic Conversation	0.308	0.308	0.044	7.058	0.222	0.392	0	Supported
Synchronous -> Video Conferencing	0.541	0.541	0.032	16.964	0.476	0.602	0	Supported

Table 5: Structural Model Measurement

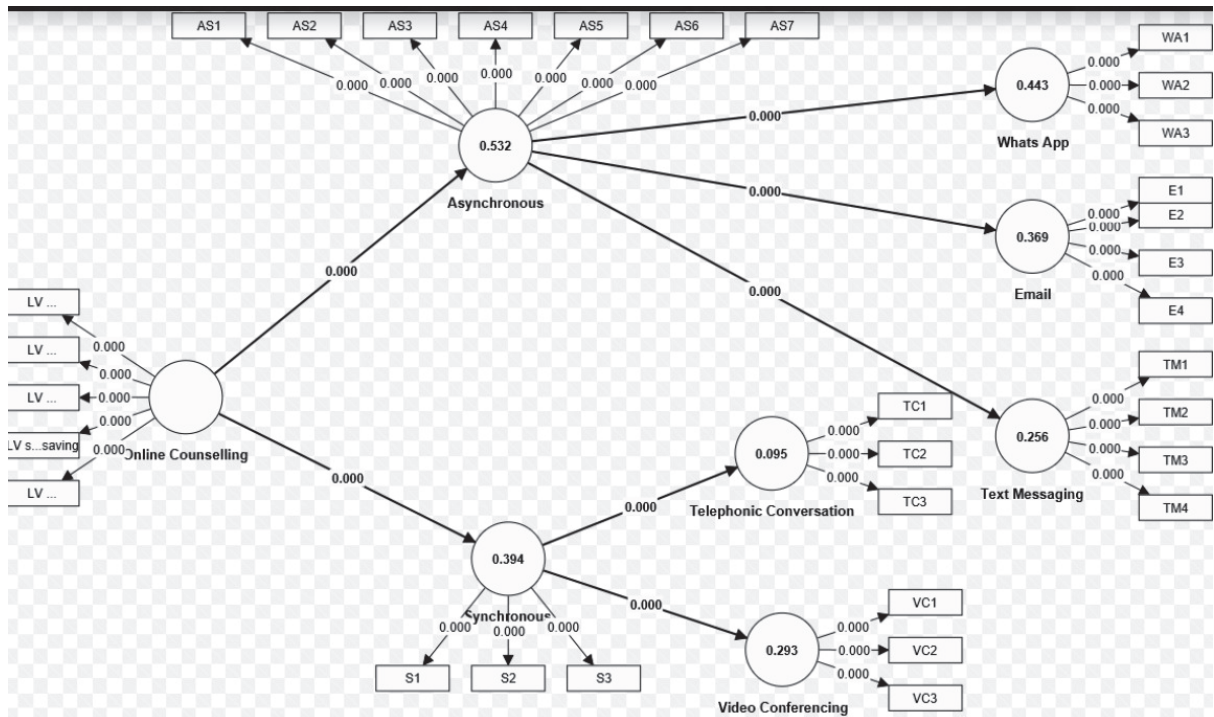


Figure 2: Structural Model Assessments with Control Variables

V. CONCLUSION

Our in-depth investigation emphasises how important internet counselling is for advancing mental health and wellbeing. Through a thorough analysis of measuring methods and structural links, we have demonstrated how digital interventions might be revolutionary in addressing the complex dynamics of psychotherapy. Our conceptions' convergent validity and internal reliability were robustly supported by composite analysis and confirmatory investigations, going above and beyond industry standards. Our measuring framework's correctness was further supported by the 'Heterotrait-Monotrait ratio of correlations' (HTMT), which also attested to each construct's distinct qualities. Our thorough structural model evaluation clarified the intricate relationships between the components and the predictive power of online counselling for behaviour and health. We developed a strong foundation for our findings using rigorous processes such as path coefficient analysis, bootstrapping, and formative review. Online therapy has a considerable impact on important outcomes, as indicated by the coefficient of determination (R^2) study, which highlights its significance in encouraging beneficial behavioural changes and mental well-being. Our goodness of fit investigation confirmed that the underlying phenomena are satisfactorily explained by the structural model. The effectiveness of both synchronous and asynchronous online counselling modalities is supported by the robust validation of each hypothesis, demonstrating their revolutionary potential to revolutionise mental health care. These results promote the use of online counselling as normal procedures, guaranteeing quick, efficient, and accessible support for people all over the world. In conclusion, our research opens the door for the effective and inclusive delivery of mental health treatment through technology and adds to the growing body of knowledge regarding digital mental health interventions.

VI. FUTURE DIRECTIONS OF THE STUDY

Subsequent studies ought to examine the enduring consequences of virtual counselling and scrutinise certain elements that augment its efficacy. In order to further enhance accessibility and results, research might also look into how new technologies like artificial intelligence (AI) and virtual reality can be used into online counselling. Studies that compare digital and traditional interventions can also shed light on the most effective ways to treat mental health issues.

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