



INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

Influence Of Acceptance And Use Of Technology And Perceived Self-Efficacy On The Outcome Of Therapeutic Alliance Among Counsellors'

¹Madhusudhan D, ²Dr Pankaj Singh

¹M.A Counselling Psychology(final year), ²Associate Professor

Amity Institute of Psychology and Allied Sciences, Amity University,

Noida, Uttar Pradesh(201303), India.

Abstract: Telepsychology has successfully made its way into the practice of new generation of counsellors. Especially, with the pandemic acting as a catalyst in this. The studies have shown the gradual rise in intake of online counselling as a mode of providing services. Even though the effectiveness of online counselling is at a par with traditional mode of counselling. The psychotherapists and counsellors are given less treatment in this aspect of how to adopt to technology in-order-to provide counselling services. This study aimed to understand the influence of Acceptance and Use of Technology and perceived self-efficacy on the establishment of therapeutic alliance. A sample of 54 counsellors from Noida, were administered the scales UTAUT-T, CES, and WAI-SR-T. The data analysis that was undertaken was correlation and multiple regression. The study concludes that there is a positive correlation among the three variables and in multiple regression UTAUT-T was statistically significant in the influence of therapeutic alliance than Counselling self-efficacy.

Index Terms – Telepsychology, Online Counselling, UTAUT, Acceptance of Technology

INTRODUCTION

The pandemic of 2019 i.e., COVID-19 resulted in a sudden worldwide shift, especially in telepsychotherapy, when it became an important means to provide services online to maintain the continuity of care. This led to many researchers hinting at a melting point wherein the use of technology became more mainstream (Wind et al., 2020). While the use of technology within mental healthcare, often termed telepsychology, or telemental health (TMH) refers to the use of technology for assessment and treatment by various mental health disciplines (Connolly et al., 2020a). According to the American Psychological Association (APA), the term telepsychology is defined as “the provision of psychological services using telecommunication technologies” (*Guidelines for the Practice of Telepsychology*, n.d.). The term telepsychology was further defined as the use of both synchronous and asynchronous formats including video conferencing (VTC), text, email, social media, and more (Varker et al., 2018). During the pandemic, it was defined as the use of real-time audio and/or video conferencing

technology to provide psychological services (Pierce et al., 2021a). Even though the specificity of the term may change across different disciplines, telepsychology is mostly associated with the delivery of services provided using technology (McCord et al., 2020) and the saliency of the term is when there is a merger of technology and therapy. Since the focus of this study is specifically focusing on therapy delivered over video, VTC, and online therapy will be used interchangeably.

When the pandemic of COVID-19 hit us all, collectively our focus turned toward personal well-being also, concern for others' well-being. While the Government and Hospitals started to take measures on how to stop the spread of infection and how quickly they can treat the ones who tested positive for the virus, mental health became another priority that needed to be addressed by both the public and the government (Shah et al., 2020). This forced transition has paved a way for therapists/counsellors to open their horizons and integrate technology into their practice. Indian Government in response to the growing gap in mental health treatment announced the launch of the National Tele Mental Health Program (NTMHP) in its Union Budget for Fiscal year 2022-23. The finance minister acknowledging the negative effects because of COVID-19 announced the establishment of a network consisting of 23 tele-mental health centers of excellence under the NTMHP that can provide citizens with better access to quality mental health counselling and care services (Sagar & Singh, 2022).

This sudden change came with its challenges for both the counsellor and the client. Counsellors found it difficult to make the transition. Even during their academic curriculum, students aren't made familiar with the usage of the internet or other mediums to conduct counselling sessions (Pierce et al., 2021b). In less than 50 years, radio communications were used by doctors to give consultations to ships to sea and videoconferencing has only increased as technology is explored as a viable method of treatment (Lustig, 2012; Sammons et al., 2020).

Additionally, Studies have shown that telepsychology is effective and has earned for itself with increasing efficacy showing its equal to in-person therapy (Payne et al., 2020). The case of 'videotherapy', and the provision of delivering psychotherapy via videoconferencing, it shows that out of the necessity during the pandemic to this reinvention (Knopf, 2020; Torous et al., 2020).

Also, the increasing evidence shows the efficacy of telepsychology is equal to the in-person therapy (Payne et al., 2020). Previous studies showed that videotherapy as an alternate solution to mental health services for those who live in remote and rural areas ((McCord et al., 2020). Recent data shows that approximately 69% of the world's population utilizes the internet, with India having the second-largest share of internet users, though the number accounting for 20% of the country's population (Internet Users by Country 2023). As the pandemic that catalysed unprecedented digital transformation, influencing human behaviour across almost all aspects of life (Kim, 2020; Yan, 2020). Resulting in a rapid shift in clinicians' attitude of favouring the use of technology and overhauling of the red tape that had restricted in the growth of this field (Webster, 2020). Many insurance companies and Medicare began covering telephone and VTC psychotherapy sessions (Luiggi-Hernández & Rivera-Amador, 2020).

However, it seems that the therapists have shown reluctance to use technology in their psychotherapy practices (E. Brooks et al., 2013), for the reasons such as practical, financial and implementation challenges (S. K. Brooks et al., 2020; Connolly et al., 2020b). Other reasons are Bias, inexperience, doubts in efficacy of online therapy, and attitude of psychologists towards technology all can be considered in lacklustre adoption of telepsychology (Doorn et al., 2021; Gershkovich, 2016; Pierce et al., 2020). The use of technology is depended upon the level of the individual believing that using the technology will help them to perform better, according to the model of the Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003). Only in recent times this model was used to assess attitudes of therapists towards online therapy via videoconferencing (Connolly et al., 2020a). The validity and adoption in predicting the acceptance behavior of remote care technologies by health professionals was revealed by a systematic review done by (Rouidi et al., 2022) on the two models Technology Acceptance Model and UTAUT.

Moreover, exploring the experiences and intentions in using of video, telephone, and in-person, also the applicability of UTAUT in predicting the telepsychology services of clinicians', video services were reported with greater positive experiences than with the telephone services (Zentner et al., 2022). In an analysis of by Alt et al., (2022); preference of students to communicate emotions on internet explained their openness of delivering online counselling.

Another, important issue that can influence effectiveness of telepsychology is the level of impact that on-screen environment has on therapeutic relationship. Tomaino et al., (2023) study on the experiences of Italian psychologists' and psychotherapists of e-interventions during the pandemic revealed technical disruptions, less confidence of online settings. Psychotherapists' acceptance of technology played a role in their professional self-doubt, and quality of therapeutic relationship with their respective online clients. Positive attitude towards telepsychotherapy was related to the therapists reporting either neutral or strong online working alliance with their clients. Specially if the practitioner was less than 40 years, and had little professional self-doubt (Békés et al., 2021). There are several factors that were proposed that may affect therapists' perception of TPT (Connolly et al., 2020b). Online therapy restricts therapists' ability of expressing themselves by being present with full body (prosody, open body posture, gesture, mirroring the movements of their client). Research studies has shown that training and support on how to use telepsychology for their practice improves the likelihood of therapists using technology and strengthen their therapeutic relationship (Pierce et al., 2020).

Correspondingly, Assessing the "therapist's effects" meaning the unique ways a therapist contribution has on its outcomes. Studies have shown that professional self-doubt, counselling self-efficacy, and humility are the qualities in therapist that influence the treatment outcome (Clements-Hickman & Reese, 2022). Counselling self-efficacy has been shown to be in correlation with counsellors' burnout, counsellor retention, and perceived level of professional competence (Goreczny et al., 2015; Lent et al., 2006; Li et al., 2022). Impact of counselling self-efficacy by the integration of video-modelling into counselling skills, showed an increase in students' perceived efficacy in using of techniques and general counselling self-efficacy (Akçabozan-Kayabol et al., 2022).

Above mentioned literature shows us that there are reasons to suspect that Acceptance and use of technology, and counselling self-efficacy both can play an important role in establishment of Therapeutic Alliance. Therefore, it is important to investigate the interactions between these variables so that counsellors can plan and better able to adopt to the changing trends in psychotherapy. The aim of this study was to see the influence of Acceptance and Use of Technology and Counselling Self-Efficacy on the outcome of Therapeutic Alliance. Accordingly, hypotheses made for this study are:

Hypothesis 1: Perceived Self-efficacy will significantly predict Therapeutic Alliance Among Counsellors

Hypothesis 2: Perceived Self-efficacy and Acceptance and Use of Technology will significantly influence Therapeutic Alliance.

II. METHOD AND MATERIALS

2.1 Research Design

This research is a correlational research design to determine the influence of Acceptance and Use of Technology, and Counselling Self-Efficacy on the establishment of Therapeutic Alliance. Within the scope of the study, the variables of Acceptance and Use of Technology, Counselling Self-Efficacy, and Therapeutic Alliance were examined.

2.2 Sample and Procedure

Overall, fifty-four participants filled out the survey form that was developed using Google Form, a widely used online survey ($M_{age}= 29.96$, $SD_{age}=7.891$; $M_{experience}=5.781$, $SD_{experience}=5.767$). **Table 1.** The type of sampling was chosen as Snowball Sampling. The participants had different levels of education (**Table 2**).

Table 1: average age, age range, and standard deviation of Age and years of experience of the counsellors.

	N	Minimum	Maximum	Mean Statistic	Std. Error	Std. Deviation
Age	54	22	55	29.96	1.074	7.891
Years of Experience	54	.2	21.0	5.781	.7848	5.7668
Valid N (listwise)	54					

The online survey was conducted by using Google Form (widely used tool for conducting online surveys across the world). First, permission was sought from the participants on collecting data from them. Then, the participants were directed to fill the questionnaire. The counsellors were informed about the nature of the study, and that they could take part voluntarily in the study. In the research, data collected from the counsellors of different educational background. This data collection procedure lasted for approx. 15 minutes, for each participant counsellor. This study was of a correlational design.

2.3 Materials

The online survey included individual items that assessed counsellors' demographics (age, level of education, and years of experience) along with standardized scales that as assessed the level of acceptance and use of technology, perceived counsellor's self-efficacy, and working alliance inventory.

Table 2: Participants from with different educational backgrounds.

Level of Education	Number of Participants
PG Diploma	1
PG	37
MPhil	9
Ph.D. Scholar	1
Ph.D.	6
N=54	

Acceptance and Use of Technology

The novel Unified Theory of Acceptance and Use of Technology Therapist Version (Békés et al., 2021) was used to assess counsellor's attitudes towards providing counselling via videoconference. This was adapted from the original model of acceptance and successive use of technology i.e., UTAUT (Venkatesh et al., 2012, 2003). The same framework was recently used in a pre-pandemic systematic empirical study as a key conceptualization of various aspects of acceptance of Telepsychotherapy technology to help frame their inclusion criteria and explanation of their findings (Connolly et al., 2020b; Venkatesh et al., 2016). The UTAUT-T had the items that represented the original factors of the model: Figure 1. Varying Cronbach's α between .68 and .91 for the subscales; Liu et al., 2015, two items regarding Behavioral Intention were added. Further, two factors that are crucial in forecasting of behavioral intention and tangible use in previous studies relevant to the field of therapy: Anxiety and Attitudes were added (Békés et al., 2021)

Therapeutic Alliance

The therapeutic relationship was assessed with the Working Alliance Inventory-Short Revised-Therapist (WAI-SRT; Hatcher & Gillaspay, 2006). The inventory includes four positively worded items for each of three subscales, based on Bordin's '79 pan- theoretical model: bond, agreement on tasks, and agreement on goals. This inventory adapts a 5-point Likert Scale, ranging from seldom (1) to always (5), and has been validated against other alliance inventories and by prediction of therapy outcomes (Munder et al., 2010).

Under normal circumstances, the therapist-rated alliance on the WAI-SF demonstrates good reliability of Cronbach's $\alpha=0.8$ (Doorn et al., 2021). The therapist-rated alliance on the WAI-SF (short form) in video therapy

is generally high ($M=5.7$, $SD=0.83$; Stubbings et al., 2013; $M=5.4$, $CI=4.72-6.07$; Morland et al., 2015), like face-to-face therapy.

Counselling Self-Efficacy

This is a 20-item self-report questionnaire that assesses competency in providing counselling tasks for group and individual counselling (Melchert et al., 1996). This instrument uses a 5-point Likert scale indicating a degree of agreement regarding counsellors' confidence in their counselling abilities. Positively worded items of 1, 2, 5, 7, 8, 13, 16, 18, and 20, be inversely scored so that the final high scores correspond with high self-efficacy. The total score of the questionnaire ranges from 20-100. Internal consistency and test-retest reliability are 0.91 and 0.85, respectively, for counselling psychology students and professional psychologists.

II. RESULTS

3.1 Data Analysis

After the study's data collection, potential errors were then checked for, and where found, any missing values and extreme values analyses were performed using box plot. Any missing data of the participants were eliminated in each scale, with missing values determined, and the average scores of these data determined according to the serial average method. After the data were deemed to be ready, the analyses were performed using correlational analysis, and multiple linear regression to determine the relationship between the variables and influence of independent variables on the outcome of dependent variable via IBM's SPSS v26 package program.

3.2 Descriptives

The main purpose of this study, to perform the level of influence of Perceived Self-Efficacy and Acceptance and Use of Technology will have on Therapeutic Alliance. In the context of the data collected from the study's participants from their responses to the scale, the maximum and minimum, the average, standard deviation, and correlation analysis are presented in the **Table 3**.

A multiple regression model was tested to investigate whether the association between Acceptance and Use of Technology and Counselling Self-Efficacy significantly predicted Therapeutic Alliance.

Table 3: Mean, Standard deviation, and correlation of the variables.

	Mean	Std. deviation	1	2	3
UTAUT-T	75.39	6.196	1		
CES	74.54	6.644	.352**	1	
WAI	48.70	4.839	.389**	.295**	1

** $p < 0.01$

A significant regression equation was found ($F(2, 51) = 5.5589$, $p < .05$), with an R^2 of .18. So, the regression was statistically significant. Refer to **Table 4 and 5**.

- It was found that Acceptance of Use of Technology of the counsellors significantly predicted the Therapeutic Alliance (WAI) ($\beta = .254$, $t = 2.402$, $p < 0.05$).
- It was found that CES i.e., Counselling Self-Efficacy did not significantly predict the Therapeutic Alliance ($\beta = .131$, $t = 1.33$, $p > 0.05$).

Table 4: R, R-square, F scores from the Multiple Regression analysis.

Model	R	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. Change	F
1	.424 ^a	.180	4.468	.180	5.589	2	51	.006	

a. Predictors: (Constant), CES, UTAUT

So, the UTAUT-T was significant predictor compared to CES of the Therapeutic Alliance (WAI). Refer to the **Table 6**.

Table 5: Mean Square from the Multiple Regression analysis.

Model		ANOVA ^a				Sig.
		Sum of Squares	df	Mean Square	F	
1	Regression	223.153	2	111.577	5.589	.006 ^b
	Residual	1018.106	51	19.963		
	Total	1241.259	53			

a. Dependent Variable: WAI
b. Predictors: (Constant), CES, UTAUT

To test the stability and reliability of the regression coefficients, collinearity analysis was undertaken. In regression analysis, existence of collinearity of two predictors means that there lies a strong correlation between them, creating difficulty to estimate their individual regression coefficients reliably showed in the **Table 6**.

The Variance Inflation Factor (VIF) values for each predictor variables are as follows:

- UTAUT-T = 1.142
- CES = 1.142

The VIF values of both the predictors are approximately equal to 1 ($VIF \approx 1$). This value indicates that there is a moderate correlation between the predictor UTAUT-T and CES in the model, creating moderate reliability of the regression coefficients.

Table 6: Multiple regression analysis, coefficients, and Collinearity

Model		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	19.752	8.763		2.254	.029		
	UTAUT-T	.254	.106	.325	2.402	.020	.876	1.142
	CES	.131	.099	.180	1.330	.189	.876	1.142

a. Dependent Variable: WAI

IV. Discussion

4.1 Implications

The research question was to investigate the influence Acceptance and Use of Technology and Counselling Self-Efficacy as predictors in the outcome of Therapeutic Alliance. The multiple regression analysis of the data revealed that counselling self-efficacy didn't alone predict the outcome of Therapeutic Alliance. However, the prediction of Acceptance and Use of Technology on the outcome of Therapeutic Alliance was positive and statistically significant. Also, interpretation from Variance Inflation Factor (VIF) being between scores of 1 to 5 (approximately close to 1). The predictor variables i.e., UTAUT-T and CES, finds that the regression results are reliable and stable.

Braun et al., 2022, in their cross-sectional survey between the psychotherapists of Germany and Switzerland, results of this study confirmed the UTAUT model, as the highest acceptance of providing psychotherapy sessions using videoconferencing option. Also, showed high acceptance rating for therapeutic interactions via telephone. The current study has shown that the Acceptance and Use of Technology has higher influence compared to Counselling Self-Efficacy on the Working Alliance.

4.2 Limitations and Future research directions

When interpreting the findings of this study, it is important to consider certain constraints. Firstly, since the research is quantitative, causality between variables cannot be established. Conducting qualitative studies would be beneficial to explore the underlying reasons behind the results. Secondly, the study only included counsellors from Wellbeing Organizations, excluding those from psychiatric wards or hospitals. Thirdly, future studies should consider confounding variables like age, level of education, and experience when examining the relationship between Acceptance and Use of Technology, Counselling Self-Efficacy, and Therapeutic Alliance. Additionally, a comparative study between online and in-person counselling services could be undertaken to gain further insights.

V. Conclusion

This research examined the influence of Acceptance and Use of Technology and Counselling Self-efficacy on the outcome of the Therapeutic Alliance. Acceptance and Use of Technology had more influence in predicting the outcome of Therapeutic Alliance than CES. Taken together, this offers a novel perspective on what predicts the outcome of therapeutic alliance in this era where day-by-day there is more integration of technology into delivering mental health services. Future research may extend this work by taking qualitative approaches to find out the factors, or comparative study to establish differences between in-person counselling services to Telepsychotherapy services.

VI. ACKNOWLEDGMENT

There are many to whom I am very thankful for helping me to undertake this research study. First, I would like to express my heartfelt gratitude to all the counsellors who participated in this study. It would not have been possible without their consent to participate in the study. Second, I would like thank Prof. (Dr.) Ranjana Bhatia, Head of the Institution of Amity Institute of Psychology and Allied Sciences, for giving the opportunity to undertake this study. Next, most importantly, Dr Pankaj Singh, Ph.D., Associate Professor, Amity Institute of Psychology and Allied Sciences, for guiding me throughout this research. His dynamism, vision, sincerity, clarity, and motivation have deeply inspired me. I would like to thank him for the immense pool of research knowledge that she provided me which led me to successfully complete this research work. Lastly, heartfelt gratitude to all my family members and friends, for helping me with their constant words of encouragement and support throughout my academics especially in the time of research.

References

- Akçabozan-Kayabol, N. B., Ozdemir, N. K., Güneri, O. Y., & Korkut-Owen, F. (2022). Integrating video-modeling into counseling skills and techniques course and its impact on counseling self-efficacy. *Current Psychology*, *41*(12), 8287–8299. <https://doi.org/10.1007/S12144-021-02434-8/TABLES/2>
- Alt, D., Boniel-Nissim, M., Naamati-Schneider, L., & Meirovich, A. (2022). Precursors of Openness to Provide Online Counseling: The Role of Future Thinking, Creativity, and Innovative Behavior of Future Online Therapists. *Frontiers in Psychology*, *13*. <https://doi.org/10.3389/fpsyg.2022.848235>
- Békés, V., Aafjes-Van Doorn, K., McCollum, J., Prout, T., & Hoffman, L. (2021). *The Development of a Self-Report Scale to Assess Therapists' Acceptance of Online Psychotherapy via Video Conferencing*. <https://doi.org/10.31234/osf.io/24w8h>
- Békés, V., Aafjes-van Doorn, K., Zilcha-Mano, S., Prout, T., & Hoffman, L. (2021). Psychotherapists' acceptance of telepsychotherapy during the COVID-19 pandemic: A machine learning approach. *Clinical Psychology & Psychotherapy*, *28*(6), 1403–1415. <https://doi.org/10.1002/PPP.2682>
- Braun, P., Drüge, M., Hennemann, S., Nitsch, F. J., Staeck, R., & Apolinário-Hagen, J. (2022). Acceptance of E-Mental Health Services for Different Application Purposes Among Psychotherapists in Clinical Training in Germany and Switzerland: Secondary Analysis of a Cross-Sectional Survey. *Frontiers in Digital Health*, *4*. <https://doi.org/10.3389/fdgh.2022.840869>
- Brooks, E., Turvey, C., & Augusterfer, E. F. (2013). Provider Barriers to Telemental Health: Obstacles Overcome, Obstacles Remaining. *Telemedicine and E-Health*, *19*(6), 433–437. <https://doi.org/10.1089/tmj.2013.0068>
- Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: rapid review of the evidence. *The Lancet*, *395*, 912–920. [https://doi.org/10.1016/s0140-6736\(20\)30460-8](https://doi.org/10.1016/s0140-6736(20)30460-8)
- Clements-Hickman, A. L., & Reese, R. J. (2022). The person of the therapist: therapists' personal characteristics as predictors of alliance and treatment outcomes. <https://doi.org/10.1080/10503307.2022.2080610>. <https://doi.org/10.1080/10503307.2022.2080610>
- Connolly, S. L., Miller, C. J., Lindsay, J. A., & Bauer, M. S. (2020a). A systematic review of providers' attitudes toward telemental health via videoconferencing. *Clinical Psychology: Science and Practice*, *27*. <https://doi.org/10.1111/cpsp.12311>
- Connolly, S. L., Miller, C. J., Lindsay, J. A., & Bauer, M. S. (2020b). A systematic review of providers' attitudes toward telemental health via videoconferencing. *Clinical Psychology: Science and Practice*, *27*(2). <https://doi.org/10.1111/CPSP.12311>
- Doorn, K. A., Békés, V., & Prout, T. A. (2021). Grappling with our therapeutic relationship and professional self-doubt during COVID-19: will we use video therapy again? *Counselling Psychology Quarterly*, *34*(3–4), 473–484. <https://doi.org/10.1080/09515070.2020.1773404>
- Gershkovich, Marina. H. J. D. G. L. H. I. Arwa. F. E. M. K. J. L. (2016). Clinicians' attitudes and experiences regarding telemental health services. *The Behavior Therapist*, *39*(1), 14–20. <https://psycnet.apa.org/record/2016-35100-003>

- Goreczny, A. J., Hamilton, D., Lubinski, L., & Pasquinelli, M. (2015). Exploration of Counselor Self-Efficacy Across Academic Training. *Http://Dx.Doi.Org/10.1080/07325223.2015.1012916*, 34(1), 78–97. <https://doi.org/10.1080/07325223.2015.1012916>
- Guidelines for the practice of telepsychology*. (n.d.). Retrieved April 5, 2023, from <https://www.apa.org/practice/guidelines/telepsychology>
- Hatcher, R. L., & Gillaspay, J. A. (2006). Development and validation of a revised short version of the Working Alliance Inventory. *Psychotherapy Research*, 16(1), 12–25. <https://doi.org/10.1080/10503300500352500>
- Internet Users by Country 2023*. (n.d.). Retrieved April 7, 2023, from <https://worldpopulationreview.com/country-rankings/internet-users-by-country>
- Kim, R. Y. (2020). The Impact of COVID-19 on Consumers: Preparing for Digital Sales. *IEEE Engineering Management Review*, 48(3), 212–218. <https://doi.org/10.1109/EMR.2020.2990115>
- Knopf, A. (2020). Telemental health comes into its own with social distancing. *The Brown University Child and Adolescent Behavior Letter*, 36(5), 7–7. <https://doi.org/10.1002/CBL.30463>
- Lent, R. W., Schmidt, J., & Schmidt, L. (2006). Collective efficacy beliefs in student work teams: Relation to self-efficacy, cohesion, and performance. *Journal of Vocational Behavior*, 68(1), 73–84. <https://doi.org/10.1016/J.JVB.2005.04.001>
- Li, X., Li, F., Lin, C., Chen, S., & Han, Y. (2022). The “roller coaster ride”: A longitudinal investigation of the dynamic relationship between Chinese counseling trainees’ self-efficacy and their clients’ outcome and the mediating effects of working alliance and session evaluation. *Journal of Counseling Psychology*, 69(4), 490–505. <https://doi.org/10.1037/cou0000595>
- Liu, L., Miguel Cruz, A., Rios Rincon, A., Buttar, V., Ranson, Q., & Goertzen, D. (2015). What factors determine therapists’ acceptance of new technologies for rehabilitation—a study using the Unified Theory of Acceptance and Use of Technology (UTAUT). *Disability and Rehabilitation*, 37(5), 447–455. <https://doi.org/10.3109/09638288.2014.923529>
- Luiggi-Hernández, J. G., & Rivera-Amador, A. I. (2020). Reconceptualizing Social Distancing: Teletherapy and Social Inequality During the COVID-19 and Loneliness Pandemics. *Journal of Humanistic Psychology*, 60(5), 626–638. <https://doi.org/10.1177/0022167820937503>
- Lustig, T. (2012). *The Role of Telehealth in an Evolving Health Care Environment*. National Academies Press. <https://doi.org/10.17226/13466>
- McCord, C., Bernhard, P., Walsh, M., Rosner, C., & Console, K. (2020). A consolidated model for telepsychology practice. *Journal of Clinical Psychology*, 76(6), 1060–1082. <https://doi.org/10.1002/JCLP.22954>
- Melchert, T. P., Hays, V. L., Wiljanen, L. M., & Kolocek, A. K. (1996). Testing Models of Counselor Development With a Measure of Counseling Self-Efficacy. *Journal of Counseling & Development*, 74(6), 640–644. <https://doi.org/10.1002/J.1556-6676.1996.TB02304.X>
- Morland, L. A., Mackintosh, M. A., Rosen, C. S., Willis, E., Resick, P., Chard, K., & Frueh, B. C. (2015). TELEMEDICINE VERSUS IN-PERSON DELIVERY OF COGNITIVE PROCESSING THERAPY FOR

WOMEN WITH POSTTRAUMATIC STRESS DISORDER: A RANDOMIZED NONINFERIORITY TRIAL. *Depression and Anxiety*, 32(11), 811–820. <https://doi.org/10.1002/DA.22397>

Munder, T., Wilmers, F., Leonhart, R., Linster, H. W., & Barth, J. (2010). Working Alliance Inventory-Short Revised (WAI-SR): psychometric properties in outpatients and inpatients. *Clinical Psychology & Psychotherapy*, 17(3), 231–239. <https://doi.org/10.1002/PPP.658>

Payne, L., Flannery, H., Kambakara Gedara, C., Daniilidi, X., Hitchcock, M., Lambert, D., Taylor, C., & Christie, D. (2020). Business as usual? Psychological support at a distance. *Clinical Child Psychology and Psychiatry*, 25(3), 672–686. <https://doi.org/10.1177/1359104520937378>

Pierce, B. S., Perrin, P. B., & McDonald, S. D. (2020). Pre-COVID-19 deterrents to practicing with videoconferencing telepsychology among psychologists who didn't. *Psychological Services*, 19(1), 157. <https://doi.org/10.1037/SER0000435>

Pierce, B. S., Perrin, P. B., Tyler, C. M., McKee, G. B., & Watson, J. D. (2021a). The COVID-19 telepsychology revolution: A national study of pandemic-based changes in U.S. mental health care delivery. *The American Psychologist*, 76(1), 14–25. <https://doi.org/10.1037/AMP0000722>

Pierce, B. S., Perrin, P. B., Tyler, C. M., McKee, G. B., & Watson, J. D. (2021b). The COVID-19 telepsychology revolution: A national study of pandemic-based changes in U.S. mental health care delivery. *American Psychologist*, 76(1), 14–25. <https://doi.org/10.1037/AMP0000722>

Rouidi, M., Elouadi, A. E., Hamdoune, A., Choujtani, K., & Chati, A. (2022). TAM-UTAUT and the acceptance of remote healthcare technologies by healthcare professionals: A systematic review. *Informatics in Medicine Unlocked*, 32, 101008. <https://doi.org/10.1016/J.IMU.2022.101008>

Sagar, R., & Singh, S. (2022). National Tele-Mental Health Program in India: A step towards mental health care for all? *Indian Journal of Psychiatry*, 64(2), 117. https://doi.org/10.4103/indianjpsychiatry.indianjpsychiatry_145_22

Sammons, M. T., VandenBos, G. R., & Martin, J. N. (2020). Psychological Practice and the COVID-19 Crisis: A Rapid Response Survey. *Journal of Health Service Psychology*, 46(2), 51–57. <https://doi.org/10.1007/s42843-020-00013-2>

Shah, K., Kamrai, D., Mekala, H., Mann, B., Desai, K., Patel, R. S., Shah, K., Kamrai, D., Mekala, H., Mann, B., Desai, K., & Patel, R. S. (2020). Focus on Mental Health During the Coronavirus (COVID-19) Pandemic: Applying Learnings from the Past Outbreaks. *Cureus*, 12(3). <https://doi.org/10.7759/CUREUS.7405>

Stubbings, D. R., Rees, C. S., Roberts, L. D., & Kane, R. T. (2013). Comparing in-person to videoconference-based cognitive behavioral therapy for mood and anxiety disorders: randomized controlled trial. *Journal of Medical Internet Research*, 15(11). <https://doi.org/10.2196/JMIR.2564>

Tomaino, S. C. M., Manzoni, G. M., Brotto, G., & Cipolletta, S. (2023). Breaking Down the Screen: Italian Psychologists' and Psychotherapists' Experiences of the Therapeutic Relationship in Online Interventions during the COVID-19 Pandemic. *International Journal of Environmental Research and Public Health*, 20(2). <https://doi.org/10.3390/IJERPH20021037>

Torous, J., Jän Myrick, K., Rauseo-Ricupero, N., & Firth, J. (2020). Digital Mental Health and COVID-19: Using Technology Today to Accelerate the Curve on Access and Quality Tomorrow. *JMIR Mental Health*, 7(3), e18848. <https://doi.org/10.2196/18848>

- Varker, T., Brand, R. M., Ward, J., Terhaag, S., & Phelps, A. (2018). Efficacy of Synchronous Telepsychology Interventions for People With Anxiety, Depression, Posttraumatic Stress Disorder, and Adjustment Disorder: A Rapid Evidence Assessment. *Psychological Services*. <https://doi.org/10.1037/SER0000239>
- Venkatesh, Thong, & Xu. (2012). Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology. *MIS Quarterly*, 36(1), 157. <https://doi.org/10.2307/41410412>
- Venkatesh, V., Smith, R. H., Morris, M. G., Davis, G. B., Davis, F. D., & Walton, S. M. (2003). USER ACCEPTANCE OF INFORMATION TECHNOLOGY: TOWARD A UNIFIED VIEW 1. In *User Acceptance of IT MIS Quarterly* (Vol. 27, Issue 3).
- Venkatesh, V., Thong, J., & Xu, X. (2016). Unified Theory of Acceptance and Use of Technology: A Synthesis and the Road Ahead. *Journal of the Association for Information Systems*, 17(5), 328–376. <https://doi.org/10.17705/1jais.00428>
- Webster, P. (2020). Virtual health care in the era of COVID-19. *Lancet (London, England)*, 395(10231), 1180–1181. [https://doi.org/10.1016/S0140-6736\(20\)30818-7](https://doi.org/10.1016/S0140-6736(20)30818-7)
- Wind, T. R., Rijkeboer, M., Andersson, G., & Riper, H. (2020). The COVID-19 pandemic: The ‘black swan’ for mental health care and a turning point for e-health. *Internet Interventions*, 20. <https://doi.org/10.1016/J.INVENT.2020.100317>
- Yan, Z. (2020). Unprecedented pandemic, unprecedented shift, and unprecedented opportunity. *Human Behavior and Emerging Technologies*, 2(2), 110. <https://doi.org/10.1002/HBE2.192>
- Zentner, K., Gaine, G., Ethridge, P., Surood, S., & Abba-Aji, A. (2022). Clinicians’ Attitudes Toward Telepsychology in Addiction and Mental Health Services, and Prediction of Postpandemic Telepsychology Uptake: Cross-sectional Study. *JMIR Formative Research*, 6(5), e35535. <https://doi.org/10.2196/35535>