

A sample of Italian psychotherapists express their perception and opinions of online psychotherapy during the covid-19 pandemic

Un campione di psicoterapeuti italiani esprime la propria percezione e le proprie opinioni sulla psicoterapia online durante la pandemia di covid-19

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SUMMARY. The covid-19 lockdown forced psychotherapists to use videoconferencing psychotherapy (VCP). There is little literature on the relationship between VCP and the theoretical orientation of the psychotherapist. The aim of our research work is to explore to what extent the Italian therapists used VCP and how they experienced the change in setting during lockdown. A sample of psychotherapists completed an on-line questionnaire including data about any previous experience of remote work, information on changes in setting during lockdown and their opinions on this experience. In the second phase, a statistical analysis of the data collected was performed with SPSS. The most represented theoretical orientations are psychoanalytic, Gestalt, systemic-relational and psychodynamic. Almost all the respondents had chosen to change the setting, opting for remote work via video calls, with no differences in terms of theoretical orientation and age group. Psychotherapeutic orientation seems to affect the type of difficulties encountered. The scientific literature on remote psychotherapy (VCP) so far does not correlate it with any specific theoretical-clinical model. Our research work offers some preliminary hypotheses about potential correlations between setting variations with the theoretical-clinical models.

KEY WORDS: videoconferencing psychotherapy, covid-19 pandemic, theoretical-clinical model, setting variations.

RIASSUNTO. Il lockdown causato dalla covid-19 ha costretto gli psicoterapeuti a ricorrere alla psicoterapia in videoconferenza (VCP). Si dispone di poca letteratura sulla relazione tra VCP e l'orientamento teorico dello psicoterapeuta. Lo scopo del nostro lavoro di ricerca è esplorare fino a che punto i terapisti italiani hanno utilizzato la VCP e come hanno vissuto il cambiamento di setting durante il lockdown. Un campione di psicoterapeuti ha compilato un questionario online includendo dati su eventuali precedenti esperienze di lavoro a distanza, informazioni sui cambiamenti nel setting durante il lockdown e le loro opinioni su questa esperienza. Nella seconda fase, è stata eseguita un'analisi statistica dei dati raccolti con SPSS. Gli orientamenti teorici più rappresentati sono psicoanalitico, gestaltico, sistemico-relazionale e psicodinamico. La quasi totalità degli intervistati aveva scelto di cambiare impostazione, optando per il lavoro a distanza tramite videochiamata, senza differenze in termini di orientamento teorico e fascia di età. L'orientamento psicoterapeutico sembra influenzare il tipo di difficoltà incontrate. La letteratura scientifica sulla psicoterapia a distanza (VCP) finora non la correla con alcun modello teorico-clinico specifico. Il nostro lavoro di ricerca offre alcune ipotesi preliminari sulle potenziali correlazioni tra le variazioni di setting con i modelli teorico-clinici.

PAROLE CHIAVE: psicoterapia in videoconferenza, epidemia da covid-19, modello teorico-clinico, variazioni di setting.

INTRODUCTION

After the WHO declared the covid-19 outbreak as a pandemic (SARS-CoV-2), Italy was the first Western Country where measures to contain contagion were implemented. In a short time both public and private health services that were not urgent or non-delayable had to be suspended, including psychotherapeutic services. In the private context, psychotherapists were confronted with three options: i) continue working in person, despite the danger of contagion; ii) suspend sessions indefinitely, with a risk for patients with severe disorders and with potential negative impact on the therapeutic relationship; iii) continue working at a distance,

looking for an alternative solution pushed by the perception that the emergency would not end soon – perception that has become reality – in order to guarantee the continuity of treatments and to meet new patients, individuals, families, who had developed psychic distress precisely as a result of the health emergency: recent studies demonstrate a correlation between the covid-19 experience and the increase in psychological distress in the general population and in clinical samples^{1,2}.

Remote psychotherapeutic work (videoconferencing psychotherapy - VCP) has been in use for several years for contingent reasons inherent to the therapeutic couple, e.g. temporary transfers abroad or prolonged illness of the pa-

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tient, treatment of patients living in rural areas, unavailability of Italian-speaking psychotherapists in the patient's country of residence or for training reasons, for example for trainees living in areas where it is impossible to find a training analyst a few hours away; but also for people who prefer to appear through the technological "filter" instead of sitting in the psychotherapist's office³⁻⁹. VCP has the potential to overcome challenges such as time constraints, scheduling difficulties, and client concerns about treatment-seeking stigma, by allowing clients to engage with professional services in the privacy of their own home¹⁰⁻¹².

The results of a systematic review indicate that videoconferencing psychotherapy (VCP) can be feasible, clinically effective and acceptable to patients, has been used in a variety of therapeutic formats and with different subjects, is generally associated with good user satisfaction, and is found to have similar clinical outcomes to traditional face-to-face psychotherapy¹³.

Over the past two decades, a great deal of literature has been published on advantages, potentials, limitations and defects of each type of online psychological intervention according to theoretical orientations and types of therapy¹⁴⁻²¹. However, little is known about the specific problems that the different therapeutic models encounter in the theoretical reflection and in the adaptation of their technique to the online setting. Setting variations normally occur for reasons connected to the evolution of theories and the appearance of new clinical forms. The psychotherapists' internal structure remains solid. During their training they learn how to manage the discomfort of their patients and their own responses in any situation. What makes setting variations during covid-19 pandemic special as compared to other emergency situations? The non-sharing of the same physical place of therapy and the perfect symmetry in being potentially contagious to one another.

The setting frame does not only delimit its contours as if the setting pre-existed, it draws the picture. It is the frame that allows for the creation and manifestation of the psychic phenomena we want to observe and understand, and on which we want to intervene^{22,23}.

One of the limitations of online psychotherapies is the value of lost information, such as that coming from the rest of the body or the other sensory channels such as sight and smell. Moreover, there are also technical internet-related problems or other privacy related questions²⁴.

Some issues are related to the personal preferences of patient and therapist (e.g. there are therapists and patients who prefer physical contact which allows for a best tuning)²⁵ or to the complexity of the situation that requires special precautions and approaches that are not always possible remotely (e.g. with subjects at risk of suicide or self-injurious behaviors)²⁶.

Therefore, there are obvious differences in the remote setting as compared to working in person. These differences have been discussed by major professional associations and new ideas and reflections have been raised, and the debate is still open.

In this regard, it is important to underline that several authors have developed their opinions on problems with VCP, on the technical adaptations required and on the theoretical issues that cannot be solved based on their different theoret-

ical approach and for lack of experience in the daily practice of online therapy²⁷⁻³⁰.

The basic training of psychotherapists deeply structures their practice and determines their vision of clinical practice even after years of experience. It is reasonable to think that their approach to online therapy is biased by their theoretical background, which determines forms, success and failure of online treatment. It is worth exploring all the facets of this unknown area to understand how the therapists' theoretical orientation affects their approach to VCP and vice versa how VCP affects the various theoretical models.

Our study aims at assessing the approach to VCP of Italian therapists, the satisfaction they report, and their opinion after some hands-on practice of online therapy and not only based on theoretical assumptions stemming from their therapeutic reference models.

This study identifies differences according to the therapists' therapeutic method as well as to their socio-demographic characteristics and personal experience in remote clinical practice.

AIM OF THE STUDY

The aim of our study is to explore how the Italian therapists used VCP and how they experienced the setting variation during the covid-19 lockdown.

Our starting assumption was that psychotherapists have a different perception of therapeutic relationship in the remote setting and a different opinion about its quality, as a function of their therapeutic method of reference.

SAMPLE AND METHODS

The sample, consisting of 507 psychotherapists from all over the country, was recruited by publicizing the research work on social media like Facebook and WhatsApp groups of psychotherapists, on sites of Associations and Schools of Psychotherapy and professional email contacts of the authors, who are also psychotherapists. The theoretical orientations represented are: Transactional analysis, Cognitive, Behavioral, Gestalt, Psychoanalytic, Psychodynamic, Systemic-relational, Humanistic, Other.

The invitation to participate included a brief description of the aims of the study and the link to a questionnaire. The questionnaire, divided into four sections, included informed consent and the processing of sensitive data, socio-demographic and professional data of respondents, previous experience of remote work, information on changes in setting during lockdown and opinions on the experience. The questionnaire did not include items about the quality and type of equipment used after the setting variation in emergency conditions, without the possibility of asking patients to equip themselves with adequate tools.

Answers were received from May to July 2020.

In the second phase, a statistical analysis of the data collected was performed with SPSS (Statistical Package for Social Sciences). Descriptive analysis (for frequencies, mean and standard deviation), Spearman's correlation test and Pearson's Chi-square were performed.

RESULTS

The sample consists of 507 psychotherapists (M=86, F=421), mainly aged 36-65. 67.1% are from Southern Italy, 80.9% are self-employed. The most represented theoretical orientations are psychoanalytic (31.4%); Gestalt (20.5%); systemic-relational (19.7%) and psychodynamic (13.2%). Before the lockdown, only 37.2% of the sample had experienced remote therapy (Table 1).

A higher percentage of male therapists (47.6%, p<.05), therapists over 65 (51.6%, p<.05) and therapists with Gestalt training (49.0%), with cognitivist (44.1%) and psychoanalytic training (39.6%) had previously practiced VCP (p<.05) (Table 2).

The main reasons given for choosing remote work were the patient's prolonged inability to continue face-to-face psychotherapy (29.4%) and the unavailability of Italian-speaking psychotherapists in the patient's country (4%) (Figure 1).

During the lockdown, 475 subjects (93.7%) changed setting; of these, 417 subjects (87.8%) used video calls and 58 (12.2%) used phone calls, with no differences in terms of theoretical orientation and age group.

Table 1. Description of the sample.

Number of respondents= 507	N	%
Gender		
Male	86	17.0
Female	421	83.0
Age group		
Up to 35 years	124	24.5
36-45 years	176	34.7
46-65 years	176	34.7
Over 65 years	31	6.1
Geography		
Southern Italy	340	67.1
Work context		
Self employed	410	80.9
Public service	70	13.8
Both	27	5.3
Theoretical orientation		
Psychoanalytic	159	31.4
Systemic relational	100	19.7
Psychodynamic	67	13.2
Cognitive behavioral	43	8.5
Transactional analysis	22	4.3
Humanistic	12	2.4

Table 2. Characteristics of professionals who had already used remote therapy.

Number of professionals who already used remote therapy = 188	N	%	χ^2	p
Male vs female	41/45 vs 147/419	47.6 vs 35.1	4.84	<.05
Aged over 65 vs aged under 65	16/31 vs 174/474	51.6 vs 36.3	16.64	<.01
Gestalt	51/104	49.9	18.8	<.01
Cognitive behavioral	19/43	44.1		
Psychoanalysis	63/159	39.6		
Transactional analysis	5/22	22.7		
Psychodynamic	24/66	36.4		
Relational systemic	24/99	24.2		
Humanistic	2/12	16.7		

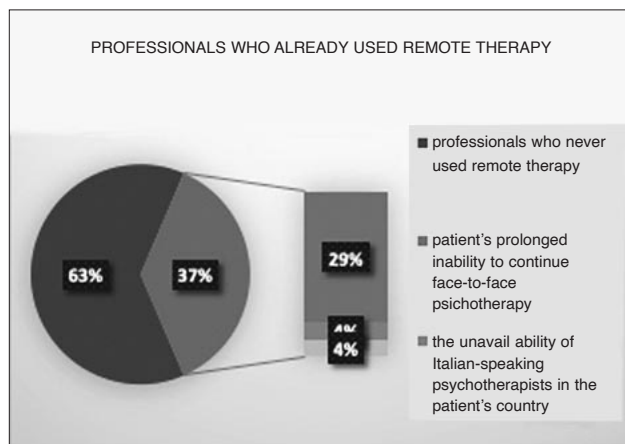


Figure 1. Use of remote psychotherapy before covid-19.

Changed workplace (from office/clinical center/rehabilitation center to home) 5.8% of the respondents; mainly young psychotherapists (<35=66.9%), while those >65 only did it in 35.4% of the cases. The lockdown also forced to reorganize working days and hours and this was mainly true for clinicians aged between 35 and 45 (43.7%) and only 16.1% of those aged over 65 (Table 3).

When interviewed on the quality of remote work, only 2.2% of the respondents indicated that remote work was no different from face-to-face work and only 3.2% said they were more relaxed. Most subjects pointed out critical issues

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Table 3. Characteristics of professionals who changed setting using video calls.

	N	%	Prevailing features
Number of subjects who changed workplace	303	59.8	69.9% of <35 35.4% of >65
Subjects who reshaped days and times to meet the needs of patients	287	56.6	43.7% of clinicians aged 36-45 16.1% of clinicians aged > 65
Subjects who reshaped days and times for personal needs	180	35.5	

such as: the need for greater flexibility on the part of the therapist (58.8%), the need for greater attention and concentration (52.9%) and greater fatigue (40.4%), given the latter highlighted above all by psychoanalysts (50.3%).

48.9% of the respondents – in particular Gestalt psychotherapists (71.1%) – stated that the remote mode prevented them from fully applying some of the techniques typical of their psychotherapeutic orientation.

39.3% of the sample found that it reduces silence as breaks are more difficult; in this case, they were mainly psychoanalysts (50.9%) and psychodynamic psychotherapists (46.2%).

For 37.9% of the respondents, remote therapy modifies the asymmetry of the patient-therapist relationship and only 13.8% highlighted the need to consider privacy issues.

45.8% of the sample believed that remote work is inapplicable with some types of patients and 62.1% thought it applies to some patients better than to others.

Regarding clinical efficacy, 20.3% of the sample believed that remote work has a lower clinical efficacy, 20.9% that it does not impact on efficacy and only 0.4% believed that it has greater clinical efficacy (Table 4).

As the lockdown continued, 64.6% of the sample found it increasingly difficult to adapt. In particular, it seems that using methods other than video calls (phone call, email) resulted in greater difficulty in adapting (67.7% vs 57.8%, $p < .05$); 44.5% became more critical of remote work. Modes other than video calls implied a more critical attitude (47.8% vs 37.1%, $p < .05$) (Table 5).

Lower clinical efficacy was found by 23% ($p < .05$) of those who had never done remote therapy before the lockdown and 15% of those who had.

Modification of the asymmetry of the patient-therapist relationship was found by 41.3% ($p < .05$) of those who had never done remote therapy before the lockdown and 31.3% of those who had.

Issues with silences in the most difficult pauses were indicated by 44.7% ($p < .01$) of those who had never done remote therapy before the lockdown and 30.4% of those who had.

This mode is applied to the treatment of some patients better than to others for 55.7% ($p < .01$) of those who had never done distance therapy before the lockdown and 72.3% of those who had (Table 6).

Table 4. Evaluation of the remote therapy experience.

Type of evaluation of remote therapy	N	%
No difference from face-to-face work	11	2.2
Less clinical efficacy	103	20.3
No impact on clinical efficacy	106	20.9
Greater clinical efficacy	2	0.4
No difference between study therapy and remote work	11	2.2
Professional feels more relaxed in remote work	16	3.2
It requires more flexibility during the setting	298	58.8
It needs higher levels of attention and concentration	268	52.9
It fatigues >50.3% of psychoanalysts ($\chi^2=12.93$; $p < .05$)	205	40.4
It restricts or prevents the possibility of applying certain techniques 71.1% of Gestalt-oriented psychotherapists ($\chi^2=38.04$; $p < .01$)	248	48.9
It reduces “silence”, making breaks more difficult 50.9% of psychoanalysts and 46.2% of psychodynamic psychotherapists ($\chi^2=25.8$; $p < .01$)	199	39.3
It changes the asymmetry of the patient-therapist relationship	192	37.9
It requires more attention to privacy issues	70	13.8
It is inapplicable with some types of patients	232	45.8
It may be better applied to some patients than others	315	62.1

Table 5. Evaluation of the remote therapy experience of users of video calls and users of other methods.

Professionals who use video call		Professionals who use other methods		
%	N	Type of evaluation	N	%
57.8	92	Difficulty in adapting ($\chi^2=4.64$; $p < .05$)	235	67.7
37.1	59	Critical attitude ($\chi^2=5.09$; $p < .05$)	166	47.8

Table 6. Evaluation of the remote therapy experience between professionals who used video calls and who used other methods.

Professionals who use video call		Professionals who use other methods		
%	N	Type of evaluation	N	%
23	73	Lower clinical efficacy of remote therapy ($\chi^2=4.23$; $p < .05$)	29	15
41.3	131	It changes the asymmetry of the patient-therapist relationship ($\chi^2=4.97$; $p < .05$)	59	31.3
44.7	142	It reduces “silence”, making breaks more difficult ($\chi^2=10.09$; $p < .01$)	57	30.4
55.7	176	It may be applied to some patients better than to others ($\chi^2=13.85$; $p < .01$)	136	72.3

In particular, 70.4% of videocall users and 58.2% of users of other means think it is better applied to the treatment of some particular patients.

DISCUSSION AND CONCLUSIONS

The covid-19 lockdown forced the population of psychotherapists to work out quick solutions to ensure continuity of treatment. Although a small percentage of the sample had already occasionally practiced remote work for specific needs of the therapist or of the patient(s), the new situation forced everyone to look for alternative measures.

Video call was the most frequently chosen mode to replace face-to-face treatment; to a lesser extent, total suspension of treatment, telephone sessions or short telephone contacts.

After the outbreak, before the lockdown was extended to the whole country, some psychotherapists continued working in person, complying with the emergency restrictions. Remote work led to change work-space especially for young therapists (<35). This is because at the start of their career they do not have private practice and usually work in clinical centers, rehabilitation centers, professional associations. Clinicians aged 35-45 mainly had to reorganize their schedule (days and times) of psychotherapy. This might be explained with this age group having other jobs besides psychotherapeutic practice: this might explain why the lockdown had a stronger impact on the organization of their work. We have not investigated aspects of the professional and private life of the respondents, but this data seems to be explained by the existential complexity of subjects of this age who ordinarily have to cope with various family and professional duties (to reconcile work and family).

These variations were independent of the theoretical orientations of the therapists. The literature on remote psychotherapy (VCP) does not correlate it with any specific theoretical-clinical model. However, within each association/society/school of psychotherapy, discussion forums on the subject have opened and guidelines have been produced to guide therapists in their choices. Our research work aims at putting forward hypotheses on the possible correlations between these variations and the reference models. The entire sample highlighted several critical issues related to VCP, ranging from the need for greater flexibility in some practical aspects of the setting (place, time and frequency of sessions) to that of maintaining greater attention and concentration. This seems a particularly strong issue for psychoanalysts and Gestalt-oriented psychotherapists.

The psychoanalysts pointing to greater fatigue with VCP might depend on the peculiar characteristics of the model, such as being non-receptive to external stimuli that do not belong to the setting and the analytic process, and staying focused on the internal worlds at play in the analytic relationship^{31,32}. VCP, on the other hand, requires frequent monitoring, for example of the good functioning of the device used (connection, audio and video quality and the like).

In addition, spontaneous breaks are limited and it is difficult to interpret the nature of the silences and whether they depend on the actual session or on technical problems with the device in use. This difficulty is shared by psychoanalysts

and psychodynamic psychotherapists who also give silence an important meaning in communication. However, having already experimented with VCP before the lockdown, reduces the negative evaluation on the impact of the VCP on pauses and silences.

Almost half of the respondents believe that remote work limits or impedes the application of some of the techniques typical of their psychotherapeutic orientation, but this percentage rises among Gestalt-oriented psychotherapists. Maybe, the inability to implement bodily techniques or to amplify the emotional experience using the physical space offered by the elements present in the therapy room, is perceived as a limitation of the clinical practice according to the Gestalt model.

Some elements emerge as differences related to therapy models and justify the need to carefully probe in the topic to measure if the different personal theoretical training has an impact on the setting of the sessions, the extent of this impact and its persistence over time. The respondents emphasize that VCP applies to some patients better than to others and that it is even inapplicable with some. This is particularly true for those who had gained a pre-pandemic covid-19 VCP experience.

These results seem to describe the difficulty of these psychotherapists to adapt their method to the new "medium". This does not represent an evaluation of the effectiveness of the new settings. We think more studies are needed to explore this aspect.

Regarding the effectiveness of VCP and the issues related to privacy, a small number of subjects expressed an evaluation. Considering that the questionnaire was administered just two months from the start of the lockdown one might think that respondents had not yet had the opportunity to fully assess the experience with the new setting.

The setting variations were generally perceived as more and more tiring over time by the majority of the sample, even if to a lesser extent by those who used video calling.

The size of the sample studied and its limited geographic scope do not allow for generalizations but our research work is only a preliminary investigation on how the therapists managed a setting variation that they had to implement to guarantee treatments in a moment of great individual and collective anxiety.

The questionnaire used for the survey was not organized to collect further details, the type of patients more or less suitable for VCP or the difficulties experienced by therapists during remote work. The literature shows that some types of patients prefer remote therapy, e.g. people with mobility problems, people with anxiety disorders, people who fear social stigma or who have time constraints as managers or professionals, or people who often move for study or work or who are socially isolated for different reasons³³. Furthermore, the childhood trauma is specifically associated with the burden of mental health, particularly mood disorders, which is increasing during the pandemic³⁴. A very recent study assessed the relationship between psychological distress related to covid-19 and childhood trauma, founding that childhood trauma was associated with increased vulnerability to the stressful effect of the coronavirus disease 2019 outbreak³⁵. Further to these studies, it can be hypothesized that online therapy is a further stressful event for this type of patients, for the change of setting, for the loss of holding giv-

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en by the therapist being present, for the difficulty in tolerating silence, and finally for possible connection problems and therefore in communication. For this reason, however, online therapy could favor the re-enactment and processing of childhood traumas.

Future studies are necessary to verify these hypotheses.

The quality and type of equipment used (microphones, speakers and monitors) has an impact on the quality of remote work. The study was able to evaluate the approach and satisfaction of remote psychotherapy in emergency situations and our conclusions cannot be extended to ordinary situations.

In the future, our research group will continue exploring the correlations between variables such as the theoretical orientation of the clinician, the age group of the patients, the diagnostic category (type of disorder) of the patients and the choice of VCP.

The results so far highlight how psychotherapists belonging to different theoretical schools seem to have adapted differently to the remote setting; for some of them it did not constitute a significant change in the perception of their clinical efficacy, for others (in particular psychoanalysts, psychodynamic psychotherapists and Gestaltists) VCP was a significant limitation.

During lockdown all psychotherapists were confronted with the problem of changing the setting of all the therapeutic processes in progress almost overnight. Our study suggests that their theoretical orientations and any previous experience with digital devices and VCP influence the degree of satisfaction and the type of difficulties encountered. The different theoretical schools, challenged as they are to adapt their clinical practice to a changing society, have the opportunity to expand the internal debate on the specificities of each model in remote work. We are going to study the methods clinicians will use for resuming in person treatment and to collect evaluations of the effects that the technical choices made during and after lockdown have had and will have on the therapeutic process.

Conflict of interests: the authors have no conflict of interests to declare.

REFERENCES

1. Moccia L, Janiri D, Giuseppin G, et al. Reduced hedonic tone and emotion dysregulation predict depressive symptoms severity during the COVID-19 outbreak: an observational study on the Italian general population. *Int J Environ Res Public Health* 2020; 18: 255.
2. Di Nicola M, Dattoli L, Moccia L, et al. Serum 25-hydroxyvitamin D levels and psychological distress symptoms in patients with affective disorders during the COVID-19 pandemic. *Psychoneuroendocrinology* 2020; 122: 104869.
3. Shore JH, Manson SM. A developmental model for rural telepsychiatry. *Psychiatr Serv* 2005; 56: 976-80.
4. Abbott JAM, Klein B, Ciechomski L. Best practices in online therapy. *J Technol Hum Serv* 2008; 26: 360-75.
5. Simpson S. Psychotherapy via videoconferencing: a review. *Br J Guid Counc* 2009; 37: 271-86.
6. Goss S, Anthony K. Developments in the use of technology in counselling and psychotherapy. *Br J Guid Counc* 2009; 37: 223-30.
7. Scharff JS. Technology-assisted psychoanalysis. *J Am Psychoanal Assoc* 2013; 61: 491-509.
8. Scharff JS (ed). *Psychoanalysis online: mental health, teletherapy, and training*. Londra: Routledge, 2018.
9. Juhos C, Mészáros J. Psychoanalytic psychotherapy and its supervision via videoconference: experience, questions and dilemmas. *Am J Psychoanal* 2019; 79: 555-76.
10. Hoge CW, Castro CA, Messer SC, McGurk D, Cotting DI, Koffman RL. Combat duty in Iraq and Afghanistan, mental health problems, and barriers to care. *N Engl J Med* 2004; 351: 13-22.
11. Jerome LW, Zaylor C. Cyberspace: creating a therapeutic environment for telehealth applications. *Professional Psychology: Research and Practice* 2000; 31: 478.
12. Ouimette P, Vogt D, Wade M, et al. Perceived barriers to care among veterans health administration patients with posttraumatic stress disorder. *Psychol Serv* 2011; 8: 212.
13. Backhaus A, Agha Z, Maglione ML, et al. Videoconferencing psychotherapy: a systematic review. *Psychol Serv* 2012; 9: 111.
14. Mora L, Nevid J, Chaplin W. Psychologist treatment recommendations for Internet-based therapeutic interventions. *Comput Human Behav* 2008; 24: 3052-62.
15. Markowitz JC, Milrod B, Heckman TG, et al. Psychotherapy at a distance. *Am J Psychiatry* 2021; 178: 240-6.
16. Cowan A, Johnson R, Close H. Telepsychiatry in psychotherapy practice. *Innov Clin Neurosci* 2020; 17: 23.
17. Lemma A. Mediated psychotherapy. In: Lemma A. *The digital age on the couch: psychoanalytic practice and new media*. London: Routledge, 2017.
18. Sharer-Mohatt K, Scharff JS. The computer as metaphor for state of mind. In: Scharff JS (ed). *Psychoanalysis online: mental health, teletherapy, and training*. London: Routledge, 2013.
19. Wallwork E. Ethical aspects of teletherapy. In: Scharff JS (ed). *Psychoanalysis online: mental health, teletherapy, and training*. London: Routledge, 2013.
20. Dolce P, Marocco D, Maldonato NM, Sperandeo R. Toward a machine learning predictive-oriented approach to complement explanatory modeling. An application for evaluating psychopathological traits based on affective neurosciences and phenomenology. *Front Psychol* 2020; 11: 446.
21. Cioffi V, Cantone D, Guerriera C, et al. Satisfaction degree in the using of VideoConferencing Psychotherapy in a sample of Italian psychotherapists during Covid-19 emergency. 11th IEEE International Conference on Cognitive Infocommunications (CogInfoCom), Mariehamn, Finland, 2020, pp. 000125-000132.
22. Guerriera C. Il senso e la misura. Processi valutativi nella presa in carico e nella cura psichica in una prospettiva psicoanalitica. Milano: Franco Angeli, 2013.
23. Sperandeo R, Moretto E, Baldo G, Dell'orco S, Maldonato MN. Executive functions and personality features: a circular interpretative paradigm, 8th IEEE International Conference on Cognitive Infocommunications (CogInfoCom), Debrecen, 2017, pp. 000063-000066.
24. Stoll J, Müller JA, Trachsel M. Ethical issues in online psychotherapy: a narrative review. *Front Psychiatry* 2020; 10: 993.
25. Coco M, Buscemi A, Guerrera CS, et al. Touch and communication in the institutionalized elderly. 10th IEEE International Conference on Cognitive Infocommunications (CogInfoCom), Naples, Italy, 2019, pp. 451-458.
26. Sperandeo R, Esposito A, Maldonato NM, Dell'Orco S. Analyzing correlations between personality disorders and frontal functions: a pilot study. In: *International Workshop on Neural Networks*. Cham, CH: Springer, 2015.
27. Lemma A. Psychoanalysis in times of technoculture: some reflections on the fate of the body in virtual space. *Int J Psychoanal* 2015; 96: 569-82.

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28. Russell GI. Screen relations: the limits of computer-mediated psychoanalysis and psychotherapy. London: Karnac Books, 2015.
29. Russell GI, Essig T. Bodies and screen relations: moving treatment from wishful thinking to informed decision-making. In: Innovations in Psychoanalysis. Londra: Routledge, 2019.
30. Sperandeo R, Alfano YM, Cioffi V, et al. Complexity in the narration of the self. A new theoretical and methodological perspective of diagnosis in psychopathology based on the computational method. 10th IEEE International Conference on Cognitive Infocommunications (CogInfoCom), Naples, Italy, 2019, pp. 445-450.
31. Cantone D, Guerriera C. Il "bicchiere della staffa": ancora qualche considerazione sui processi valutativi. In: Guerriera C (ed). Il senso e la misura. Processi valutativi nella presa in carico e nella cura psichica in una prospettiva psicoanalitica. Milano: Franco Angeli, 2013.
32. Maldonato M, Dell'Orco S, Sperandeo R. When intuitive decisions making, based on expertise, may deliver better results than a rational, deliberate approach. In: Multidisciplinary approaches to neural computing. Cham, CH: Springer, 2018.
33. Sperandeo R, Messina G, Iennaco D, et al. What does personality mean in the context of mental health? A topic modeling approach based on abstracts published in Pubmed over the last 5 years. *Front Psychiatry* 2020; 10: 938.
34. Janiri D, De Rossi P, Kotzalidis GD, et al. Psychopathological characteristics and adverse childhood events are differentially associated with suicidal ideation and suicidal acts in mood disorders. *Eur Psychiatry* 2018; 53: 31-6.
35. Janiri D, Moccia L, Dattoli L, et al. Emotional dysregulation mediates the impact of childhood trauma on psychological distress: first Italian data during the early phase of COVID-19 outbreak. *Aust N Z J Psychiatry* 2021; 4867421998802.