



Qualitative paper

Embodiment in online psychotherapy: A qualitative study

Enara García*¹ , Ezequiel A. Di Paolo^{1,2,3}  and
Hanne De Jaegher^{1,4} 

¹IAS-Research Center for Mind, Life and Society, Department of Philosophy,
University of the Basque Country (UPV/EHU), San Sebastian, Spain

²IKERBASQUE, Basque Foundation for Science, Bilbao, Spain

³Centre for Computational Neuroscience and Robotics, University of Sussex,
Brighton, UK

⁴ChatLab, School of Psychology, University of Sussex, Brighton, UK

As a result of the COVID-19 pandemic, many therapists and patients have been required to switch to online sessions in order to continue their treatments. Online psychotherapy has become increasingly popular, and although its efficacy seems to be similar to face-to-face encounters, its capacity to support the implicit nonverbal and embodied aspects of the therapeutic relationship has been questioned and remains understudied.

Objectives. To study how embodied and intersubjective processes are modified in online psychotherapy sessions.

Design. Taking the enactive concept of participatory sense-making as a guiding thread, we designed an interpretative phenomenological analysis to examine the experiences of embodiment in online therapy.

Methods. We conducted phenomenological semi-structured interviews with patients and therapists who have recently switched from face-to-face encounters to online modality.

Results. Adjustments in verbal and nonverbal behavior, gaze behavior, management of silences, and displacements of non-intentional and pre-reflective patterns onto reflective ones are reported as necessary to compensate for changes introduced in the online modality.

Conclusions. From an enactive perspective, such adaptations manifest regulatory processes aimed at sustaining interactive dynamics and coordinating the primordial tension between relational and individual norms in social encounters.

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

*Correspondence should be addressed to Enara García, Carlos Santamaría B13, Plaza Elhuyar, 2. 20008 San Sebastián, Spain (email: enara.garcia@ehu.eus).

Practitioner points

- We examine different aspects of embodiment that practitioners should take into account when switching from face-to-face to online encounters with their clients.
- Online communication systems can alter aspects of the therapeutic relationship, such as its structure, its fragility, and its significance.
- Video calls afford new forms of intervention such as integrating the experience of patients with their self-image, incorporating information about their habitual environment into the process, and adopting less confrontational therapeutic styles.

As a result of the worldwide state of emergency during the COVID-19 pandemic that started in 2020, there has been a massive shift towards the use of online communication for purposes of work and social contact. Face-to-face, on-site therapeutic processes have been moved to online platforms causing changes in patterns of practitioner–client interaction. Online psychotherapy has rapidly spread in recent years due to, among other things, its accessibility and convenience in reaching a wider population. Several comparative studies give support to this new modality assessing its validity, efficiency, and effects on the therapeutic alliance and treatment (Backhaus et al., 2012; Cataldo, Chang, Mendoza, & Buchanan, 2021; Hilty, Luo, Morache, Marcelo, & Nesbitt, 2002; Norwood, Moghaddam, Malins, & Sabin-Farrell, 2018; Simpson, 2009; Simpson & Reid, 2014). Studies also scrutinize the advantages and disadvantages of online therapy (Kocsis & Yellowlees, 2018; Schuster, Topooco, Keller, Radvogin, & Laireiter, 2020; Stoll, Müller, & Trachsel, 2020; Wegge, 2006). However, unlike therapeutic processes carried out mostly in the online modality, the current situation has compelled a shift to online platforms and many therapists and patients have had to adapt to a modality they were not used to. This situation allows us to explore the contrast between the modalities by examining first-hand experiences, particularly the role of nonverbal communication, embodiment, and intercorporeality before and after the switch.

There is widespread agreement that embodied aspects of intersubjectivity play a substantial role in the psychotherapeutic process (Hauke, 2016; Shaw, 2004; Siegel, 2019; Tschacher & Pfammatter, 2016). Intersubjectivity here refers to the co-creation of meaning between two or more people as well as their lived experience of mutual presence and recognition (Gallagher & Zahavi, 2012). The enactive approach, as a branch of embodied cognitive science (Newen, Bruin, & Gallagher, 2018), highlights the constitutive role that sensorimotor engagements with the environment play in mental life (Di Paolo, Buhrmann, & Barandiaran, 2017; Thompson, 2007; Varela, Thompson, & Rosch, 1991). In social situations, interpersonal engagement relies on all kinds of aspects of interaction, not only gestures, expressions, and utterances, but also factors such as bodily posture, interpersonal distance and rhythms, and micro-movements. The concept of intercorporeality refers to how social interactions or the presence of other persons shape pre-reflective bodily behaviors and gestures (Merleau-Ponty, 2012). Such pre-reflective elements allow individuals to attune to each other in bodily and affective resonance and set the basis for *participatory sense-making* processes by which they mutually influence each other's cognitive and affective activities (De Jaegher & Di Paolo, 2007). Participatory sense-making is defined as the ways people make sense together, of each other, the world, and themselves, in moving together. For this, they rely on both pre-reflective and reflective coordination processes at many levels, from regulation of interpersonal distance and mutual orientation to joint activities and conversations. These coordination patterns have long been studied (Abney, Paxton, Dale, & Kello, 2014; Dale, Fusaroli, Duran, & Richardson, 2013), and we find, for instance, physiological correlates in

autonomous responses such as heart rate variability, skin conductance, and inter-brain synchrony (Kleinbub, 2017). Participants also coordinate movements and utterances (Fuchs & Jirsa, 2008; Kendon, 1990). These multiple kinds of bodily resonance and other forms of intercorporeality (Fuchs & De Jaegher, 2009) serve as the primary way by which participants perceive each other and together generate meanings in the interaction, with reflective, dialogic, and other gestural engagements relying on this basic pre-reflective substrate. The idea of participatory sense-making suggests that not only the presence but also the particular time-course of such intercorporeal synergies contributes to building the therapeutic alliance and processes of change (García & Di Paolo, 2018; Koole & Tschacher, 2016).

The effectiveness of online therapy, in which intercorporeal cues are altered (in general diminished) by the video-call setting, might be construed as a counterexample to the enactive perspective. If online sessions can be effective (Lingely-Pottie & McGrath, 2006), then perhaps intercorporeality is not as important as enactivists suggest. On this issue, the literature on online therapy shows two apparently opposing views. On the one hand, efficiency studies report that there is no statistical difference between online and face-to-face interventions (Norwood et al., 2018) and the quality of therapeutic alliance seems also to be equivalent in both modalities (Cataldo et al., 2021; Simpson & Reid, 2014). On the other hand, there are compelling questions about whether online therapy can support the implicit nonverbal and embodied aspects of the therapeutic relationship. Russell (2018) examines the limitations of online therapy, without discarding its advantages. These limitations concern the role of embodied co-present interactions in building trust (see also Rocco, 1998) and the absence of implicit bodily cues that help patients and therapists regulate meaning and memory together. The case is, as we explain next, that there is not so much an absence as a transformation of intercorporeal patterns in online interactions and the question remains whether these changes have an effect on the quality of participatory sense-making.

Participatory sense-making in online social interactions

There is a tendency to consider digital online communication as a sort of disembodied virtual reality. However, all interactions with technology are embodied in the sense that they take place in the context of everyday sensorimotor engagements with the world (Price, Roussos, Falcão, & Sheridan, 2009; Smart, 2014). The online/offline contrast cannot be mapped onto a disembodied/embodied distinction. The idea that cognition is embodied and technologically extended encourages us to see our interaction with communication devices as constitutive of cognition in general (Clark & Chalmers, 1998; Wheeler, 2019). Work on cognitive anthropology and material culture (Hutchins, 1995; Malafouris, 2013) demonstrates how technologically mediated interpersonal encounters modulate, enhance, and constrain lived experience. Digital technology is rather a mediator, that is, more than just conveying a message, and it transforms, translates, distorts, modifies, and even scaffolds meaning (Håland & Melby, 2015; Latour, 2005).

Indeed, from an enactive approach, there is no un-mediated perception since perception is always constrained and constituted by sensorimotor contingencies enacted by an agent (Di Paolo et al., 2017; Noë, 2004). Any environment offers certain potentials for action both physically and socially (Suthers, 2006). As an illustration, we may consider the measurement of Social Presence, which is often used to rate different technologies in

terms of sociability and the moment-by-moment awareness of the co-presence and engagement with the other (Ijsselstein, 2003). Although mediated communication can result in detriment of emotional and other forms of crucial information, it can also support new ways of communicating and interacting (Furukawa & Driessnack, 2013; Newman, Szkodny, Llera, & Przeworski, 2011; Price et al., 2009). Thus, we should move away from the ‘just transmitter’ or ‘just impoverished’ approaches to technology-mediated interactions in order to recognize new forms of embodied interactions that technology affords.

Social cognition, in an enactive sense, is a *participatory sense-making* process, that is, the ‘coordination of intentional activity in interaction, whereby individual sense-making processes are affected and new domains of social sense-making can be generated that were not available to each individual on her own’ (De Jaegher & Di Paolo, 2007, p. 497). In social encounters, there is a co-regulation of the coupling between individuals that generates interactive dynamics, that is, a relational domain that acquires a certain autonomy from individual acts and intentions (see Figure 1). This interactive autonomy is evidenced in cases where interaction continues even when participants are trying to stop it, for example, the narrow corridor ‘sideways dance’ when people walking in opposite directions cannot get past each other, phone conversations that reignite after having said goodbye, or the tendency of therapists and patients to synchronize their movements in the conversation (Koole & Tschacher, 2016). These interactive processes are manifested intercorporeally as shared rhythms, synchrony, spatial configurations, and bodily/affective resonance between participants. Fuchs and De Jaegher (2009) describe such intercorporeality as the basis for intersubjectivity and social cognition. Unsurprisingly, these processes of embodied intersubjectivity play a fundamental role in building the therapeutic alliance (Bizzari, 2020; Tschacher & Pfammatter, 2016).

A core element of participatory sense-making is the dialectical articulation between two forms of autonomy and normativities, the individual and the interactional (Di Paolo, Cuffari, & De Jaegher, 2018). Individual autonomy arises from the sustained integration of organic and sensorimotor agencies in each participant. Interactive autonomy is the result of self-organized and self-sustained relational patterns that emerge in social interaction. These two autonomies can give rise to different normativities and constitute the *primordial tension* between the individual and

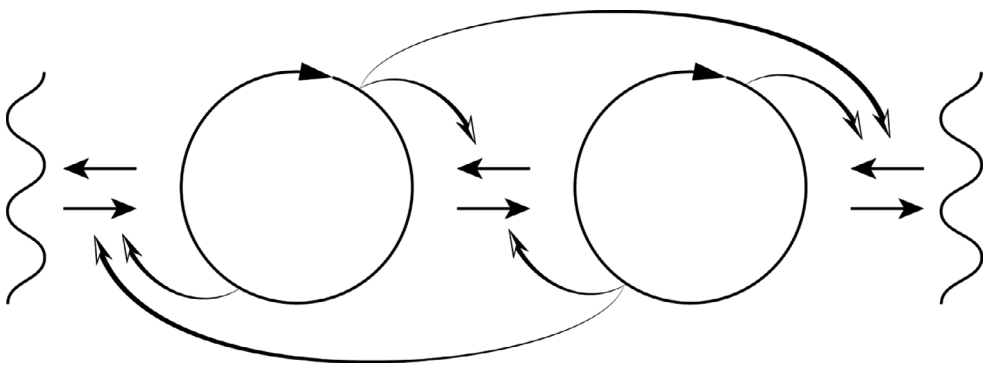


Figure 1. Depiction of the co-regulation of the coupling between two self-constituting agents (full circles) in interaction with each other and with the environment (vertical waves sideways). The arrows on the circles illustrate the self-constitution of the agent and curved arrows represent the co-regulation of the coupling. (Reproduced with permission from Di Paolo et al., 2018.)

relational intentionalities, a tension that is ongoingly transformed and regulated, but never entirely absent. This double normativity is clearly shown in cases where the interactive autonomy generates sustained relational patterns regardless of the individual intentions. For instance, systemic phenomena such as the aggressor–victim–rescuer dramatic triangle (Karpman, 1968) manifest the autonomy of relational patterns. It is important to notice that the primordial tension does not always imply a discord between individual participants, but rather, it manifests the sensitivity of individual sense-making processes to being affected by relational patterns. This explains how therapeutic relationships have potential for transformation and healing. Moreover, the constitutive processes of the autonomous agent are precarious in the sense that these processes would dissipate in the absence of enabling conditions of the whole network that makes up the agent (Di Paolo & Thompson, 2014). In social cognition, then, the relational domain is also precarious. That is to say, the relational autonomy must be sustained by the activity of individuals even if it cannot entirely be under their control (De Jaegher, Peräkylä, & Stevanovic, 2016). As a consequence, there is a mutual regulation, as well as a tension, between the relational and the individual domains.

The concept of participatory sense-making has been used in a wide range of interactive situations, for example, psychiatry (de Haan, 2020), autism (De Jaegher, 2013), narrative and story-telling (Popova, 2019), joint music and dance experiences (Hermans, 2019; Ravn, 2016; Schiavio & De Jaegher, 2017), and sport psychology (Araújo & Davids, 2016). It helps explain, in these varied contexts, how meaning is co-constructed and continuously negotiated in interaction. This pervasive phenomenon occurs in every social situation and is particularly salient in therapeutic encounters (García, 2021), where the course of the relational dynamics (in the sense of alliance building, ruptures, enactments, and change moments; Boston Change Process Study Group, 2013) marks significant events in the therapeutic process.

In asynchronous social interactions, such as e-mail communication or discussion threads on social media, the general attenuation of immediate shared rhythms and other intercorporeal processes can impair the co-creation of autonomous relational patterns, as Maiese (2013) suggests, for instance, in assessing transformative learning in online education, or in health technological services (Håland & Melby, 2015). However, these intercorporeal processes are very much present in synchronous interactions such as video calls and phone conversations used in psychotherapy online encounters. As we have said, we must move away from the idea that technology simply impoverishes habitual forms of interaction towards the idea that each technology affords specific modulations and interactive regulations (Arminen, Licoppe, & Spagnolli, 2016).

Methodology

Motivated by the question of whether online therapy fits within the enactive perspective on intercorporeality, we study how intercorporeal patterns change in the switch to the online modality. For doing so, we adopt a phenomenological stance (Galbusera & Fellin, 2014) to assess the experience of participants at the pre-reflective and implicit level. We use interpretative phenomenological analysis (Smith, Flowers, & Larkin, 2009), a qualitative method that combines phenomenology and hermeneutics fostering a dialogue between participants' first person experience and enactive theory (Larkin, Eatough, & Osborn, 2011; Stilwell & Harman, 2021).

Design

The lived experiences gleaned from the interviews are used as triggers for theoretical reflection. It is clear that these experiences are sometimes incommensurable, so we make no claim about their generality. We do, however, attempt to extricate in some detail the possible underlying factors that affect these experiences and provide interpretations from the perspective of embodied and situated intersubjectivity. Since the study focuses on relational, intersubjective phenomena, we applied a multiple perspective design (Larkin, Shaw, & Flowers, 2019) by combining both therapists and patients' perspectives. This two-role focus is combined with a multiplicity of therapeutic schools in order to have a multiperspectival view on the phenomena.

Recruitment and participants

Between 15 March and 1 June 2020, we have interviewed 4 practitioners and 3 patients (one was excluded due to technical problems during the interview) [see Table 1]. It is worth mentioning that patients are underrepresented in our data. Two pairs participate in the same therapist–patient relation (Manuel/Martin and Julio/Javier; all names are fictitious), but we do not analyse the particularities of their relationship. The therapists are all experienced and belong to different schools. There was no specific filtering by diagnosis or population. All participants started their therapeutic process in the face-to-face modality and continued their sessions via video call. Participants were recruited via email with the collaboration of the Federation of Spanish Psychotherapy Associations (FEAP). The interviewees have all given their consent to participate, and the study was carried out under the approval of the ethics committee of the University of the Basque Country (M10_2018_184).

Data collection

Interviews were semi-structured with the aim of identifying therapeutically relevant changes undergone due to the switch to the online modality. Unlike usual IPA interviews, due to the pandemic restrictions, we had to conduct the interviews over the telephone. A recorded research diary was kept to reflect on personal feelings in each interview. No specific impediments to the communication of personal experiences were noted due to the use of telephone communication. The interviews contained 22 questions gathered into 4 topics: spatiality, temporality, embodiment, and relationship (duration approximately 1 hr). A list of questions can be found in Appendix S1. Quoted passages have been translated by the authors (two of them native Spanish speakers) with discussion of nuances in meaning and sensitive expressions. Transcriptions of the interviews (in the original Spanish) are available by request.

Data analysis

The analysis was performed using the interpretative phenomenological approach (Smith et al., 2009). We followed a three-step multiple perspective design (Larkin et al., 2019). In the phenomenological step, data are analysed idiographically by codifying and commenting each interview separately. We analysed individual perspectives and identified each person's main thematic categories. We used a computer-assisted qualitative data analysis software (Atlas.ti) for codification and categorization. In the second comparative step, we identified the synthesis, integration, and/or resonance

Table 1. Table of participants

Therapist	Gender/age	Type of therapy	Modalities	Prior experience with online therapy
Julio	Male/middle-age	Relational Psychoanalyst (RT)	Video call Telephone	No
Martin	Male/middle-age	Relational Psychoanalyst (RT)	Video call	No
Clara	Female/middle-age	Gestalt Therapist (GT)	Video call	Yes, she has had new online patients
Monica	Female/middle-age	Cognitive–Behavioral Therapist (CBT)	Video call	Yes, she uses online supervision
Patient	Gender/age	Type of therapy received	Modalities	Prior experience with online therapy
Manuel	Male/middle-age	Relational psychoanalysis (P)	Video call	No
Javier	Male/middle-age	Relational psychoanalysis (P)	Video call	No

between themes keeping a two-related-role (therapist-patient) distinction. Some of the themes extracted (those related with the COVID-19 effect on therapy and personal circumstances) were not included in the analysis. In the third hermeneutic step, we interpreted the themes attending to the concepts of intercorporeality and the primordial tension of participatory sense-making, advancing possible enactive explanations of the lived experience of participants. The analysis, thus, is not assumed to be theory-free, but it shows our reflexive engagement in the co-construction of meaning.

Reflexivity

The first author performed the thematic analysis, and the second author revised it and translated the quotes in a separate phase. As reliability control and check of the analytic process, we use an ‘inter-rater reliability’ (Brocki & Wearden, 2006) procedure where authors EG and EDP agreed on the interpretation of the data and on the resulting thematic categories. There was also a final reading of the data to ponder the level of interpretation and distance from interviewed experience. Descriptive data about the respondents are included, and the enactive perspective of the researcher is acknowledged and highlighted.

Results

This section presents the four superordinate themes and the sub-themes that emerged from the analysis: Communication (Interferences, Management of Silences), Embodied Interaction (Corporeality, Visual Contact, Self-image, Distance), Space/Time (Transparency, Separation, Transition), and Relationship (Structure, Styles). A full table of results with selected quotes can be found in Appendix S2.

The general impression about the switch to online therapy was quite positive for both therapists and patients. Participants stress the importance of having conducted previous sessions in a face-to-face setting in order to establish a strong therapeutic alliance. ‘The therapeutic alliance can withstand this [switch] and more’ (Julio, RT). Having started treatment face-to-face, the therapeutic dyad needed to adapt to a new form of interaction. Due to such adaptations, online sessions are sometimes regarded as a ‘bracket’, as transitory states, or as ‘a little break’ (Martin, RT). However, some participants report that after an adaptation period, they managed to overcome initial concerns and prejudices, carrying the therapeutic process forward. Thus, the results presented here correspond to this adaptive process and cannot be generalized to long-standing processes or to therapeutic processes that started in an online setting.

Communication

Both patients and therapists reported a loss of interactive flow and spontaneity in their interactions.

The fluency [in interaction] might be slower. (Javier, P)

[The interaction] is getting a bit solidified. (Martin, RT)

However, some therapists show an increase in their verbal and non-verbal activity in order to compensate for such loss of the interactive flow.

I have found myself being a bit more controlling, telling them [the patients] “this and that”. Like giving more direction in case there was a loss of attention in them or a bit more apathy due to the lack of physical presence. (Monica, CBT)

Some participants report communicative interferences produced by the signal latency of the video call as an important factor for the loss of the interactive flow.

That small delay that we, you and I, are having, these microseconds. Who’s going to say something? And then you interrupt yourself, “no, you go first”. All this breaks the spontaneity that is, yeah . . . basic, necessary, indispensable for a therapy to carry on. (Martin, RT)

According to some interviewees, changes in the management of silences are more salient in video call sessions than in telephone sessions. The reason is that the intrinsic latency that can sometimes take place in video calls can make ‘you interpret as silence something that isn’t silence’ (Julio, RT).

Therapists, in particular, highlight the technical role played by silences in the therapeutic process. Silences are more difficult to sustain and work through in the online modality.

Physical space facilitates and normalizes silences that can be more reflective silences, more resisting, disquieting, or more felt. In the videoconference, having the therapist’s gaze or the patient’s gaze fixed, practically locked on you, those silences are more difficult. (Julio, RT)

Embodied interaction

All participants agree that the image on the screen focuses exclusively on the face, setting aside other parts of the body. This results in a loss of awareness of the whole body, posture, and potential misperceptions of hand gestures and other movements.

It’s true that without a spatial reference, movements on the screen sometimes seem more pronounced than they really are. (Javier, P)

In online therapy I only see them from shoulders up. (Monica, CBT)

The screen does not modify only the perception of the other, but also their own posture and movements in front of the screen, and the embodied interaction between them.

The camera demands stillness. (Julio, RT)

I myself am sitting down here on the chair in a way I’ve never sat during therapy. (Martin, RT)

I think that the synchrony between patient and therapist, in a bodily sense, can happen more physically in face-to-face presence. (Monica, CBT)

‘You cross your legs, you lean backwards and you can see the other person moving. Normally it is more like a dance. Here, I think it doesn’t happen, because you lose the lower body.’ ‘You are more rigid during the session.’ (Martin, RT)

The relative distance between therapists and patients in the online setting is felt as closer than in a face-to-face interaction.

I see them closer, visually, the plane of the face is closer than if I was sitting in front of them. (Javier, P)

One of the main differences in the online setting is the lack of mutual visual contact. For most participants, direct visual contact is not possible:

Each one is looking at the screen, not at the camera. And if we looked at the camera we wouldn't make visual contact either. It is really impossible. (Manuel, P)

I think that if we had a very direct gaze across the screen—imagine it was the same as a face-to-face gaze—I think it would be very intimidating. (Clara, GT)

For Clara (GT) and Monica (CBT), however, even if there is no direct eye contact, they still perceive the interaction of the eye movements in online settings and use different clues to adapt.

Yes, I think so, there is such contact, more or less the same. . . that visual coming and going, stop looking, and reconnect back; I think it is there. (Monica, CBT)

I realize that [eye contact] is replaced by another type of gaze. (Clara, GT)

Regarding gaze behavior, Julio (RT) highlights the change in introspective and emotionally intense moments:

[In face-to-face sessions,] I don't remain looking at the person. I lower my gaze or look elsewhere. Not so much disconnecting myself, but allowing them to be as they are for the time they need, as if removing myself from the scene somewhat. (Julio, RT)

He continues:

When I'm here [in the video call], I don't do this. I don't do it because I get the impression that the patient will think I'm disengaging. If I stop looking at the camera, then I stop looking at them. (Julio, RT)

In this vein, he reports:

they [the patients] feel more under observation than accompanied (Julio, RT)

Another important aspect of the online setting is the possibility of seeing the self-image on the screen. In general, this is seen by both patients and therapists as potentially disrupting their attention from the therapeutic interaction, and changing the awareness of their own embodiment.

Yes, it's the strangest sensation, because you stop sensing yourself to look at yourself. (Martin, RT)

If it is there [the self-image], I sometimes look at it and I move my attention away from the relation with the patient. (Clara, GT)

However, we find differences in how both patients and therapists use the self-image on the screen. Self-observation tendencies of the patient can also contribute to the interactive dynamics by providing relevant information to the therapist. The relationship of the

patient with their own image and their self-observation patterns are a manifestation of self-regulation. This information is perceived by the therapist either reflective or pre-reflectively and they can respond accordingly:

It gives you clues about the degree of emotional inhibition or how patients regulate their narcissism at that moment . . . or their experience of embarrassment. (Julio, RT)

In this regard, a patient reports how seeing his self-image on the screen elicits a process of self-reflection and self-esteem:

[It helps me] tolerate my own image and my own presence in different situations. (Manuel, P)

On the therapist's side, self-observation is more related with the aim of guiding the interaction by providing adequate conditions for communication (lighting, noise, focus, etc.) and by controlling one's own facial and bodily expressions.

Especially if the emotions are uncomfortable, serious, or profound, I've found myself looking at my image to see if I was wearing the right expression, one that's fitting or congruent with the emotional charge being communicated. (Julio, RT)

I remove it [the self-image] or leave it on depending on the attention level I want to have. It is also a way of establishing distance, or not. (Clara, GT)

Space/Time

Interviewees remark on the changes in the space where patients and therapists are located. All therapists agree that the information provided by the space surrounding the patients affects their interventions in the online modality.

It gives you direct data about the person, about the place they inhabit. (Julio, RT)

It's like when a patient speaks about aspects of themselves, even though you're perceiving other aspects they don't talk about. (Clara, GT)

Yet they feel that this [the consultation room] is a place where they can be safe. And they feel safe because, among other things, this place is not "my place" but the therapist's place. In the therapist's room, the therapist directs, the therapist receives me, the therapist listens to me, questions me, confronts me, reaffirms me, the therapist supports me. It is the therapist's space. In such a place I feel safely welcome. This is a basic experience. This is lost in online sessions because the patient is in their place and you in yours, the consultation room. It is a physical difference, you know? And this makes patients not feel at ease in the same way. (Julio, RT)

Both patients and therapists comment on the relevance of having a transition process from everyday life settings to therapy sessions and back in order to prepare internally for the session and to assimilate the experience.

[In the therapy room you] leave all the shit there and come back feeling renewed. But this more physical process, you don't have it so much when you are at home. (Javier, P)

The immediacy of the online format does not allow for such extended transitions between settings. In compensation, both therapists and patients report having adopted rituals for keeping both spaces separated.

I wear different hats in the same room depending on the situation [metaphorically]. (Manuel, P)
As a therapist, I also have my rituals for getting ready, moving there, taking my time [. . .] I get ready to be a therapist. (Clara, GT)

Relationship

Participants report that the therapeutic relationship does not change significantly as a result of the switch to the online format insofar as the therapeutic alliance had already been built face-to-face. However, Martin (RT) reports an interesting change at the level of the structure of the relationship.

A more pronounced horizontality [in the relation], because horizontality is enforced [...] I think that new fields for horizontality are opened, because it makes us, therapists, more open. (Martin, RT)

This horizontality (i.e., a more symmetrical interaction where the separation between roles becomes less sharp) is a result of being in similar situations, both with similar devices and each in their own place. Indeed, not having the possibility of modifying the physical arrangements of spaces and intimacy represents a relevant change in the usual relational asymmetry between therapists and patients.

All of these changes also affect the intervention style of therapists, for example, a confrontational intervention that may challenge a patient's attitudes.

Perhaps in the face-to-face format if there's a confrontation that, say, puts the continuation of the therapy in doubt, I can take that risk more easily. Here [in the online format] I'm not sure how to take that risk. (Clara, GT)

Discussion

From an enactive perspective, we define social interactions as encounters between participants where their individual autonomies are not curtailed by the encounter and, in addition, the relational interactive patterns acquire a dynamic autonomy of their own (De Jaegher, Di Paolo, & Gallagher, 2010). In this way, the primordial tension between relational and individual autonomies has its manifestation in the modulation of interactive patterns that are sustained through reflective, pre-reflective, and even non-intentional embodied processes (Di Paolo et al., 2018). In this regard, participants report how a switch from a habitual face-to-face modality of encounter to a different, online one systematically changes aspects of intercorporeality, potentially displacing non-intentional and pre-reflective patterns onto a more reflective register.

Communication

As therapists report in the interviews, moments of silence can be clinically meaningful in psychotherapy sessions. Silence may indicate introspection, emotional connection, restructuring of behavioral patterns, beliefs and attitudes, etc. (Lane, Koetting, & Bishop, 2002; Weisman, 1955). They are particularly relevant to understanding therapeutic micro-changes. In online sessions, some participants refer to the difficulty of sustaining moments

of silence. Since the intercorporeal possibilities are reduced, participants tend to compensate by increasing verbal and nonverbal behaviors.

The difficulty of sustaining silences by therapists and patients can indicate two things. At the individual level, the lack of silences could indicate some emotional inhibition in the patients. At the interactive level, the overuse of linguistic inputs can function as a compensatory mechanism for the diminished intercorporeal cues that help sustain the interaction. Bodily resources such as orientation, joint attention, posture, gaze, and even subtler aspects such as breathing patterns work as intercorporeal processes that contribute to keep the interaction going. When the spectrum of these resources is reduced, there is an attempt to sustain the interaction by increasing speech, permanent attention, fixed gaze, and postural rigidity, as ways of reaffirming one's presence and attention to the other.

These compensations can be seen as manifestation of the primordial tension between the individual and the interactive autonomies of participatory sense-making. They are felt as demands on the participants' resources and strains on the lived experience of interacting. The management of silences modulates both the individual and the relational regulatory loops, reflecting and modulating the intertwinement between individual and interactive processes.

Embodied interaction

The uncertainty about what a silence might mean hinders the enactment of introspective silences. The difference between video call and telephone sessions in this regard reveals an apparent paradox. One might expect intercorporeal processes to be easier in video calls than on the telephone due to the addition of the visual channel (Ball, McLaren, Summerfield, Lipsedge, & Watson, 1995). However, in video calls, we find a saturated visual channel, that is, a visual channel that has fewer degrees of freedom for interactive regulation. Thus, it is common to find a therapist with static attention, the gaze fixed on the screen, and visual interferences such as hands moving in and out of the screen without a clearly perceptible trajectory.

The example of Julio (RT) modifying his gaze behavior to regulate emotionally intense moments illustrates how intercorporeal processes, in this case gaze direction, must become more regimented in order to sustain the online interaction, and lose the flexibility needed to succeed in their regulatory function, supporting the saturation of the visual channel. Indeed, in face-to-face interactions the shared space allows for joint attention to a third object, a behavior that coordinates and regulates the intentionalities of the interactors and contributes to alliance building (Roth, 2014). This possibility is hindered (practically removed) in online settings. A similar rigidity can be found in facial expressions and bodily posture too.

Participants highlight the difficulty in achieving mutual eye contact as another process that contributes to the saturation of the visual channel. In Western culture, eye contact in face-to-face encounters activates physiological autonomic responses and generates a synergy between participants (Senju & Johnson, 2009). In dyadic conversations, eye contact increases presence in communication and sense of reality (Storbacka, 2020) and it favors the phenomenological experience of togetherness and mutual recognition (Koudenburg, Postmes, & Gordijn, 2013). Coordinated gaze behavior and visual contact serve to negotiate the intersubjective space.

Laboratory studies show that physiological responses such as autonomic arousal and facial movements are statistically equivalent in face-to-face and video-call conditions

(Gehrer, Duchowski, Jusyte, & Schöenberg, 2020; Hietanen, Peltola, & Hietanen, 2020; Prinsen & Alaerts, 2019). However, it is questionable whether these results are directly applicable to naturalistic/ecological contexts, where the variability of devices and parameters are manifold. Although parameters such as the distance from the camera, the visual angle or the placement of the camera can be fine-tuned to obtain a semi-realistic condition (Huggins, 2016), these parameters are in general highly variable in typical devices (smartphones, notebooks, etc.). In most cases, there is no possibility of strict eye contact; instead, there is a situation of oblique gazes. It is unclear whether this oblique gazing can generate the same synergies as proper visual contact. Indeed, even if something like normal eye contact were possible, since the relative apparent distance between faces on the screen tends to appear shorter than in face-to-face interactions, it can still be felt sometimes as an uncanny situation.

Social cognition is qualitatively different when interacting with someone from when just observing them (Froese & Gallagher, 2012; Hari, Henriksson, Malinen, & Parkkonen, 2015; Schilbach, 2016; Schilbach et al., 2013). As Martin (RT) reports, patients feel more under observation than accompanied. Patterns of observation and interaction can change in online settings, favoring more reflective and observational forms of social cognition. Indeed, one of the main interfering factors mentioned by interviewees is the possibility of seeing one's own image at the margin of the screen. Studies report that this can elicit negative affective reactions such as shame, anger, longing, dislike, and control (Storbacka, 2020; Wegge, 2006). Although most current applications give the possibility of modifying or removing the self-image, the mere possibility of self-observation can modify the proprioceptive attention in therapeutic processes.

This shift in proprioceptive attention can be explained by the phenomenological distinction between two modalities of body consciousness: body-schema and body-image (Gallagher & Zahavi, 2012). Body-schematic processes are those in which the body is perceived in a pre-reflective and unmediated way and includes proprioception, movement and posture regulation, and sensorimotor regulation. Body-image, in contrast, is the way our body presents itself in reflective consciousness. This mode of bodily consciousness is activated when we look at ourselves in the mirror, we visualize body parts, and so on. Generally, body-schematic processes, such as motor control and sensorimotor abilities or habits operate better when the object of our reflective intentional state is other than our own body.

In face-to-face interaction, the coupling between the sensorimotor systems of patient and therapist typically functions in a body-schematic way, leading to synchronization of physiological processes (breathing, heartbeat) and coordination of movements (Koole & Tschacher, 2016; Palumbo et al., 2017). This dyadic sensorimotor coordination loop sets the basis for participatory sense-making and the emergence of interactive patterns. It is reasonable, then, to expect that the perception of one's own image and the saturation of the visual channel can elicit the activation of body-image experiences to the detriment of the fluidity of body-schematic processes. Indeed, the participant's sense-making is modulated through a loop that adds an additional self-reflection process, mediated by the self-image that provides information on how one may be seen by others. This shift in awareness may generate interferences between patients and therapists at the intercorporeal level. This is an example of how inner and relational processes are reciprocally affected through the digital medium (Beebe & Lachmann, 1998).

Space/time

A shared physical space enables and demands a wide range of intercorporeal activity, from co-regulating interpersonal distance and bodily stance to the possibility of physical contact. Smells, sounds, and shared objects also contribute to regulating interpersonal stance and to the overall atmosphere of the encounter. Each of the environments discussed here is a behavior setting: a spatially and temporally bounded ecological unit that strongly constrains the action that takes place in it by offering certain possibilities for action and perception, and affording certain behaviors while inhibiting others (Barker, 1968; Schoggen, 1989). Indeed, the space from where a patient connects reveals information that is unavailable in the consultation room. This information, in turn, affects the patient–therapist interaction and the construction of shared meanings and might also be incorporated into the therapeutic process. Monica (CBT), for instance, took the advantage of a patient being in their home environment to incorporate the patient’s family to the sessions. Clara (GT), instead, uses these environmental cues to highlight incongruencies between a patient’s narrative and their environment. Behavior settings establish a certain normativity on spaces by both physical arrangements, meanings, and socially constrained behavior (Rietveld & Kiverstein, 2014). In online settings, three aspects are modified:

1. At the *behavioral level*, the mediated distance between therapist and patient can make the relationship more vulnerable. The risk of the alliance breaking down in online therapy is manifested in the difficulty therapists can face at the moment of showing a more confrontational attitude. Confrontational behaviors are generally easier to sustain in face-to-face interactions due to the availability of intercorporeal resources and the shared physical setting. This means that the therapeutic style of the therapist can sometimes be compromised in online settings, changing the relational patterns in order to sustain the interaction.
2. Regarding the *meanings of space*, interviewees refer to the symbolic significance of the therapeutic space in the imagery of the process. The consultation room is a well-guarded space of confidentiality and safety where the patient can find refuge, feel comfortable and open. However, in online therapy, the responsibility of sustaining the intimacy and safety of the space falls on the patient. Thus, the therapist’s room, as the place of shelter, disappears.
3. With respect to *physical arrangements*, the impossibility of the therapist to exert control over the physical space and framing of the session (exit mechanisms, intimacy, safety) also displaces the responsibility for the therapeutic framework towards the patient. This movement re-structures the therapeutic relationship and can generate an imbalance in the habitual relational asymmetry. The therapeutic relationship is thus levelled in a particular way. In face-to-face settings, the therapeutic framework entails a structural asymmetry between patient and therapist regarding ethical issues, responsibility, and self-disclosure. The online format, however, favors a certain horizontality (as noticed by Martin, RT) insofar as the patient acquires more control over the therapeutic encounter. In online settings, therapists may struggle with guaranteeing a safe and intimate space for their clients.

At the level of temporality, the immediacy of online communication generates a sharp transition of entry into and exit from the session. Both the process of preparation before and the process of assimilation after the session tend to disappear. These moments are highly influential because therapeutic processes are not limited to what happens within

sessions, but also include expectations, projections, elaborations, and assimilation processes that play a significant role. In this regard, some participants refer to the use of compensatory transition rituals that trigger a symbolic space shift in online settings.

Furthermore, the immediacy of online applications modifies the significance of the therapeutic space, bringing it close to other online interactions such as conversations with family and friends, work meetings, and so on. As a consequence, the medium moves the therapist to the common place, a space where the therapeutic significance of the process can be diminished.

Conclusion

In this qualitative study, we have applied the enactive theory as an interpretative conceptual framework to understand participants' experience of the transition from face-to-face to online therapy. The interviews provide diverse evidence of embodied mechanisms that participants employ to compensate for changes in intercorporeal cues in online settings and so sustain the therapeutic interaction. Video calls afford certain transparency, continuity, and immediacy between therapy and everyday life which, in turn, may modify the therapeutic relationship in terms of its structural asymmetry, its fragility, and the interactive patterns of the dyad. Intercorporeal processes such as the management of silences, gaze behavior, and eye contact as well as the temporality and spatiality of behavior settings undergo significant changes. Reflectively or not, some of these changes indicate attempts to compensate for differences with the face-to-face situation. Compensatory and adaptive behavior supports the enactive view of social cognition as being at least partly realized through the interaction process (De Jaegher et al., 2010). Thus, these adaptations can be seen as manifestations of the primordial tension of participatory sense-making, that is, the coordination of individual and interactive processes and norms in social encounters. Attending to this tension between the relational and individual domains and how the interactive and self-regulatory mechanisms are altered may be useful to therapists facing a transition to online professional activity and for the development of future guidelines (Kraus, Stricker, & Speyer, 2004; Turvey et al., 2013).

Acknowledgements

The authors acknowledge support from the IAS-Research Group funding IT-1228-19 from the Basque Government and from the Spanish Ministry of Science and Innovation with project Outonomy PID2019-104576GB-I00.

Conflicts of interest

The authors declare no conflict of interest.

Author contribution

Enara García: Conceptualization (equal); Data curation (equal); Investigation (equal); Methodology (equal); Writing – original draft (equal); Writing – review & editing (equal).
Ezequiel A. Di Paolo: Conceptualization (equal); Supervision (equal); Visualization

(equal); Writing – original draft (equal); Writing – review & editing (equal). **Hanne De Jaegher**: Conceptualization (equal); Supervision (equal).

Data availability statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

References

- Abney, D. H., Paxton, A., Dale, R., & Kello, C. T. (2014). Complexity matching in dyadic conversation. *Journal of Experimental Psychology: General*, *143*(6), 2304–2315. <https://doi.org/10.1037/xge0000021>
- Araújo, D., & Davids, K. (2016). Team synergies in sport: Theory and measures. *Frontiers in Psychology*, *7*, 1449. <https://doi.org/10.3389/fpsyg.2016.01449>
- Arminen, I., Licoppe, C., & Spagnolli, A. (2016). Respecifying mediated interaction. *Research on Language and Social Interaction*, *49*(4), 290–309. <https://doi.org/10.1080/08351813.2016.1234614>
- Backhaus, A., Agha, Z., Maglione, M. L., Repp, A., Ross, B., Zuest, D., ... Thorp, S. R. (2012). Videoconferencing psychotherapy: A systematic review. *Psychological Services*, *9*(2), 111–131. <https://doi.org/10.1037/a0027924>
- Ball, C. J., McLaren, P. M., Summerfield, A. B., Lipsedge, M. S., & Watson, J. P. (1995). A comparison of communication modes in adult psychiatry. *Journal of Telemedicine and Telecare*, *1*(1), 22–26. <https://doi.org/10.1177/1357633x9500100105>
- Barker, R. G. (1968). *Ecological psychology: Concepts and methods for studying the environment of human behavior*. Stanford, CA: Stanford University Press.
- Beebe, B., & Lachmann, F. M. (1998). Co-constructing inner and relational processes: Self- and mutual regulation in infant research and adult treatment. *Psychoanalytic Psychology*, *15*(4), 480–516. <https://doi.org/10.1037/0736-9735.15.4.480>
- Bizzari, V. (2020). Commentary on “Time and embodiment in the process of psychotherapy: A dynamical systems perspective”. *Time and Body: Phenomenological and Psychopathological Approaches*, 117–122. <https://doi.org/10.1017/9781108776660.010>
- Boston Change Process Study Group. (2013). Enactment and the emergence of new relational organization. *Journal of the American Psychoanalytic Association*, *61*, 727–749. <https://doi.org/10.1177/0003065113496636>
- Brocki, J. M., & Wearden, A. J. (2006). A critical evaluation of the use of interpretative phenomenological analysis (IPA) in health psychology. *Psychology and Health*, *21*(1), 87–108. <https://doi.org/10.1080/14768320500230185>
- Cataldo, F., Chang, S., Mendoza, A., & Buchanan, G. (2021). A perspective on client-psychologist relationships in videoconferencing psychotherapy: Literature review. *JMIR Mental Health*, *8*(2), e19004. <https://doi.org/10.2196/preprints.19004>
- Clark, A., & Chalmers, D. (1998). The extended mind. *Analysis*, *58*(1), 7–19.
- Dale, R., Fusaroli, R., Duran, N. D., & Richardson, D. C. (2013). The self-organization of human interaction. *Psychology of Learning and Motivation*, *59*, 43–95. <https://doi.org/10.1016/b978-0-12-407187-2.00002-2>
- de Haan, S. (2020). *Enactive psychiatry*. Cambridge, UK: Cambridge University Press. <https://doi.org/10.1017/9781108685214>
- De Jaegher, H. (2013). Embodiment and sense-making in autism. *Frontiers in Integrative Neuroscience*, *7*, 15.
- De Jaegher, H., & Di Paolo, E. (2007). Participatory sense-making. *Phenomenology and the Cognitive Sciences*, *6*, 485–507. <https://doi.org/10.1007/s11097-007-9076-9>

- De Jaegher, H., Di Paolo, E., & Gallagher, S. (2010). Can social interaction constitute social cognition? *Trends in Cognitive Sciences*, *14*, 441–447.
- De Jaegher, H., Peräkylä, A., & Stevanovic, M. (2016). The co-creation of meaningful action: Bridging enaction and interactional sociology. *Philosophical Transactions of the Royal Society B: Biological Sciences*, *371*, 20150378. <https://doi.org/10.1098/rstb.2015.0378>
- Di Paolo, E., Buhrmann, T., & Barandiaran, X. (2017). *Sensorimotor life: An enactive proposal*. Oxford, UK: Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780198786849.001.0001>
- Di Paolo, E. A., Cuffari, E. C., & De Jaegher, H. (2018). *Linguistic bodies: The continuity between life and language*. Cambridge, MA: MIT Press. <https://doi.org/10.7551/mitpress/11244.001.0001>
- Di Paolo, E. A., & Thompson, E. (2014). The enactive approach. In L. Shapiro (Ed.), *The Routledge handbook of embodied cognition* (pp. 68–78). London, UK: Routledge. <https://doi.org/10.31231/osf.io/3vraf>
- Froese, T., & Gallagher, S. (2012). Getting interaction theory (IT) together: Integrating developmental, phenomenological, enactive, and dynamical approaches to social interaction. *Interaction Studies*, *13*, 436–468. <https://doi.org/10.1075/is.13.3.06fro>
- Fuchs, A., & Jirsa, V. K. (Eds.) (2008). *Coordination: Neural, behavioral and social dynamics*. Berlin, Germany: Springer. <https://doi.org/10.1007/978-3-540-74479-5>
- Fuchs, T., & De Jaegher, H. (2009). Enactive intersubjectivity: Participatory sense-making and mutual incorporation. *Phenomenology and the Cognitive Sciences*, *8*, 465–486. <https://doi.org/10.1007/s11097-009-9136-4>
- Furukawa, R., & Driessnack, M. (2013). Video-mediated communication to support distant family connectedness. *Clinical Nursing Research*, *22*(1), 82–94.
- Galbusera, L., & Fellin, L. (2014). The intersubjective endeavor of psychopathology research: Methodological reflections on a second-person perspective approach. *Frontiers in Psychology*, *5*, 1150. <https://doi.org/10.3389/fpsyg.2014.01150>
- Gallagher, S., & Zahavi, D. (2012). *The phenomenological mind* (2nd ed.). London, UK: Routledge. <https://doi.org/10.4324/9780203126752>
- García, E. (2021). Participatory sense making in therapeutic interventions. *Journal of Humanistic Psychology*, *1*, 21. <https://doi.org/10.1177/00221678211000210>
- García, E., & Di Paolo, E. A. (2018). Embodied coordination and psychotherapeutic outcome: Beyond direct mappings. *Frontiers in Psychology*, *9*, 1257. <https://doi.org/10.3389/fpsyg.2018.01257>
- Gehrer, N. A., Duchowski, A. T., Jusyte, A., & Schönenberg, M. (2020). Eye contact during live social interaction in incarcerated psychopathic offenders. *Personality Disorders: Theory, Research, and Treatment*, *11*(6), 431–439. <https://doi.org/10.1037/per0000400>
- Håland, E., & Melby, L. (2015). Negotiating technology-mediated interaction in health care. *Social Theory & Health*, *13*(1), 78–98. <https://doi.org/10.1057/sth.2014.18>
- Hari, R., Henriksson, L., Malinen, S., & Parkkonen, L. (2015). Centrality of social interaction in human brain function. *Neuron*, *88*(1), 181–193.
- Hauke, G. (Ed.) (2016). *European psychotherapy 2016/2017: Embodiment in psychotherapy* (Vol. 13). Norderstedt, Germany: Books on Demand.
- Hermans, C. (2019). Let's dance: Participatory sense-making in an eight-year-old boy with autism. *Journal of Dance Education*, *19*(1), 23–33. <https://doi.org/10.1080/15290824.2018.1422254>
- Hietanen, J. O., Peltola, M. J., & Hietanen, J. K. (2020). Psychophysiological responses to eye contact in a live interaction and in video call. *Psychophysiology*, *57*(6), e13587. <https://doi.org/10.1111/psyp.13587>
- Hilty, D. M., Luo, J. S., Morache, C., Marcelo, D. A., & Nesbitt, T. S. (2002). Telepsychiatry: An overview for psychiatrists. *CNS Drugs*, *16*, 527–548. <https://doi.org/10.2165/00023210-200216080-00003>
- Huggins, R. (2016, November 2). Making Eye Contact Over Video in Telemental Health Services. Retrieved from <https://personcenteredtech.com/2016/11/02/making-eye-contact-over-video-in-telemental-health-services/>

- Hutchins, E. (1995). *Cognition in the wild*. Cambridge, MA: MIT Press. <https://doi.org/10.7551/mitpress/1881.001.0001>
- IJsselstein, W., van Baren, J., & van Lanen, F. (2003). Staying in touch: Social presence and connectedness through synchronous and asynchronous communication media. *Human-Computer Interaction: Theory and Practice (Part II)*, 2(924), e928.
- Karpman, S. (1968). Fairy tales and script drama analysis. *Transactional Analysis Bulletin*, 7(26), 39–43.
- Kendon, A. (1990). *Conducting interaction: Patterns of behavior in focused encounters*. Cambridge, UK: Cambridge University Press. <https://doi.org/10.2307/2075490>
- Kleinbub, J. R. (2017). State of the art of interpersonal physiology in psychotherapy: A systematic review. *Frontiers in Psychology*, 8, 2053. <https://doi.org/10.3389/fpsyg.2017.02053>
- Kocsis, B. J., & Yellowlees, P. (2018). Telepsychotherapy and the therapeutic relationship: Principles, advantages, and case examples. *Telemedicine Journal and E-Health*, 24(5), 329–334. <https://doi.org/10.1089/tmj.2017.0088>
- Koole, S. L., & Tschacher, W. (2016). Synchrony in psychotherapy: A review and an integrative framework for the therapeutic alliance. *Frontiers in Psychology*, 7, 862. <https://doi.org/10.3389/fpsyg.2016.00862>
- Koudenburg, N., Postmes, T., & Gordijn, E. H. (2013). Conversational flow promotes solidarity. *PLoS One*, 8(11), e78363. <https://doi.org/10.1371/journal.pone.0078363>
- Kraus, R., Stricker, G., & Speyer, C. (2004). *Online counseling: A handbook for mental health professionals*. Academic Press. <https://doi.org/10.1176/appi.ajp.162.3.638>
- Lane, R. C., Koetting, M. G., & Bishop, J. (2002). Silence as communication in psychodynamic psychotherapy. *Clinical Psychology Review*, 22, 1091–1104. [https://doi.org/10.1016/s0272-7358\(02\)00144-7](https://doi.org/10.1016/s0272-7358(02)00144-7)
- Larkin, M., Eatough, V., & Osborn, M. (2011). Interpretative phenomenological analysis and embodied, active, situated cognition. *Theory & Psychology*, 21, 318–337. <https://doi.org/10.1177/0959354310377544>
- Larkin, M., Shaw, R., & Flowers, P. (2019). Multiperspectival designs and processes in interpretative phenomenological analysis research. *Qualitative Research in Psychology*, 16(2), 182–198. <https://doi.org/10.1080/14780887.2018.1540655>
- Latour, B. (2005). *Reassembling the social: An introduction to actor-network-theory*. Oxford, UK: Oxford University Press. <https://doi.org/10.17323/1726-3247-2013-2-73-87>
- Lingely-Pottie, P., & McGrath, P. J. (2006). A therapeutic alliance can exist without face-to-face contact. *Journal of Telemedicine and Telecare*, 12, 396–399. <https://doi.org/10.1258/135763306779378690>
- Maiese, M. (2013). Embodied social cognition, participatory sense-making, and online learning. *Social Philosophy Today*, 29, 103–119. <https://doi.org/10.5840/socphiltoday201329111>
- Malafouris, L. (2013). *How things shape the mind*. Cambridge, MA: MIT Press. <https://doi.org/10.7551/mitpress/9476.001.0001>
- Merleau-Ponty, M. (2012). *Phenomenology of perception* (D. A. Landes, Trans.). London, UK: Routledge.
- Newen, A., De Bruin, L., & Gallagher, S. (Eds.) (2018). *The Oxford handbook of 4E cognition*. Oxford, UK: Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780198735410.001.0001>
- Newman, M. G., Szkodny, L. E., Llera, S. J., & Przeworski, A. (2011). A review of technology-assisted self-help and minimal contact therapies for anxiety and depression: Is human contact necessary for therapeutic efficacy? *Clinical Psychology Review*, 31(1), 89–103.
- Noë, A. (2004). *Action in perception*. Cambridge, MA: MIT Press.
- Norwood, C., Moghaddam, N. G., Malins, S., & Sabin-Farrell, R. (2018). Working alliance and outcome effectiveness in videoconferencing psychotherapy: A systematic review and noninferiority meta-analysis. *Clinical Psychology & Psychotherapy*, 25, 797–808. <https://doi.org/10.1002/cpp.2315>
- Palumbo, R. V., Marraccini, M. E., Weyandt, L. L., Wilder-Smith, O., McGee, H. A., Liu, S., & Goodwin, M. S. (2017). Interpersonal autonomic physiology: A systematic review of the literature.

- Personality and Social Psychology Review*, 21(2), 99–141. <https://doi.org/10.1177/1088868316628405>
- Popova, Y. B. (2019). Participatory sense-making in narrative experience. In R. Beach & D. Bloome (Eds.), *Language relations for transforming the literacy and language arts classroom* (pp. 153–171). New York, NY: Routledge. <https://doi.org/10.4324/9781351036580-8>
- Price, S., Roussos, G., Falcão, T. P., & Sheridan, J. G. (2009). Technology and embodiment: Relationships and implications for knowledge, creativity and communication. *Beyond Current Horizons*, 29, 1–22.
- Prinsen, J., & Alaerts, K. (2019). Eye contact enhances interpersonal motor resonance: Comparing video stimuli to a live two-person action context. *Social Cognitive and Affective Neuroscience*, 14, 967–976. <https://doi.org/10.1093/scan/nsz064>
- Ravn, S. (2016). Embodying interaction in Argentinean tango and sports dance. In T. F. DeFrantz & P. Rothfield (Eds.), *Choreography and corporeality: Relay in motion* (pp. 119–134). Palgrave Macmillan UK. https://doi.org/10.1057/978-1-137-54653-1_8
- Rietveld, E., & Kiverstein, J. (2014). A rich landscape of affordances. *Ecological Psychology*, 26, 325–352. <https://doi.org/10.1080/10407413.2014.958035>
- Rocco, E. (1998). Trust breaks down in electronic contexts but can be repaired by some initial face-to-face contact. *Proceedings of the SIGCHI conference on human factors in computing systems* (pp. 496–502). <https://doi.org/10.1145/274644>
- Roth, B. (2014). Mutual attention and joint gaze as developmental forerunners of the therapeutic alliance. *Psychoanalytic Review*, 101(6), 847–869. <https://doi.org/10.1521/prev.2014.101.6.847>
- Russell, G. I. (2018). *Screen relations: The limits of computer-mediated psychoanalysis and psychotherapy*. London, UK: Routledge. <https://doi.org/10.4324/9780429479762>
- Schiavio, A., & De Jaegher, H. (2017). Participatory sense-making in joint musical practices. In M. Lesaffre, P. J. Maes, & M. Leman (Eds.), *The Routledge companion to embodied music interaction* (pp. 31–39). New York and London, UK: Routledge. <https://doi.org/10.4324/9781315621364-4>
- Schilbach, L. (2016). Towards a second-person neuropsychiatry. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 371, 20150081. <https://doi.org/10.1098/rstb.2015.0081>
- Schilbach, L., Timmermans, B., Reddy, V., Costall, A., Bente, G., Schlicht, T., & Voegeley, K. (2013). A second-person neuroscience in interaction. *Behavioral and Brain Sciences*, 36, 441–462. <https://doi.org/10.1017/s0140525x12002452>
- Schoggen, P. (1989). *Behavior settings: A revision and extension of Roger G. Barker's ecological psychology*. Stanford, CA: Stanford University Press.
- Schuster, R., Topooco, N., Keller, A., Radvogin, E., & Laireiter, A.-R. (2020). Advantages and disadvantages of online and blended therapy: Replication and extension of findings on psychotherapists' appraisals. *Internet Interventions*, 21, 100326. <https://doi.org/10.1016/j.invent.2020.100326>
- Senju, A., & Johnson, M. H. (2009). The eye contact effect: Mechanisms and development. *Trends in Cognitive Sciences*, 13(3), 127–134. <https://doi.org/10.1016/j.tics.2008.11.009>
- Shaw, R. (2004). The embodied psychotherapist: An exploration of the therapists' somatic phenomena within the therapeutic encounter. *Psychotherapy Research: Journal of the Society for Psychotherapy Research*, 14(3), 271–288. <https://doi.org/10.1093/ptr/kph025>
- Siegel, D. J. (2019). The mind in psychotherapy: An interpersonal neurobiology framework for understanding and cultivating mental health. *Psychology and Psychotherapy*, 92(2), 224–237. <https://doi.org/10.1111/papt.12228>
- Simpson, S. (2009). Psychotherapy via videoconferencing: A review. *British Journal of Guidance & Counselling*, 37(3), 271–286. <https://doi.org/10.1080/03069880902957007>
- Simpson, S. G., & Reid, C. L. (2014). Therapeutic alliance in videoconferencing psychotherapy: A review. *The Australian Journal of Rural Health*, 22(6), 280–299. <https://doi.org/10.1111/ajr.12149>

- Smart, P. R. (2014). Embodiment, cognition and the world wide web. In L. Shapiro (Ed.), *The Routledge handbook of embodied cognition* (pp. 326–334). New York, NY: Routledge. <https://doi.org/10.4324/9781315775845.ch31>
- Smith, J. A., Flowers, P., & Larkin, M. (2009). *Interpretative phenomenological analysis: Theory, method and research*. London, UK: Sage.
- Stilwell, P., & Harman, K. (2021). Phenomenological research needs to be renewed: Time to integrate enactivism as a flexible resource. *International Journal of Qualitative Methods*, 20, 1–15. <https://doi.org/10.1177/1609406921995299>
- Stoll, J., Müller, J. A., & Trachsel, M. (2020). Ethical issues in online psychotherapy: A narrative review. *Frontiers in Psychiatry*, 10, 993. <https://doi.org/10.3389/fpsy.2019.00993>
- Storbacka, R. (2020). Evaluation of a prototype for eye contact in video communication [diva-portal.org]. Retrieved from <https://www.diva-portal.org/smash/record.jsf?pid=diva2:1438036>
- Suthers, D. D. (2006). Technology affordances for intersubjective meaning making: A research agenda for CSCL. *International Journal of Computer-Supported Collaborative Learning*, 1, 315–337. <https://doi.org/10.1007/s11412-006-9660-y>
- Thompson, E. (2007). *Mind in life: Biology, phenomenology, and the sciences of mind*. Cambridge, MA: Harvard University Press.
- Tschacher, W., & Pfammatter, M. (2016). Embodiment in psychotherapy—A necessary complement to the canon of common factors. *European Psychotherapy*, 13, 9–25.
- Turvey, C., Coleman, M., Dennison, O., Drude, K., Goldenson, M., Hirsch, P., . . . Bernard, J. (2013). ATA practice guidelines for video-based online mental health services. *Telemedicine Journal and E-Health*, 19, 722–730.
- Varela, F., Thompson, E., & Rosch, E. (1991). *The embodied mind*. Cambridge, MA: MIT Press. <https://doi.org/10.7551/mitpress/6730.001.0001>
- Wegge, J. (2006). Communication via videoconference: Emotional and cognitive consequences of affective personality dispositions, seeing one's own picture, and disturbing events. *Human-Computer Interaction*, 21(3), 273–318. https://doi.org/10.1207/s15327051hci2103_1
- Weisman, A. D. (1955). Silence and psychotherapy. *Psychiatry*, 18(3), 241–260. <https://doi.org/10.1080/00332747.1955.11023010>
- Wheeler, M. (2019). The reappearing tool: Transparency, smart technology, and the extended mind. *AI & Society*, 34(4), 857–866. <https://doi.org/10.1007/s00146-018-0824-x>

Received 15 October 2020

Supporting Information

The following supporting information may be found in the online edition of the article:

Appendix S1. List of questions of the interviews.

Appendix S2. Representative quotes from interviews according to theme.