Archives of Psychiatry and Psychotherapy, 2024; 2: 95–93

10.12740/APP/181582

Online and face-to-face therapy during Covid-19 pandemic – determinants of the therapeutic relationship

Joanna Furmańska, Emilia Rutkowska, Cristiana C. Marques, Maria João Martins, Håkan Lane, Johannes Meixner, Najam us Sahar

Abstract

The aim of the study: To assess how the therapeutic relationship is perceived by therapists both in online and face-to-face therapy during the Covid-19 pandemic and if the therapist's personal, professional, and psychological characteristics, as well as their experience of the COVID-19 pandemic influence their perception of the therapeutic relationship.

Material and Methods: Recruited 327 psychotherapists from four European countries: Sweden (Northern Europe), Poland (Eastern Europe), Portugal (Southern Europe) and Germany (Central Europe). Used original questionnaire and the Scale to Assess Therapeutic Relationship (STAR), the Fear of Contracting COVID-19 Scale (FCS Covid-19), the Pandemic Fatigue Scale (PFS), the Hospital Anxiety and Depression Scale (HADS), the Social Support Questionnaire (F-SozU K-14) and the Sense of Efficacy Test (SET).

Results: The therapeutic relationship is perceived as more effective and productive in face-to-face therapy, although therapists noticed more emotional difficulties in this form than in online therapy. The predictor of the assessment of the overall quality and strength of the therapeutic relationship in online therapy is the therapist's self-efficacy, whereas in face-to-face therapy are the therapist's depression, age and cognitive / behavioral approach.

Discussion: Variables related with therapist's personal, occupational, psychological characteristics, and their experience with COVID-19 pandemic are related to the perception of the therapeutic relationship and these relationships, although in different configurations, apply to both online and face-to-face therapy.

Conclusions: The obtained results broaden the scope of knowledge about the therapeutic relationship, and also encouraged therapists to reflect on the factors that are important for its assessment.

Joanna Furmańska[1], Emilia Rutkowska[1], Cristiana C. Marques[2], Maria João Martins[2,3], Håkan Lane[4], Johannes Meixner[4], Najam us Sahar[5,6]. [1]Department of Clinical Psychology and Psychoprophylaxis, Institute of Psychology, University of Szczecin, Poland; [2] Center for Research in Neuropsychology and Cognitive and Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, University of Coimbra, Coimbra, Portugal; [3] University of Coimbra Health Services, University of Coimbra, Coimbra, Portugal; Head of the Service: Dr. António Queirós; [4] Department of Psychiatry and Psychotherapy, Brandenburg Medical School, Immanuel Klinik Rüdersdorf, Rüdersdorf, Germany; [5] Behavioral Sciences Department Fatima Jinnah Women University, Rawalpindi, Pakistan; [6] School of Psychology Queen's University Belfast
Correspondence address: furmanska-joanna@wp.pl

therapeutic relationship; online therapy; face-to-face therapy; therapist characteristics; COVID-19 pandemic

INTRODUCTION

One of the key concepts related to mental health care is the therapeutic relationship, and the quality of this bond between the therapist and the patient is related to the course and results

of treatment and predicts therapeutic attachment [1,2].

Several factors have been found to contribute to the therapeutic relationship and they can be grouped in different ways such as therapist-related aspects, patient-related aspects, aspects related to sessions, among others. Therapist-related aspects include the therapist's qualities and experience, the availability of shared therapeutic decision-making [3], frequency and duration of sessions [4], therapists' ability to connect on a person-to-person level with the patient and accommodate and replace initial strong negative emotions [5]. Mixed results have been found regarding therapists' sociodemographic characteristics [6]. Clinical symptoms and insight have been pointed out regarding the patients' aspects. Patients' social and family support has also been referenced as influencing the therapeutic alliance [3].

Conventional face-to-face psychological treatments underwent a major transformation during the COVID-19 pandemic. Therapists and patients started to show more positive attitudes regarding online treatments and to accept this modality as a reasonable alternative to face-to-face therapy [7,8]. When comparing modalities, studies have shown that online psychotherapy has comparable treatment effectiveness to face-to-face psychotherapy [9,10].

Given the increasing prevalence of online modalities in psychotherapy, there has been discussion about the impact of the therapeutic relationship on online psychotherapy and whether it is similar to face-to-face psychotherapy. Previous studies have suggested that equally strong therapeutic relationships can occur in both face-to-face and online interventions [11,12]. Furthermore, it was recently found that the therapeutic relationship does not deteriorate when moving from face-to-face to online therapy [13]. Nonetheless, recent meta-analysis showed that strong therapeutic relationships are built up during online interventions, but these relationships are generally weaker than during face-to-face therapy [14].

Due to the fact that certain characteristics, experiences, and skills of the therapist can have an impact on the therapeutic relationship [15], here we examine how the therapeutic relationship is perceived by therapists in both face-to-face and online therapy. Therefore, in this study we would like to answer the research questions: 1. Is there any difference in the therapist's perception of the therapeutic relationship between online and face-to-face therapy? 2. Is there a relationship between the therapist's personal characteristics (gender and age), professional characteristics (therapeutic approach, patient age group, professional experience in both face-to-face and online therapy, etc.), and psychological characteristics (anxiety, depression, perceived social support, and sense of efficiency), or their experience with COVID-19 pandemic (fear of COVID-19, prevention of infection, and pandemic fatigue) and the perception of the therapeutic relationship, both in online and face-to-face therapy? 3. Which therapist characteristics and which pandemic experiences qualify as predictors for the perception of the therapeutic relationship in the respective modality of therapy?

MATERIAL AND METHODS

Procedure, Participants and Recruitment

An anonymous online study was conducted in four European countries, i.e. Sweden (Northern Europe), Poland (Eastern Europe), Germany (Central Europe) and Portugal (Southern Europe). People working as professional psychotherapists were recruited through advertisements on social platforms, via professional associations, by direct inquiries to publicly available email addresses or from the authors' circle. A reminder requesting participation in the study was sent a maximum of two times. After obtaining the informed consent of the study participants, the data was collected via an online survey in their native language. It was a questionnaire study. A online survery we created contained original questionaire and Scale to Assess Therapeutic Relationship, Fear of Contracting COVID-19 Scale Pandemic Fatigue Scale, Hospital Anxiety and Depression Scale, Social Support Questionnaire and Sense of Efficacy Test. Participants did not receive any financial compensation. The presented data are part of a larger project. Collection of data used in this article started in February 2022 and ended in March 2022.

MEASURES

Original Questionnaire (OQ): We have created a questionnaire collecting information on the functioning of a professional therapist, variables related to the experience of conducting online therapy, as well as variables related to work in the context of the risk of contracting COVID-19. The complete questionnaire consisted of 19 items. For the purposes of this study, we used the following data: 1) sociodemographic information, e.g. age, gender, country; 2) information related to the professional experience of the therapist, e.g. therapeutic approach, experience in working with different age groups, type of therapy; 3) information related to previous experience in online therapy – before the pandemic and work in the context of the risk of COVID-19 infection; and 4) information related to the psychological characteristics of the therapist, e.g. social support and self-efficacy.

Scale to Assess Therapeutic Relationship (STAR): The Scale to Assess Therapeutic Relationship (STAR) [2] is a widely used tool designed to evaluate the therapeutic relationship between a therapist and a patient. The STAR questionnaire, available in versions for both therapists and patients, consists of twelve statements that are rated on a five-point scale ranging from zero to four (never, rarely, sometimes, often, always). The possible scores range from 0 to 48, with a higher score indicating a better therapeutic relationship. The STAR includes subscales: Therapeutic Relationship General: This subscale evaluates the overall quality and strength of the therapeutic relationship. Positive Collaboration: It measures how well the therapist and patient collaborate by combining their efforts in therapy, which is reflected in a good rapport, a shared understanding and the experience of mutual openness and trust. Emotional Difficulties: This subscale refers to the therapeutic support in coping with emotional difficulties and reflects problems in the relationship such as the clinician's feeling of not being able to empathize with the patient and not being accepted by the patient. Positive Clinical Input: It measures how well the therapist provides specific clinical knowledge and skills in therapy and reflects to what extent clinicians encourage, regard, support, listen to and understand the patient [2].

Fear of Contracting COVID-19 Scale (FCS Covid-19): The COVID-19 Fear Scale [16] is based on respondents' indication of the level of fear and anxiety they experience about situations related to the infection. FCS Covid-19 consist of nine items which are rated on a five-point Likert scale from one (no fear) to five (very much fear). The higher the total score, the greater the fear of contracting COVID-19.

Pandemic Fatigue Scale (PFS): The PFS [17]] is a short, valid, and economic measure that may evaluates pandemic fatigue, which is understood to be a component of two separate but strongly correlated factors: information fatigue (IF) and behavioral fatigue (BF) both of which contribute to people's experience of overall pandemic fatigue. The PFS consists of six items which are rated on a seven-point Likert scale from one (strongly disagree) to seven (completely agree). The higher the overall PFS score, the greater the pandemic fatigue reported by therapists.

Hospital Anxiety and Depression Scale (HADS): The HADS [18] is a self-report scale with two subscales: anxiety (HADS–A) and depression (HADS–D). The HADS focuses on non-physical symptoms and describes more anhedonic symptoms of depression, while it does not contain items related to somatic symptoms of depression. The HADS consists of 14 items on a four-point Likert scale. Each question is scored between zero (no impairment) and three (severe impairment).

Social Support Questionnaire (F-SozU K-14): The F-SozU K-14 is a short version of the original Social Support Questionnaire [19,20]. The F-SozU K-14 as a one-dimensional version indicates the subjectively perceived social support, which is understood as the result of interactions between the individual and his/her environment, independently of the actual social support received. We only interpreted the total score because recent studies have revealed that the reliability of the short version's total score is essentially higher than that of the three dimensions (as the original questionnaire: emotional support, practical support and social integration). The questionnaire consists of 14 items rated on a five-point Likert scale from one (does not concern me at all) to five (it concerns me completely).

Sense of Efficacy Test (SET): The SET [21] focuses on the sense of self-efficacy as a variable of the

individual's personal resources, i.e. the characteristics of the individual constituting his belief in the effectiveness of the actions taken. Its total score reflects the therapist's general sense of self-efficacy. The Test consists of 17 items rated on a 4-point Likert scale (1-definitely not; 4 – definitely yes) and allows you to diagnose in general the sense of self-efficacy of the respondents.

STATISTICAL ANALYSIS

Statistical analysis for this study was conducted using the Statistica software, version 13. First, basic data describing the group are presented. For nominal data, frequencies and percentages are provided, while for quantitative data characterizing the group, means and standard deviations are presented. To examine potential differences in therapists' perception of the therapeutic relationship in online therapy and face-to-face therapy, a comparison of ratings was conducted. An independent t-test was used to compare ratings of the therapeutic relationship between online and face-to-face therapy collected from the same respondents. To identify variables that could be used as predictors of 1) therapists' perceptions of the therapeutic relationship in online therapy and 2) therapists' perceptions of the therapeutic relationship in face-to-face therapy, correlations (Spearman's rho for quantitative variables and point-biserial correlations for qualitative variables) were calculated with variables from the group of potential predictors. Finally, a combined regression analysis was performed to identify statistically significant predictors of 1) therapists' perceptions of the therapeutic relationship in online therapy and 2) therapists' perceptions of the therapeutic relationship in face-to-face therapy.

RESULTS

Descriptive characteristics of participants

The research sample consists of 327 psychotherapists (100%) from four European countries: Sweden (28.4%), Poland (27.4%), Portugal (24.1%) and Germany (20.1%). Among the surveyed psychotherapists, women dominate (77.7%), which is consistent with the fact that this profession is more often undertaken by women than by men [22]. Detailed characteristics of the study group are provided in Table 1.

Table 1. Sociodemographic descriptives.

Sociodemographic characteristics – therapist	
Country of practice	N (%)
Sweden	93 (28.35 %)
Poland	90 (27.44 %)
Germany	66 (20.12 %)
Portugal	78 (24.09 %)
Gender	N (%)
Female	254 (77.68 %)
Male	72 (22.01 %)
Non-binary	1 (0.31%)
Age (years)	M (SD); MIN-MAX
	47.24 (12.19); 23-80
Experience (years)	M (SD); MIN-MAX
	14.85 (10.03); 1-50
Education	N (%)
psychology	248 (75.61%)
pedagogy	18 (5.49%)
sociology	7 (2.13%)
medical education	34 (10.37%)
others	20 (6.4%)

School of psychotherapy	N (%)
comprehensive psychotherapy course (4-5 years)	59 (18 %)
completed 4-5 year psychotherapy course	100 (30.5 %)
psychotherapist certificate	168 (51.5 %)
Therapeutic approach	N (%)
cognitive-behavioral	111 (33.8%)
integrative	108 (32.9%)
psychodynamic and psychoanalytic	66 (20.2%)
systemic	20 (6.2%)
other approach	10 (3.1%)
existential and Gestalt	10 (3.1%)
Erickson therapy	2 (0.7%)
Basic characteristics – psychotherapist practice	
Practice location	N (%)
big city (>100000)	233 (71%)
small town (1000 – 100000)	89 (27.2%)
village (< 1000)	5 (1.8%)
Workplace	N (%)
only private practice	200 (61.2 %)
only public health service	26 (8.7 %)
private practice and public health service	101 (30.1 %)
Patient age group	N (%)
Children (0-15 years old)	70 (21.4 %)
Not working with children	257 (78.6%)
Adolescents (16-18 years old)	116 (35.5 %)
Not working with adolescents	211 (65.5%)
Adults (18+ years old)	313 (95.4 %)
Not working with adults	14 (4.6%)
Hours per week online (hours)	M (SD); MIN-MAX
	6.64 (8.25); 0-44
Hours per week total (hours)	M (SD); MIN-MAX
	21.98 (11.68); 4-55

Dependent variables

Comparisons of assessments of the therapeutic relationship in online and face-to-face therapy collected from the same psychotherapists are provided in Table 2.

Table 2. Therapeutic relationship in online and face-to-face psychotherapy in the perception of therapists measured by the STAR questionnaire.

	Face-to-Face		Online				
	M	SD	M	SD	t	df	p
Therapeutic Relationship (GS)	38.54	4.69	37.25	6.14	5.57	326	< .001***

Positive Collaboration (PC)	19.18	2.25	18.68	3.34	3.33	326	< .001***
Emotional Difficulties (ED)	9.06	3.28	8.55	3.19	5.54	326	< .001***
Positive Clinical Input (PCI)	10.33	1.24	10.01	1.73	3.87	326	< .001***

M = Mean, SD = Standard Deviation, N = 327

*** Significant at 0.001 level

The results indicate that the perception of the therapeutic relationship in face-to-face and online therapy is quite similar, however there are small but significant differences in all 3 dimensions and the total score. These results suggest that face-to-face therapy may be more effective in building a therapeutic relationship, promoting positive cooperation, and in producing positive clinical outcomes compared to online therapy. It is worth noting, however, that therapists may show greater emotional difficulties in face-to-face therapy, which may require additional support for therapists.

Predictive variables

In order to assess the role of psychosocial variables towards perception of relation in psychotherapy four factors (based on apparent similarity) were developed which grouped 13 features arbitrarily. This classification will provide a detailed analysis and clear presentation of psychosocial predictor scores that may be relevant to assessing the psychotherapeutic relationship in online and face-to-face therapy.

Table 3. Selected variables – grouped into factors – that are thought to influence therapists' perception of the therapeutic relationship – output model.

Factor 1	Factor 2	Factor 3	Factor 4
Personal Characteristics	Professional Characteristics	Psychological Characteristics	Pandemic-related Characteristics
Gender	Therapeutic approach	Therapist's anxiety (HADS-A) and depression (HADS-D)	Fear of COVID-19 (FCS)
Age	Experience in working with different age groups	Social support (FSozU)	Conviction about the sense of COVID-19 prevention (OQ)
	Type of therapy	Sense of efficacy (SET)	Pandemic fatigue (behavioral and informational) (PFS)
	Professional therapy experience		
	Pre-pandemic online therapy experience		

Table 4 shows the correlation between the personal characteristics of therapists (Factor 1) and their perception of relationships in online and face-to-face psychotherapy. We can see a small but statistically significant correlation between gender and the general therapeutic relationship in online psychotherapy, the positive collaboration in online psychotherapy and the positive clinical impact to online psychotherapy. In contrast, in face-to-face therapy we only noticed very small and statistically insignificant correlations between gender and the therapeutic relationship in all its dimensions. However, though significant it should be remembered that these are small differences, which should not be interpreted as large or very significant differences between the sexes. Moreover, the results indicate a mean negative correlation between age and general therapeutic relationship and emotional difficulties in online psychotherapy.

Table 4. Correlations between variables from therapists' personal characteristics (Factors 1) and therapists' perceived therapeutic relationship.

		Therapeutic relationship (GS)	Positive Collaboration (PC)	Emotional Difficulties (ED)	Positive Clinical Input (PCI)
Gender	OT	0.14*	0.12*	0.06	0.13*
	FTF	0.06	0.01	0.07	0.04
Age	OT	-0.14**	0.02	-0.36***	0.10
	FTF	-0.14**	0.01	-0.25***	0.08

* significant at .05 level; ** significant at .01 level; *** significant at .001 level
scores: correlations of the selected variable with the therapeutic relationship (sub-)scale
(OT) for online therapy and (FTF) for face-to-face therapy
Gender (point-biserial correlations): 1-Female,0-Male

There was a positive correlation between the cognitive/behavioral approach, and a negative correlation between the psychodynamic/psychoanalytic as well as the integrative approach and the different dimensions of the therapeutic relationship for both online and face-to-face therapy (detailed results in Table 5).

With respect to the experience of working with specific age groups, we found a negative correlation between work with children and a positive relationship between work with adolescents and the assessment of emotional difficulties in the relationship for both online and face-to-face therapy (Table 5). In addition, working with adolescents was positively associated with the perceived overall strength and quality of the therapeutic relationship (GS). For working with adults, all effects were not significant.

With respect to years of professional experience, we found statistically significant but rather weak positive correlations for emotional difficulties in online therapeutic relationships. On the other hand, pre-pandemic experience in online therapy is associated with more positive evaluations of the therapeutic relationship. Interestingly, this association is independent of therapy modality (Table 5).

Table 5. Correlations between therapists' professional experience (Factor 2) and perceived therapeutic relationship.

Therapy type	Modality	Therapeutic Relationship (GS)	Positive Collaboration (PC)	Emotional Difficulties (ED)	Positive Clinical Input (PCI)
Cognitive / Behavioral	OT	0.18**	0.21***	0.04	0.16**
	FTF	0.19***	0.23***	0.07	0.15**
Psychodynamic / Psychoanalytic	OT	-0.25***	-0.13*	-0.31***	-0.08
	FTF	-0.28***	-0.15**	-0.29***	-0.09
Systemic	OT	-0.03	-0.04	-0.06	0.07
	FTF	-0.06	-0.06	0.03	-0.06
Integrative	OT	-0.05	0.01	-0.12*	0.04
	FTF	-0.09	-0.03	-0.13*	0.03
Other	OT	-0.04	0.10	-0.26***	0.13*
	FTF	-0.04	0.14*	0.21***	0.15**
	Experience in working with different age groups (point-biserial correlations)				
Children	OT	0.01	0.08	-0.13*	0.10
	FTF	-0.09	-0.03	-0.12*	0.03

Adolescents	OT	0.14**	0.02	0.23***	0.04
	FTF	0.15**	0.01	0.23***	-0.02
Adults	OT	0.03	0.10	-0.10	0.11
	FTF	0.00	0.06	-0.05	0.05
	Type of therapy (point-biserial correlations)				
Individual therapy with:					
Children	OT	0.03	0.04	0.00	0.04
	FTF	0.01	0.01	0.01	0.01
Adolescents	OT	0.06	0.06	0.01	0.09
	FTF	0.04	0.07	0.01	0.02
Adults	OT	0.05	0.08	-0.02	0.07
	FTF	-0.01	0.05	-0.03	-0.02
Group therapy with:					
Adults	OT	0.02	-0.06	0.12*	– 0.04
	FTF	0.06	-0.01	0.09	-0.01
Youth	OT	0.02	-0.04	0.08	0.00
	FTF	0.05	0.04	0.04	0.02
Couples therapy	OT	-0.05	0.01	-0.12*	0.01
	FTF	-0.06	0.01	-0.12*	0.07
Family therapy	OT	-0.04	-0.07	0.02	-0.05
	FTF	-0.05	-0.09	-0.00	-0.04
	Professional therapy experience (Spearman's Correlations)				
Years of professional experience	OT	-0.03	0.03	-0.11*	0.06
	FTF	-0.02	0.04	-0.08	0.06
	Pre-pandemic experience with online therapy (point-biserial correlations)				
Pre-pandemic online therapy experience…	OT	0.10	0.17**	-0.05	0.15**
	FTF	0.10	0.14*	0.00	0.13
…with video sessions	OT	0.11*	0.14*	0.01	0.10
	FTF	0.11*	0.13*	0.05	0.08
…with voice calls	OT	-0.03	0.10	-0.24***	0.12*
	FTF	-0.06	0.06	-0.17**	0.07
…with text chats	OT	-0.04	0.09	-0.16**	-0.01
	FTF	0.02	0.18***	-0.12*	0.08

* significant at .05 level; ** significant at .01 level; *** significant at .001 level

scores: correlations of the selected variable with the relationship value: (OT) for online therapy and (FTF) for face-to-face therapy

Analyzing the association between the psychological characteristics of therapists (Factor 3) and their perceived therapeutic relationship yielded a negative correlation between the therapists' level of anxiety and depression and the general therapeutic relationship as well as its individual dimensions in both online and face-to-face therapy (detailed results in Table 6). On the other hand, the level of therapists' self-efficacy has a positive correlation with the assessment of the psychotherapeutic relationship in general, positive collaboration and positive clinical input both in online and face-to-face therapy (Table 6).

Table 6. Correlations between the therapists' psychological characteristics (Factor 3) and their perceived therapeutic relationship.

		Therapeutic Relationship (GS)	Positive Collaboration (PC)	Emotional Difficulties (ED)	Positive Clinical Input (PCI)
Anxiety (HADS-A)	OT	-0.31***	-0.16**	-0.38***	-0.12*
	FTF	-0.38***	-0.20***	-0.37***	-0.18***
Depression (HADS-D)	OT	-0.29***	-0.14*	-0.34***	-0.14**
	FTF	-0.42***	-0.23***	-0.41***	-0.19***
Self-efficacy (SET)	OT	0.21***	0.25***	0.03	0.23***
	FTF	0.24***	0.32***	0.03	0.28***
Social support (FSOU)	OT	-0.07	-0.07	-0.01	-0.10
	FTF	0.06	0.04	0.07	-0.02

* significant at .05 level; ** significant at .01 level; *** significant at .001 level

scores: correlations of the selected variable with the relationship value:(OT) for online therapy and (FTF) for face-to-face therapy

Analyzing the therapist's experience of the COVID-19 pandemic (Factor 4), we found a positive relationship between fear of COVID-19 (FCS) and the general therapeutic relationship as well as all other dimensions for online therapy. Similar, albeit smaller, correlations were also evident in face-to-face therapy (see Table 7). These results suggest that therapists who reported fear of going outside, meeting others, or contacting healthcare professionals also reported worse therapeutic relationships for both therapy modalities.

The perceived therapeutic relationship in online therapy was positively correlated with several aspects of a positive attitude towards COVID-19 prevention such as therapist vaccination, COVID-19 survey, patient testing, therapist testing, and wearing a face mask. Especially, wearing a mask during an online session makes it difficult for the therapist to observe the communication pattern and nonverbal cues, which might ultimately increase the therapist's anxiety during the session. On the other hand, for face-to-face therapy, there are even stronger associations between perceived therapeutic relationship and attitudes towards COVID-19 prevention measures (detailed results in Table 7).

The last dimension – pandemic fatigue – showed a negative relation between pandemic behavior fatigue and all dimensions of the therapeutic relationship, both for online and face-to-face therapy. In addition, there was a positive correlation between the therapists' perceived emotional difficulties in online therapy and pandemic information fatigue (Table 7).

Table 7. Correlations between pandemic-related characteristics (Factor 4) and perceived therapeutic relationship.

		Therapeutic Relationship (GS)	Positive Collaboration (PC)	Emotional Difficulties (ED)	Positive Clinical Input (PCI)
Fear of COVID-19					
Fear of COVID-19 (general)	OT	0.21***	0.12*	0.19***	0.17**
	FTF	0.17**	0.04	0.17**	0.15**
Contracting COVID-19	OT	0.02	– 0.03	0.07	0.02
	FTF	-0.01	-0.08	0.06	-0.04
Going outside	OT	0.37***	0.22***	0.37***	0.23***
	FTF	0.35***	0.20***	0.32***	0.23***
Meeting others	OT	0.26***	0.18***	0.19***	0.21***
	FTF	0.23***	0.15**	0.16**	0.22***

Contact with someone who shows respiratory symptoms	OT	0.10	0.03	0.10	0.08
	FTF	0.04	-0.07	0.08	0.06
Contact with someone in contact with infected person	OT	0.11*	0.05	0.11*	0.09
	FTF	0.10	-0.03	0.14*	0.08
Contact with healthcare professionals	OT	0.29***	0.18***	0.25***	0.22***
	FTF	0.26***	0.13*	0.23***	0.22***
Contact with infected	OT	0.08	0.06	0.05	0.07
	FTF	0.03	-0.03	0.05	0.05
Severe complications	OT	-0.01	-0.04	0.03	0.00
	FTF	-0.03	-0.09	0.01	0.02
Dying from COVID-19	OT	0.09	0.02	0.13*	0.05
	FTF	0.10	-0.01	0.13*	0.04
COVID-19 Prevention					
Masks during session	OT	-0.02	0.04	-0.24**	0.13
	FTF	0.03	-0.01	0.01	0.11
Keeping distance during session	OT	-0.01	-0.02	-0.03	0.04
	FTF	0.06	0.01	0.04	0.12
Hand disinfection before the session	OT	-0.12	-0.09	-0.13	-0.80
	FTF	-0.21**	-0.19*	-0.16*	-0.15
Room disinfection	OT	0.04	-0.01	0.10	0.03
	FTF	-0.05	-0.10	0.01	0.01
Therapist vaccination	OT	0.17*	0.18*	0.00	0.20*
	FTF	0.17*	0.11	0.18*	0.14
Patient vaccination	OT	0.02	-0.06	0.07	0.11
	FTF	-0.03	-0.12	0.05	0.06
COVID-19 survey	OT	0.10	0.10	-0.03	0.17*
	FTF	0.06	0.01	0.06	0.09
Patient testing	OT	0.05	0.04	-0.05	0.15*
	FTF	0.07	0.00	-0.01	0.22**
Therapist testing	OT	0.07	0.11	-0.15*	0.19**
	FTF	0.14	0.11	0.10	0.12
Pandemic Fatigue					
Information fatigue	OT	0.01	-0.05	0.12*	-0.08
	FTF	0.01	-0.06	0.07	-0.03
Behavior fatigue	OT	-0.18***	-0.23***	0.01	-0.24***
	FTF	-0.15**	-0.18***	-0.01	-0.24***

* significant at .05 level; ** significant at .01 level; *** significant at .001 level

scores: correlations of the selected variable with the relationship value: (OT) for online therapy and (FTF) for face-to-face therapy

Regression model

In order to identify predictors of therapeutic relationship in online and face-to-face therapy, regression analyses were conducted, separately for the general scale of the STAR questionnaire and for the three subscales of this questionnaire. For each model, potential predictors were selected based on the significant correlations of these variables with the dependent variable, as shown in the analyses above.

The first regression model was constructed for online therapy. In the first model (general scale), we looked for positive collaboration, emotional difficulties along with subscales, and positive clinical input separately (see Table 8). The results were significant with emotional difficulties contributing the highest (R^2 = 22%, F(22.154) = 3.28, p < .001) followed by positive clinical input (R^2 = 16%, F(16.159) = 3.03, p < .001) and positive collaboration (R^2 = 14%, F(14.162) = 3.01, p < .001) in online therapeutic relationship. The standardized beta coefficients give a measure of the contribution of each variable to the model in terms of standard deviations. Previous online therapy experience (β = .31, p = .009) contributed the most to positive collaboration followed by behavioral fatigue (β = .17, p < .03) and cognitive/behavioral therapy (β = .16, p < .05). These three predictors alone can explain a total of 64% of the variance in the dependent variable (Table 8).

Table 8. Statistically significant predictors of the perceived therapeutic relationship in online therapy measured by the STAR questionnaire.

Predictors	β (95% confidence interval)	p value
Therapeutic Relationship (GS) OT – [F(16.159) = 3.15, p < .001] (Adjusted R² = 0.16)		
Self efficacy	0.19 (0.03 – 0.34)	.02*
Positive Collaboration (PC) OT – [F(14.162) = 3.01, p < .001] (Adjusted R² = 0.14)		
Pre-pandemic online therapy experience	-0.31 (-0.54 – -0.08)	.009**
Behavioral Fatigue	-0.17 (-0.31 – -0.02)	.03*
Cognitive/Behavioral Therapy	-0.16 (-0.33 – -0.001)	.04*
Emotional Difficulties (ED) OT – [F(22.154) = 3.28, p < .001] (Adjusted R² = 0.22)		
Age	-0.40 (-0.65 – -0.17)	.0009***
Psychoanalytic / Psychodynamic	0.07 (0.008 – 0.30)	.04*
Positive Clinical Input (PCI) – OT – [F(16.159) = 3.03, p < 0.001] (Adjusted R² = 0.16)		
Self efficacy	0.20 (0.04 – 0.35)	.01**

* significant at .05 level; ** significant at .01 level; *** significant at .001 level
only statistically significant results are shown

The second regression model (Table 9) was constructed for face-to-face therapy. The predictors added in this stepwise model were depression, age and cognitive/behavioral therapy showing significant results (F(15.161) = 5.60, p < .001) for general therapeutic relationship. Cognitive/behavioral therapy had the most significant contribution (β = .26, p < .05) followed by depression (β = .20, p < .05) and age (β = .16, p < .05). For positive collaboration again, cognitive/behavioral approach was a significant predictor (β = .30, p < .01) followed by previous online experience (β = .18, p < .05) with a model fit of F(16.159) = 3.58, p < .001. The next step showed

fear of COVID as the most significant predictor of emotional difficulties ($F(18.158) = 3.47$, $p < .001$). For positive clinical input, significant predictors were positive attitude towards patient testing, for self-efficacy and for cognitive/behavioral approach ($F(11.165) = 4.96$, $p < .001$). The value of adjusted R^2 was significant for therapeutic relationships (general scale) at .001, contributing 28% variance through cognitive/behavioral approach, depression, and age.

Table 9. Statistically significant predictors of perceived therapeutic relationship in face-to-face therapy measured by the STAR questionnaire.

Predictors	β (95% confidence interval)	p value
Therapeutic relationship (GS) FTF – [F(15.161) = 5.60, p < .001] (Adjusted R² = 0.28)		
Cognitive/Behavioral	-0.26 (-0.41 – -0.12)	.0005***
Depression	-0.20 (-0.36 – -0.04)	.01**
Age	0.16 (0.01 – 0.30)	.03*
Positive Collaboration (PC) FTF – [F(16.159) = 3.58, p < .001] (Adjusted R² = 0.19)		
Cognitive/Behavioral	-0.30 (-0.46 – -0.14)	.0003***
Previous experience (pre-pandemic) in online therapeutic work	-0.18 (-0.34 – – 0.02)	.02*
Emotional Difficulties (ED) FTF – [F(18.158) = 3.47, p < .001] (Adjusted R² = 0.20)		
Fear of COVID-19 (FCS)	0.29 (0.03 – 0.54)	.03*
Depression	-0.25 (-0.43 – -0.08)	.004**
Psychoanalytic/Psychodynamic	0.17 (0.02 – 0.32)	.03*
Positive Clinical Input (PCI) FTF – [F(11.165) = 4.96, p < 0.001] (Adjusted R² = 0.20)		
Convinced of patient testing	0.21 (0.07 – 0.35)	.003**
Self efficacy	0.19 (0.04 – 0.34)	.01**
Cognitive/ Behavioral	-0.14 (-0.28 – -0.001)	.04*

* significant at .05 level; ** significant at .01 level; *** significant at .001 level
only statistically significant results are shown

DISCUSSION

The current study showed that the relationship between the therapist and the patient is assessed as more effective and productive in face-to-face therapy. However, it is also assessed as the one that yields more emotional difficulties.. Current research, during the COVID-19 pandemic, indicates that both therapists and patients have an increasingly positive attitude towards online therapy [8,23]. Nevertheless, the therapeutic bond or difficulties in assessing non-verbal communication are still the main barriers reported by therapists [23,24]. Strong therapeutic relationships can occur in both face-to-face and online interventions [11], however, a recent meta-analysis by Norwood et al. [14] indicates that online interventions can likely build strong therapeutic relationships, but, in line with our results, they are generally weaker than in face-to-face therapy.

Our primary aim was to assess the role of psychosocial variables in relation to the perceived therapeutic relationship in online and face-to-face therapy. Taking into account the personal characteristics of therapists, we showed that therapists' gender is related to the assessment of relationships in online therapy. Although these

are minor differences that should be interpreted with caution, it is noticeable that female therapists rate the therapeutic relationship and positive clinical contribution in online therapy higher than male therapists. While age is related to both therapy modalities, in such a way that the older the therapist, the lower the assessment of the therapeutic relationship, but also the lower the assessment of emotional difficulties in this relationship. Research review points to ambiguous results as to the sociodemographic characteristics of therapists in evaluating the therapy relationship [6] and attitudes towards online therapy [8,25].

For therapists' professional experience, results showed that all of the analyzed variables i.e. therapeutic approach, experience in working with different age groups, type of therapy, professional experience and pre-pandemic online therapy experience, are related to the assessment of the therapeutic relationship in both online and face-to-face therapy. The therapeutic relationship may be defined slightly differently in individual therapeutic approaches [26]. Different understanding of the relationship and its importance for the therapeutic process may be associated with a different perception of this relationship in contact with the patient. In addition, it is worth noting that cognitive-behavioral therapy was used online much earlier, and for example online psychoanalytic/psychodynamic therapy developed only during the COVID-19 pandemic [27,28].

Experience in working with children and adolescents is correlated with perception of relationships. Working with adolescents, although it is positively associated with the general perception of the relationship, was also associated with emerging emotional difficulties, reflecting problems in the relationship such as the clinician's feeling that they cannot empathize with and are not accepted by their younger patients. While with the experience of working with children, these difficulties are smaller. Developmentally, supporting young people requires navigating issues of power and control [29], as well as working on age-specific behaviors and changes that are rapid and multifaceted [30], which requires flexibility and understanding. In addition, it is necessary to deal with the complexities of the emotional world of young people and their relational experiences [31]. Our study shows that the relationship between the perception of the therapeutic relationship and working with specific age groups appear for online and face-to-face therapy.

Therapists who had previous experience with online psychotherapy were already familiar with this tool, so they went through the first interventions other than face-to-face therapy, they were aware not only of the advantages, but also the disadvantages and limitations of this form of online therapy. Perhaps the experience gained allowed for the development of such forms and interventions that effectively contribute to the creation of a good therapeutic relationship [7,32].

The analysis of the relationship between selected psychological characteristics of therapists and their perception of relationships in psychotherapy suggests that the emotional state of therapists is related to the assessment of relationships..Research by Aafjes-van Doorn et al. [32] suggest that therapists with lower levels of doubt and fear more often accept videotherapy, while those with an anxious attitude assess their patients' progress worse [33]. Research also shows that therapists with an avoidant attachment style are less likely to rate the relationship as genuine [34]. The experience of therapists losing control is related to the change in the overall experience of online counseling [35]. Perhaps if the therapist himself experiences difficulties, anxiety or depression, this translates into the perception of the therapeutic relationship. On the other hand, our observations also show that the experience of some therapists shows that a lower mood allows for greater understanding and empathy.

The obtained results indicate that the perception of the therapeutic relationship in online and face-to-face therapy, although to a lesser extent, is associated with fear of COVID-19. In addition, the higher the level of therapists' fatigue with behaviors related to preventing the spread of the pandemic, the lower the assessment of the therapeutic relationship. And the fatigue experienced by therapists following media reports is relevant to the emotional difficulties they perceive in their relationship with the patient. Those people who are more demotivated to use protective behavior and withdraw from searching for information about the pandemic experience a higher level of fatigue due to the influx of informa-

tion about the pandemic [17]. Overloading information about the pandemic, some of which is false or unverified, causes fear, anxiety, stress and a sense of confusion [36], which can translate into therapeutic care and relationship.

Among predictors of the therapist's perception of the therapeutic relationship in online therapy distinguished: self-efficacy of therapists, behavioral fatigue, cognitive/behavioral and psychoanalytic/psychodynamic approach, previous experience in online therapeutic work, and age of therapists. In face-to-face therapy: depression of therapists, age of therapists, cognitive/behavioral and psychoanalytic/psychodynamic approach, previous experience in online therapeutic work, fear of COVID-19 and belief of the therapist about the patient testing as a prevention of COVID-19 and also self-efficacy.

To sum up, our study showed that the perception of the therapeutic relationship in online therapy and face-to-face therapy is perceived differently by therapists. Variables related with therapist's personal, professional, psychological characteristics, and their experience with the COVID-19 pandemic are related to the perception of the therapeutic relationship and these relationships, although in different configurations, apply to both online and face-to-face therapy. More research is needed to assess what factors account for and could predict the perceived difference in an online and face-to-face therapeutic relationship.

Our study has several limitations. Firstly, psychotherapists from only four European countries were invited to participate in the study, so the results obtained cannot be generalized to the general group of professional psychotherapists living in other countries. Secondly, despite contact with many therapists, we were unable to reach everyone and the answers were provided by some of those who received an invitation to the study. So we have a convenience sample, which cannot reflect the whole diversity of psychotherapists' answers. Our study relied on self-report measures that may lead to a response consistent with social approval, and therefore some degree of bias in the results.

Ethical considerations

Prior to data collection, the study obtained approval by Ethical Committee of the Institute of Psychology of the University of Szczecin, nr KB 18/2021. Participation in the study was entirely voluntary, and participants had the freedom to withdraw from the study at any time without any negative consequences. Additionally, participants were given the opportunity to seek clarifications or ask questions from the study coordinators. To ensure confidentiality, all collected data were anonymized before undergoing subsequent analysis.

Acknowledgments
We thank Christine Brook-Lawson for her invaluable help with the German translation and data collection.

REFERENCES

1. Priebe S, McCabe R. The therapeutic relationship in psychiatric settings. Acta Psychiatr Scand. Supplementum. 2006; (429): 69–72. https://doi.org/10.1111/j.1600-0447.2005.00721.x
2. McGuire-Snieckus R, McCabe R, Catty J, Hansson L, Priebe S. A new scale to assess the therapeutic relationship in community mental health care: STAR. Psychol Med. 2007; 37(1): 85–95. https://doi.org/10.1017/S0033291706009299
3. da Costa H, Martin B, Franck N. Determinants of therapeutic alliance with people with psychotic disorders. J Nerv Ment Dis. 2020; 208(4): 329–339. https://doi.org/10.1097/NMD.0000000000001125
4. Prusiński T. Factors promoting alliance quality: Differentiation of therapeutic alliance according to the formal aspects of the psychotherapeutic process and demographic variables. The European Journal of Psychiatry. 2023; 37(3): 190–198. https://doi.org/10.1016/j.ejpsy.2022.11.002
5. Lavik KO, McAleavey AA, Kvendseth EK, Moltu C. Relationship and alliance formation processes in psychotherapy: A dual-perspective qualitative study. Frontiers in Psychology. 2022; 13. https://doi.org/10.3389/fpsyg.2022.915932
6. Ryan R, Berry K, Hartley S. Review: Therapist factors and their impact on therapeutic alliance and outcomes in child and adolescent mental health – a systematic review. Child and Adolescent Mental Health. 2023; 28(2): 195–211. https://doi.org/10.1111/camh.12518
7. Békés V, Aafjes-van Doorn K. Psychotherapists' attitudes toward online therapy during the COVID-19 pandemic. Journal of Psychotherapy Integration. 2020; 30(2): 238–247. https://doi.org/10.1037/int0000214
8. Rutkowska E, Furmańska J, Lane H, Marques CC, Martins MJ, Sahar N us, Meixner J, Tullio V, Argo A, Bermeo Barros

D. M. Determinants of psychotherapists' attitudes to online psychotherapy. Frontiers in Psychiatry. 2023; 14. https://doi.org/10.3389/fpsyt.2023.1196907

9. Chi D, Zhang Y, Zhou D, Xu G, Bian G. The effectiveness and associated factors of online psychotherapy on COVID-19 related distress: A systematic review and meta-analysis. Frontiers in Psychology. 2022; 13. https://doi.org/10.3389/fpsyg.2022.1045400
10. Fernandez E, Woldgabreal Y, Day A, Pham T, Gleich B, Aboujaoude E. Live psychotherapy by video versus in-person: A meta-analysis of efficacy and its relationship to types and targets of treatment. Clinical Psychology & Psychotherapy. 2021; 28(6): 1535–1549. https://doi.org/10.1002/cpp.2594
11. Cipolletta S, Frassoni E, Faccio E. Construing a therapeutic relationship online: An analysis of videoconference sessions. Clinical Psychologist. 2018; 22(2): 220–229. https://doi.org/10.1111/cp.12117
12. Simpson S, Reid CL. Therapeutic alliance in videoconferencing psychotherapy: A review. Australian Journal of Rural Health. 2014; 22(6): 280–299. https://doi.org/10.1111/ajr.12149
13. Simpson S, Richardson L, Pietrabissa G, Castelnuovo G, Reid C. Videotherapy and therapeutic alliance in the age of COVID-19. Clinical Psychology & Psychotherapy. 2021; 28(2): 409–421. https://doi.org/10.1002/cpp.2521
14. Norwood C, Moghaddam NG, Malins S, Sabin-Farrell R. Working alliance and outcome effectiveness in videoconferencing psychotherapy: A systematic review and noninferiority meta-analysis. Clinical Psychology & Psychotherapy. 2018; 25(6): 797–808. https://doi.org/10.1002/cpp.2315
15. Ackerman SJ, Hilsenroth MJ. A review of therapist characteristics and techniques negatively impacting the therapeutic alliance. Psychotherapy: Theory, Research, Practice, Training. 2001; 38(2): 171–185. https://doi.org/10.1037/0033-3204.38.2.171
16. Trindade IA, Ferreira NB. COVID-19 pandemic's effects on disease and psychological outcomes of people with inflammatory bowel disease in Portugal: A preliminary research. Inflammatory Bowel Diseases. 2021; 27(8): 1224–1229. https://doi.org/10.1093/ibd/izaa261
17. Lilleholt L, Zettler I, Betsch C, Böhm R. Shedding light on pandemic fatigue. PsyArXiv. 2020. https://doi.org/10.31234/osf.io/2xvbr
18. Zigmond AS, Snaith RP. The Hospital Anxiety and Depression Scale. Acta Psychiatr Scand. 1983; 67(6): 361–370. https://doi.org/10.1111/j.1600-0447.1983.tb09716.x
19. Fydrich T, Sommer G, Tydecks S, Brähler E. Fragebogen zur sozialen Unterstützung (F-SozU): Normierung der Kurzform (K-14) [Social Support Questionnaire (F-SozU): Standardization of short form (K-14)]. Zeitschrift für Medizinische Psychologie. 2009; 18: 43–8.
20. Juczyński Z. Czasopismo Psychologiczne. Psychological Journal. 2019; 25(2): 195-202.
21. Chomczyńska-Rubacha M, Rubacha K. Test Poczucia Skuteczności. Opracowanie teoretyczne i psychometryczne Pracowni Narzędzi Badawczych Komitetu Nauk Pedagogicznych PAN [The Sense of Efficacy Test. Theoretical and psychometric study of Research Tools Workshop of The Committee on Pedagogical Sciences of Polish Academy of Sciences]. Przegląd Badań Edukacyjnych. 2013; 1(16): 85-104. https://doi.org/10.12775/PBE.2013.007
22. Sterna, A. M., & Sterna, W. (2021). Psychotherapy: Method of treatment conducted by women for women? Feminization of psychotherapy. *Psychiatria, 18*(2), 152-158.https://doi.org/10.5603/PSYCH.a2021.0002
23. Békés V, Aafjes-van Doorn K, Luo X, Prout TA, Hoffman L. Psychotherapists' challenges with online therapy during COVID-19: Concerns about connectedness predict therapists' negative view of online therapy and its perceived efficacy over time. 2021; Frontiers in Psychology: 12. https://doi.org/10.3389/fpsyg.2021.705699
24. Stoll J, Müller JA, Trachsel M. Ethical issues in online psychotherapy: A narrative review. Frontiers in Psychiatry. 2020; 10. https://doi.org/10.3389/fpsyt.2019.00993
25. Hennemann S, Beutel M E, Zwerenz R. Ready for eHealth? Health professionals' acceptance and adoption of eHealth interventions in inpatient routine care. Journal of Health Communication. 2017; 22(3): 274–284. https://doi.org/10.1080/10810730.2017.1284286
26. Cataldo F, Chang S, Mendoza A, Buchanan G. A perspective on client-psychologist relationships in videoconferencing psychotherapy: Literature review. JMIR mental health. 2021; 8(2): e19004. https://doi.org/10.2196/19004
27. Reatto LL, Werbart A, Oasi O, De Salve F, Ierardi E, Giordano M, Riva Crugnola C. Understanding psychoanalytic work online and back to the couch in the wake of the COVID-19 pandemic: An investigation among Italian psychoanalysts. Frontiers in Psychology. 2023; 14: 1167582. https://doi.org/10.3389/fpsyg.2023.1167582
28. Ruwald J, Lange A, Schrieken B, Emmelkamp P. Efficacy and effectiveness of online cognitive behavioral treatment: a decade of interapy research. Studies in Health Technology and Informatics. 2011; 167: 9–14.
29. Colton A, Pistrang N. Adolescents' experiences of inpatient treatment for anorexia nervosa. European Eating Disorders Review. 2004; 12(5): 307–316. https://doi.org/10.1002/erv.587
30. Blakemore SJ, Burnett S, Dahl RE. The role of puberty in the developing adolescent brain. Human Brain Mapping. 2010; 31(6): 926–933. https://doi.org/10.1002/hbm.21052
31. Stubbing J, Gibson K. What young people want from clinicians: Youth-informed clinical practice in mental health care. Youth. 2022; 2(4): 538–555. https://doi.org/10.3390/youth2040039
32. Aafjes-van Doorn K, Békés V, Prout TA. Grappling with our therapeutic relationship and professional self-doubt during COVID-19: Will we use video therapy again? Couns Psy-

chol Q. 2021; 34(3-4): 473–484. https://doi.org/10.1080/09515070.2020.1773404

33. Sass-Stańczak K, Czabała JC. Therapeutic relationship – What influences it and how does it influence on the psychotherapy process? Psychoterapia. 2015; 1(172): 5-17.
34. Bucci S, Seymour-Hyde A, Harris A, Berry K. Client and therapist attachment styles and working alliance. Clinical Psychology & Psychotherapy. 2016; 23(2): 155-165. https://doi.org/10.1002/cpp.1944
35. Wright J, Griffiths F. Reflective practice at a distance: Using technology in counselling supervision. Reflective Practice. 2010; 11: 693–703. https://doi.org/10.1080/14623943.2010.516986
36. Sosnowska M. Review of research on impact of epidemic on healthcare workers, quarantined and socially isolated persons. Psychiatria. 2020; 17: 229–36. https://doi.org/10.5603/PSYCH.2020.0038