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## Facilitating psychotherapy with patient-made videos: A qualitative study of patient experiences

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**Abstract:** We have developed a method utilizing video material to facilitate the psychotherapeutic process we call VideoTalk. In this method, which uses schema therapy as a theoretical framework, patients make videos at home in various emotional situations following the therapist's detailed instructions. They then watch the videos together with the therapist making observations about the patient and how they speak about themselves and other people. The aim of this article is to describe five patients' personal experiences of psychotherapy consisting of 15 video-assisted sessions. We used mixed methods methodology consisting of material-based content analysis of patient interviews done after the therapy and changes in symptoms measured by psychological symptom scales. Based on the symptom scales, this outcome study found that all participants benefited from the VideoTalk therapy. 'Gaining bodily self-awareness and insight', 'Thinking more clearly and with self-compassion', and 'Challenges associated with the technology and practicalities of video work' were found to be the main categories in the content analysis. After some minor technical difficulties, the patients found the video method workable. The results showed a wide range of self-observations, which began to be positively integrated into the patients' lives and to increase their overall wellbeing. In the course of VideoTalk therapy, patients face painful emotions and may begin to create a new kind of connection between their own insulated internal world and the surrounding world.

**Keywords:** Psychotherapy, video, self-reflection, emotional processing, life management, mixed methods research

significant for the results (Conklin and Strunk 2015, Flückiger et al. 2012, Nilsson et al. 2007). The working alliance is often predictive of therapy outcomes (Norcross & Karpiak, 2017).

Today, psychotherapists have many good treatment protocols, but still not all patients get the help or significant benefits they need. Less than 50% of patients respond to first-line antidepressant treatment or psychotherapy despite substantial advances in treatment and management strategies for major depression (Van Bronswijk et al 2018). It seems that,

There is abundant research available on the effectiveness of various types of psychotherapy (Munder et al. 2019, Cuijpers et al. 2019) for various mental health problems, such as depression and anxiety (Cuijpers et al. 2008; Watts et al. 2015). Good trust between patient and therapist, patients' motivation and active cooperation during therapy, such as doing their homework between therapy sessions, are also

despite the abundance of research data, it may at times be difficult for patients to extrapolate the results of psychotherapy to their daily life (McPherson et al. 2020), new solutions and therapeutic tools are still needed. The Covid pandemic has also demonstrated the need for new forms of psychotherapeutic work (Talevi et al. 2020).

### **History of Using Photographs in Psychotherapy**

In psychotherapy, photographs have long been utilized to facilitate speaking and to bring out emotions (Halkola 2013; Martin 2013; Weiser 1999). The Photovoice method, for example, utilizes photographs taken by the participants and analysis of such photographs to help participants define and verbalize important issues related to their life (Wang and Burris 1997). Taking photographs has become easier and is now possible for everyone. The technology has advanced greatly, making editing, modification and manipulation of photographs easy. Real-timeness increases the possibilities for using photographs: there are virtually no limits to the use and dissemination of photographs in social media (Loewenthal 2013).

### **Development of Video Work in Psychotherapy**

Compared to a photograph, video offers a wider angle of approach, as it also records facial and body movements and the voice, as well as the gaze and subtle movements of the eyes and mouth. Video therefore offers a broader approach compared to a photograph and provides information that would not otherwise be available. Modern neuroimaging has been able to prove that dynamic stimuli activate brain areas more than static stimuli (Arsalidou et al. 2011). Moving pictures have been utilized in cinematherapy (Berg-Cross et al. 1990).

Videoassistance has been utilized to further develop working methods in health care (Crenshaw 2012) and to train and assess the training of psychotherapists and physicians (Brockfeld et al. 2018, Topor et al. 2017). In cognitive therapy, video has been utilized as part of the therapeutic process for the treatment of social anxiety disorder. Patients have been given video feedback to help them correct their distorted, negative self-concept (Warnock-Parkes et al. 2017), for instance. To treat social anxiety disorder, patients have been videoed during public speaking, for example, to provide them with the opportunity of watching themselves like an objective observer. Positive results have been obtained during brief therapies (Kim et al. 2002, Orr and Moscovitch 2010, Rodebaugh et al. 2010). In addition, video-assistance has been utilized to observe and improve parent-child interaction. In the context of parenting, watching videos together with a parent has been used to provide both parent and therapist with the

opportunity to observe the parent-child interaction on the video (Kennedy et al. 2017). Video feedback interventions have also been utilized to improve the interaction between hearing impaired children and their families through auditory rehabilitation (Dantas dos Santos and Brazorotto 2018).

The field of psychotherapy is changing, too given the way various technical applications may already now form a part of the work, for instance utilizing audiovisual tools, images, videos, animation, discussion forums, writing, and automatic reminders to guide patients through the therapy process (Andersson 2018). Real-time remote work became highly topical during the Covid-19 pandemic as therapists increased their use of technology in therapy. Further research is needed, but the unprecedented situation of the Pandemic is affecting the organisation of psychotherapy, too, giving us a chance to learn something new and to evaluate and develop forms of treatment further (Markowitz et al. 2020, Sasangohar et al. 2020). Alternative work forms are valuable in view of the rapidly changing situations around the world and the high demand for therapy.

## **Development of the VideoTalk Method**

We have developed a method applying video assistance in psychotherapy which we named VideoTalk (Koffert et al. 2019). We began by using photos in psychotherapy and then decided to try using patient-made videos. We found this approach useful in our clinical work and many patients with depression and anxiety seemed to benefit from this kind of approach. Feedback from patients has been crucial to develop VideoTalk, and the approach evolved through collaboration between the therapist and the patients.

The theoretical framework we used in developing the method was schema therapy (Young 1990). The method or its elements may be combined with various psychotherapy orientations. The mode concept from schema therapy referring to different parts of self is well suited for creative work. For instance, in Detached Protector mode the person retreats and hides, whereas in Vulnerable Child mode they experience loneliness and helplessness and in Punitive Parent mode they punish and blame themselves. The need to use Detached Protector mode diminishes as the patient gets in touch with Vulnerable Child mode (Young 1990). With the help of video, in VideoTalk, a person reveals to themselves and their therapist the emotional state they have experienced, protected and described in an authentic environment.

The VideoTalk method facilitates documenting patients' emotional expression in their own living environment. This is done to capture the reality of the patient's current life. A video recording represents a simulation of a difficult situation at home, shared on the emotional level in the therapist's office to allow the patient to face the difficult emotional experiences again together with the therapist. Strengthening patients' autonomy and sense of coping by guiding them to be active and responsible implementers of their treatment is central to the videoassisted method.

### VideoTalk Procedures and Practice

Video work aims to intensify psychotherapy and teach patients to act in problem situations faced at home. Patients are not required to have any previous experience or skills related to visual work or photographing. A smartphone, for instance, can be used for the VideoTalk method. The therapist's role in the VideoTalk method is to listen and to activate patients by validating their experiences through questions.

VideoTalk is a structured method of treatment. In the VideoTalk, there are three phases: the life-review phase, the face photo phase, and the video phase (see table 1).

Life review	Sessions 1-3
Face photograph	Sessions 4-5
An incident of the patient's choice	Sessions 6-7
Speaking to the parents	Sessions 8-9
Helplessness	Sessions 10-11
Coping	Sessions 12-13
Plans for the future	Sessions 14-15

Table 1: The themes of the fifteen VideoTalk sessions

The life-review and face photograph phases do not involve videoing but prepare the patient for work with video. In life review, patients collect photographs of significant incidents (childhood, school and family memories, present days, etc.) in their life. The photographs are attached to a large sheet of paper in chronological sequence and then reviewed together with the therapist. The therapist sits by the patient who is asked to talk freely about the photographs and tell stories associated with them. The patient's thoughts, explanations and observations are written below each picture. Attention is also paid to the strengths and skills of the patient. In the end, the patient and the therapist have collected a lot of information (social relations, modes of thinking, environment, skills etc.) on the sheet about patient's life. This visual life review is important throughout the therapy process and new

thoughts are added to it if needed. On the basis of the life review work, the patient's central problematic life patterns are summarized. These will be the focus of the future psychotherapeutic work.

In the face photograph phase, patients begin to document their reactions, a process then continued into the video phase, to enable them to consider and conserve factors affecting their overall well-being. Patients watch the videos made at home first alone and then step-by-step together with the psychotherapist in the session, going through observations that they have made themselves (self-reflection). The psychotherapist will listen and voice his/her observations. The patient and the psychotherapist then review together their observations and the associated, often difficult, emotional experiences. Discussion and processing emotions facilitates an extensive, integrative view consisting of observations made by both patient and therapist. The helplessness sessions, for instance, involve a video where patients talk freely about their feelings concerned with what goes on in their mind when they cannot do what they intended to do. In the second video, patients deal with things they have learned or realized when working with the first video. Work done by patients themselves forms the ground for the therapy.

The purpose of the present project was to survey the experiences with video work of patients who have had psychotherapy using the VideoTalk method. Our aim was to bring out patients' personal points of view and experiences.

## Methodology

This study uses a mixed-methods design containing both qualitative and quantitative approaches (Creswell 2017). The benefits of using the mixed-method are the strengthening of reliability and a deeper and more detailed understanding of the phenomenon (Brannen 2008). In research with a participatory philosophical orientation, people participate in the research process as actors and the methodology used is qualitative rather than quantitative. Pragmatism has been described as the philosophical starting point for mixed-method research emphasizing the practical nature of the knowledge obtained through the research (Johnson & Onwuegbuzie 2004, Creswell 2017).

The study, planned as a preliminary pilot for a larger study, included five patients aged 19–34, one male and four females. The patients were psychotherapy patients of one of the authors (TK). She is a cognitive therapist who has specialized in schema therapy. The patients had all first consulted public health care, and a psychiatrist had then recommended psychotherapy for them.

## Rating scales

At a study visit before starting the therapy, a psychiatrist assessed the diagnoses and the scores on the Social and Occupational Functioning Assessment Scale, SOFAS (Goldman et al. 1992). After therapy, the psychiatrist reassessed the SOFAS scores. SOFAS rates a person's social and occupational functioning on a scale from excellent to grossly impaired; the higher the score, the better the person's functional capacity (Goldman et al. 1992). Psychiatric diagnoses according to the Diagnostic and Statistical Manual of Mental Disorders, 4th Edition (DSM-IV) before the therapy were established using the Structured Clinical Interview for DSM (SCID I/P DSM-IV-TR) (First et al. 2002); for diagnosing personality disorders, the SCID-II (First et al. 1997) was used. After baseline assessment all patients had 15 sessions of VideoTalk therapy.

Before starting the therapy, the patients filled in the scales used for the study. The psychiatric rating scales were used to make visible a more diverse perspective on VideoTalk changes. The severity of psychiatric symptoms was assessed using a psychiatric rating scale (Symptom Checklist, or SCL-90) (Derogatis et al. 1973). Depression and anxiety symptoms were scored with the Beck Depression Inventory (BDI) (Beck et al. 1961) and Beck Anxiety Inventory (BAI) (Beck et al. 1988), respectively. Interpersonal problems were assessed using the total averages of the Inventory of Interpersonal Problems (IIP-32) (Horowitz et al. 1988). In the Liebowitz Social Anxiety Scale (LSAS) social phobia and avoidance was measured. The Rosenberg Self-Esteem Scale (RES) (Rosenberg 1965) and Sense of Coherence Scale (SOC) were also used in this research. After the VideoTalk therapy, the patients filled in BDI, BAI, SCL-90 and IIP-32 scales to provide follow-up scores. Reference values for psychiatric symptom scales can be found in Appendix 1.

## Interview

Patients participating in the study were given an information leaflet concerning the interview study and they had time to think their participation. They also had the chance to ask questions at the beginning of the interview. The participants signed their consent to record the interview study. The trust between the patient and the therapist was very important and the basic of the therapy process. All research material is confidential and its use is controlled. The Ethics Committee of Southwest-Finland Hospital District gave ethical approval to the study and the interviews.

A semi-structured interview was engaged with each patient by one of the authors (EN) (Galletta 2013). Although the themes of the interview were decided in advance, the interviews focused on the interviewees' interpretations and perceptions and thus gave plenty of room for free speech. The goal was to

record patients' views and experiences with regard to the VideoTalk treatment and its effects on their lives as authentically as possible.

The interview appointment was made based on the interviewees' schedules and the atmosphere in the session was as calm, free and safe as possible. The interviewees determined the length of the interview, and no time limit was specified in advance. It was also possible to take breaks and drink cup of tea. In this way, any feeling of time pressure was avoided. The interviews were performed as soon as possible after the end of the VideoTalk therapy depending on the patients' schedules. The interviewees had the possibility to send questions also afterward to the interviewer. All five interviews were recorded.

## Content Analysis

The interview material was transcribed from the recording and analyzed by content. Using content analysis, researchers can quantify and analyze the presence, meanings and relationships of certain words, themes or concepts. In content analysis, the aim is to analyze and to understand the material in text form as an entity without losing any information value (Elo & Kyngäs 2008, Krippendorff 2018, Neuendorf 2017).

Content analysis was employed to identify material within the comments on video work (spontaneously expressed, answer to a question) and to try to find out whether video assistance provides any added value for the therapeutic work. The content was systematically labelled using the NVivo data analysis software designed for the analysis of qualitative research. The software facilitates coding the content and allows the researcher to arrange and categorize the codes, but the researcher performs the actual analysis.

## Results

### Quantitative Results

The patients' psychiatric diagnoses and the results from the quantitative scales are given in Table 2. All participants had depression and/or anxiety of a longer duration, and all had a psychiatric diagnosis. During the initial assessment, one subject showed severe symptoms of depression, three moderate to severe symptoms and one mild to moderate symptoms of depression. Two subjects had severe and three mild anxiety. Two subjects had low self-esteem and three had average self-esteem. One subject had good functional capacity, one mild and two moderate functional problems and one had severely impaired functional capacity. Four subjects had a low and one an average sense of coherence.

ID	Age, Gender	Diagnosis	BDI Baseline	BDI After Intervention	BAI Baseline	BAI After Intervention	SCL-90 Baseline	SCL-90 After Intervention	IIP-32 Baseline	IIP-32 After Intervention	SOFAS Baseline	SOFAS After Intervention
1	33y, Female, LSAS 90, SOC 39, RES 17	Bipolar disorder, type II, partly in remission Panic disorder Social phobia	29	3	32	4	2.28	0.31	2.25	0.03	55	75
2	34y, Male LSAS 51 SOC 64 RES 20	Recurrent depressive disorder, partly in remission Social phobia	27	20	12	9	1.28	1.00	1.16	0.66	60	50
3	26y, Female LSAS 74, SOC 42, RES 22	Recurrent depressive disorder, current episode moderate Panic disorder	28	29	42	39	2.88	2.23	1.91	1.47	50	60
4	22y, Female, LSAS 45, SOC 44 RES 15	Moderate depressive episode Panic disorder Anorexia nervosa, partly in remission	34	18	28	8	1.96	0.88	1.06	0.72	90	90
5	19y, Female, LSAS 55 SOC 51 RES 22	Obsessive-compulsive disorder	13	2	14	5	1.34	0.57	1.16	0.78	70	80

Table 2: Basic characteristics and symptom and functional ratings in patients before and after 15 sessions of VideoTalk assisted psychotherapy

Basic ratings: LSAS = *Liebowitz Social Anxiety Scale*, SOC = *Antonovsky's sense of coherence scale*, RES = *Rosenberg Self-Esteem Scale*.

Intervention ratings: BDI = *Beck Depression Inventory*, BAI = *Beck Anxiety Inventory*, SCL-90 = *Symptom Checklist 90*, IIP-32 = *Inventory of Interpersonal Problems*, SOFAS = *Social and Occupational Functioning Assessment Scale*.

Three subjects had anxiety associated with social situations. According to the results obtained after VideoTalk therapy, the BDI scores decreased during VideoTalk therapy in four patients, and the scores on the psychological BAI and SCL-90 decreased in all five subjects. The IIP 32 scores improved clearly in all five patients receiving VideoTalk therapy. SOFAS scores increased in three subjects, reflecting their improved functional capacity. One patient's SOFAS score remained unchanged, and one patient's score decreased.

### Qualitative Content Analysis

Content analysis was used to examine content relating to the advantages of video work and the problems associated with it, as well as any added value for the therapeutic work. 'Gaining bodily self-awareness and insight', 'Thinking more clearly and with self-compassion' and 'Challenges associated with the technology and practicalities of video work' were the main categories created. By 'Gaining bodily self-awareness and insight' we mean the effects of patients' observations on their attitude to themselves and to their environment. The first main category comprises observations made by patients on their bodies, thoughts and emotions ('Observations on the body', 'Observations on thoughts and emotions'). The second main category comprises 'Life management', 'Self-compassion' and noting the 'Good things in life'. The third main category comprises technical and other factors ('Technical factors', 'Other practical factors') and 'Continuing the work' in future. The main categories and subcategories of the content analysis are listed in Table 3.

1. Gaining bodily self-awareness and insight	(a) Observations on the body self-awareness and insight (b) Observations on thoughts and emotions
2. Thinking more clearly and with self-compassion	(a) Life management and with self-compassion (b) Self-compassion (c) Good things in life
3. Challenges associated with the technology and practicalities of video work	(a) Technical factors technology and practicalities (b) Other practical factors of video work (c) Continuing the work

Table 3: Main categories and subcategories derived from material-based content analysis

### Gaining Bodily Self-Awareness and Insight

The subcategories of 'Gaining bodily self-awareness and insight' were 'Observations on the body' and 'Observations on thoughts and emotions'. The numbers in brackets in the text refer to the statements given verbatim below, the numbers following the letters indicating the category and subcategory in the verbatim statements denote the patient. During the VideoTalk work, patients made numerous observations about themselves. For example, that seeing and hearing oneself was concrete and real (1). The information patients obtained about their bodies was different from what they were previously aware of, such as hearing their voice tremble or seeing their eyes wander (1, 2). They also reacted physically to the video work, which sometimes caused fatigue or weakness (3, 4).

"How her voice trembles and shakes and how you really notice that her eyes go blurry, how they become like quite hazy" (A.a.1)

"I didn't really like watching those videos. Just seeing your eyes wander and all that" (A.a.5)

"...I was quite wiped out, I felt that after making one video I would need to sleep two days" (A.a.1)

"...my body reacted a lot, I felt positively weak afterwards" (A.a.1)

During the VideoTalk work, patients became aware that their thoughts were not always correct (5). They received information about themselves which made them realize that how they felt was more clearly visible than they had thought (6, 7, 8). This provided them with a new perspective on themselves, disclosing needs that they had previously found difficult to identify and to name (9).

"That my set ideas are not true. That they are like not, that it is not a fact but a distortion that's developed in my mind" (A.b.1).

"...you can also see very clearly when you look at me how I feel, perhaps more than I realized" (A.b.3) "...but I hadn't realized that I show it so clearly" (A.b.1)

"Then you like saw it on the video, or somehow it became more the truth" (A.b.4)

"...but when I really concretely see in a picture that, my God, that person looks really tired and really sad, it is somehow a wakeup call that, like, something should be done" (A.b.3)

## Thinking More Clearly and with Self-Compassion

'Life management', 'Self-compassion' and seeing the 'Good things in life' were the subcategories of the main category 'Thinking more clearly and with self-compassion'. During video work, patients were able to clarify their thinking (10). They became aware of their harmful automatic modes of thinking and were thus able to question their thinking and to understand themselves better than before (11). The video work elicited different emotions and thoughts in patients, even insights, and they found new perspectives for themselves and their lives (12). The video work enabled them to learn to regulate their emotions through a better understanding of such emotions, so that a negative emotion, for instance, would not automatically grow to be the prevailing emotional experience (13, 14).

"...yes (voicing my thoughts) did clarify my thoughts, actually quite a bit" (B.a.1)

"...getting to speak on the video made thoughts somehow more concrete and then clearer, so that even I realized what I sort of thought and what the reason was for it all" (B.a.4)

"(Video work) has triggered really a lot of thoughts and emotions and brought up quite a lot of emotions, realizations and possible ways of looking at things" (B.a.3)

"I started seeing things, like some tension and lack of strength and such despair in the pictures, and this helped me to maybe gain some control of these things so that I have become capable of modifying my state a bit by looking at myself" (B.a.2)

"Precisely being able to read my state better through these and perhaps knowing that a specific emotion is arising, helps to prevent it from becoming the prevailing thought" (B.a.2).

The video work helped patients to see themselves as from outside and thus to obtain a new kind of distance to their thinking, which helped them to find self-compassion (15, 16, 17, 18). There was no need for them to judge themselves or to approach themselves critically or in a demanding fashion but with understanding and empathy (16). The multisensory information obtained through the video work provided patients with more comprehensive information than working with photographs would have done (19).

"I would consider it valuable that this method lets you see yourself from the outside, somehow, see and hear yourself. This may also help you to stop judging these

things. Even if you do judge, you might consider why you're being judgemental" (B.b.3)

"...and then it came somehow so close, you could see so clearly there that you were able to place yourself outside yourself, and a strong feeling arose that 'help, I will need to start taking care of that person'. That it's me" (B.b.1)

"...somehow it triggered a lot of compassion" (B.b.1)

"It was somehow really, I would say, touching" (B.b.1)

"Seeing the person speaking on the video... I don't think that if I had just taken photographs, it would have got to me in the same way at all. Without video, discussing things would not have got to me in the same way (B.b.1)

Patients felt that through the video work good things from the past came to mind (20). Through questioning negative information with the therapist, new space to process positive memories was created in the patients' minds. The patients also experienced that the work gave them energy (21). These observations were empowering and made it concrete that life had not always been difficult or hard. The video work thus made patients aware of their own capabilities, which they had found very hard to see in their action or to remember from their past (21, 22). The work also increased patients' self-knowledge (23).

"That, damn it, I have had some fine moments and fine times in my life that I didn't remember at all" ... "...that that person's eyes are shining" (B.c.1)

"I didn't feel in any way that it drained my energy, in a way it may even have given me some. It's more likely that, when you've made a video of yourself and your own capability, watching it actually gives you some energy" (B.c.2)

"...you may wonder about your own capability, the first video was a bit like 'I haven't achieved anything' and the next time I took even small things as good, like 'not everyone can do what I've done' (B.c.5)

"(Self-knowledge) has also increased through those images" (B.c.2)

## Challenges Associated with the Technology and Practicalities of Video Work

'Technical factors', 'Other practical factors' and 'Continuing the work' were the subcategories of the main category 'Challenges associated with the technology and practicalities of video work'. Video work was a new kind of experience for

many patients, which in the beginning posed some challenges. Some patients (24, 25) had technical problems but not all (26).

“It would have been easier if I’d had decent equipment” (C.a.1)

“(Video work) I got used to it and feel it is meaningful, technical adjustment was strenuous” (C.a.3)

“...I took them with my phone, no problem” (C.a.2)

The video work involved challenges, such as difficulty finding a peaceful place for making the video (27) or not being able to make the video anywhere they wanted, such as in a public place, or not liking the task given (28). One patient also experienced making and watching videos as disgusting or brutal (29, 30). Remembering to do the homework and procrastination were also challenging (31). In addition, patients felt that it was difficult to make a video when they were feeling low (32).

“If I had a suitable moment, a mental state suitable for making a video, then my daughter happened to turn up. Now I have a study where I can make videos” (C.b.1)

“I’m sort of convenience-loving myself and would rather do something easy that can be done anywhere, like on the bus, in a public place. So some other method would be better for me” (C.b.5)

“It was disgusting at times to watch those videos but (later on) it became easier” (C.b.4)

“It was really tough at first” (C.b.4)

“I kind of left taking the pictures really often to the last day before the session because I just didn’t, I just sort of tried to ignore it to the last minute... that it was really scary, but then when I made the videos, the first ones, or took the photographs, it made me feel ‘this can’t be true, who’s the person speaking there?’” (C.b.1)

“Making a video like that in a moment of weakness is still somehow difficult” (C.b.2)

As the work proceeded, the need to discuss the topic started to recede (33, 34). Video facilitated pouring out one’s thoughts like in a diary (35). The work in all was found interesting (36).

“They turned out to consist of me just babbling... will I need this anymore (last videos)” (C.b.1)

“It may have been more significant at first than after several videos had been made, then it started to lose some of its value” (C.b.2)

“It feels hard to start writing, speaking is considerably easier, so in this sense it was a really good idea for pouring out your thoughts” (C.b.3)

“(Visual work) was almost a little distressing but very interesting” (C.b.3)

The work was intensive and could therefore become exhausting for patients (37). However, they planned to keep their learned skill of utilizing video active and use it later in life, as necessary (38, 39, 40, 41). The patients felt that the therapy had a positive effect on their wellbeing and considered learning to use the method a valuable skill that might benefit them in future.

“(Continuing the work) I am completely bored with it, so there’s no point in doing it now for a while” (C.c.5)

“I have actually planned to (continue)” (C.c.1)

“(Continuing the work) I have, yes, and that is my aim” (C.c.2)

“(Continuing the work) Yes, I would hope so, at least” (C.c.3)

“(Continuing the work) Yes, I think that if I feel like that, I would use this, yes” (C.c.4)

## Discussion

### Main Findings

Both the quantitative and the qualitative results show that the VideoTalk therapy improved the patients’ life management and thus improved their quality of life. All patients participating in the study suffered from significant psychiatric symptoms. The quantitative scales used in the study indicate that the VideoTalk was beneficial for all five patients: their anxiety and interpersonal relationship problem scores decreased. The findings of the content analysis provide explanations for these changes: the patients perceived that the VideoTalk work had enhanced their bodily self-awareness and insight as well as helped them to think more clearly and with self-compassion. The patients were able to find new ways of acting and to change their stagnated ways of thinking and behaving. They also had a significant experience of being able to influence their quality of life, well-being and mood. Making and watching videos as part of therapy can function as exposure training where patients have to encounter themselves in a new way. The video work provides the patients

with sensory information about themselves, which affects the world of their experiences. Because the patients were used to having a very critical, judgemental attitude towards themselves and had not questioned their thoughts or found new perspectives to their thinking, the experiences of compassion and approval during the VideoTalk were highly significant for them. Finding a new perspective on themselves improved the patients' self-esteem and their quality of life.

## Comparing Results with Previous Research

We believe that ours is the first research on the patients' perspective on psychotherapy that utilizes video which is why we can only compare our results with studies on standard psychotherapy.

As the VideoTalk therapy proceeded, patients were capable of taking a new kind of responsibility for their life and learned to consider this important. They learned something new about themselves in the fields of both verbal and nonverbal communication. In line with our results, Clarke et al. (2004) found that patients' experiences of psychotherapy include increased self-confidence and feeling of well-being, a more relaxed attitude to themselves and improved life management (Clarke et al. 2004). Speaking about themselves and self-reflection have clarified patients' life stories, increased the feeling of safety and facilitated naming thoughts and emotions (Nilsson et al. 2007). The ability to feel self-compassion increases the individual's experience of well-being (Gilbert 2010; Zessin et al. 2015).

During the VideoTalk therapy, patients made observations that they needed to look after and take care of themselves. Patients began to see a side of themselves that they had previously not been able to see, and understood that no-one else could take care of them. Improved coping skills have become a part of their daily lives and they have the courage to face situations previously experienced as daunting. Klein and Elliott (2006) found that positive changes in psychotherapy included improved self-esteem, increased self-reflection and various changes observed in association with the person's position or role in social situations. In our study, patients became more conscious of their own needs, and taking responsibility for their own life became more concrete. The VideoTalk method thus facilitated experiences of coping, capability, learning and success.

## Applying VideoTalk in Practice

The study identified some practical challenges in the VideoTalk therapy. Firstly, applying the method requires some technical skills from the patient as well as suitable equipment. However,

our study also shows that the technical difficulties related to the VideoTalk method brought up by the patients were soon eliminated as the method became more familiar to them. Ongoing technological development will also facilitate the use of the VideoTalk therapy in future.

Secondly, finding the time and the place for making the videos was sometimes challenging for the patients. Some procrastination may have represented avoidance behaviour that patients had learned to use to cope with difficult situations. Nevertheless, none of the patients included in this study excluded the possibility of utilizing the VideoTalk method later; nor did they consider the method harmful in any way, even though some boredom with the work appeared at the time of the interview. Becoming bored with the method can also be considered a positive observation, showing that the topics worked on were becoming more distant.

Learning new skills (such as learning new responses to challenging situations) requires some time. However, through learning new skills, patients may develop new modes of behaviour, regardless of the reasons for seeking therapy. Ideally, new skills should become part of a patient's daily life and behaviour in due course, thus improving their quality of life and functional capacity (Farmer & Chapman 2016). The VideoTalk method provides patients with a new skill to use independently in difficult situations. The notion that after the end of therapy patients would have a new skill facilitating understanding themselves and improving their total well-being is significant.

## Strengths and limitations of the study and areas for further research

The material-based content analysis was well suited for this purpose because it supported the aim of the study. The mixed methods approach containing qualitative as well as quantitative instruments illuminated the change from various perspectives. As changes in functional capacity are slow, substantial changes in functional capacity cannot be expected to be seen after short-term treatment consisting of 15 therapy sessions. Human change, of course, involves much more than changes in psychiatric rating scale scores, although these give useful additional information.

As the study was designed to be a preliminary study, the number of patients was too small to make generalized conclusions. However, there were no substantial differences between our patients in the way they had experienced the video work.

One of the authors (TK) had a dual role in being both the therapist and author, which can be seen as a limitation of the

study. However, in order to increase objectivity, she took no part in analyzing the results. The qualitative content analysis proved to be a suitable method from the perspective of the study aim.

Further research could usefully examine homemade videos made by the patients as well as video recordings of the psychotherapy sessions. Alternative qualitative methodologies may also enrich the pool of findings. For instance, phenomenological or narrative analysis of the qualitative data would offer deeper and richer analysis of the patient's lived experience. Conversation analysis of psychotherapeutic dialogues would deepen an understanding of the process.

## Conclusion

The VideoTalk therapy process has been shown to help individuals understand themselves better. Our study has demonstrated how VideoTalk may begin to restore the dialogue between patients' external and internal realities and, if successful, facilitates more extensive review of their life where they find new perspectives and ways to see themselves in a new way. As patients connect with themselves, they also become more capable of connecting with people around them. The decreased scores in the Inventory of Interpersonal Problems in all five patients support this observation. It may be that video work as a part of the therapeutic process has the added value of successfully starting an emotional process and increasing the ability for reflection in patients for whom this has previously been challenging. The beginning emotional process activates patients' locked emotions and puts patients in touch with their emotional experiences, which is also very important for the effectiveness of therapy. It would therefore seem that the VideoTalk method is able to provide a valuable new tool for therapeutic work.

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## References

- Andersson, G. (2018). Information technology and the changing role of practice. In S.C. Hayes & S. G. Hofmann (Eds.), *Process-based CBT: The science and core clinical competencies of cognitive behavioral Therapy* (pp. 67-81). Context Press.
- Antonovsky, A. (1987). *Unravelling the mystery of health: How people manage stress and stay well*. San Jossey-Bass Publishers.
- Antonovsky, A. (1993). The structure and the properties of the sense of coherence scale. *Social Science & Medicine Journal*, 36(6), 725-733. [https://doi.org/10.1016/0277-9536\(93\)90033-Z](https://doi.org/10.1016/0277-9536(93)90033-Z)
- Arsalidou, M., Morris, D., & Taylor, M. J. (2011). Converging evidence for the advantage of dynamic facial expressions. *Brain Topography*, 24(2), 149-163. <https://doi.org/10.1007/s10548-011-0171-4>
- Barkham, M., Hardy, G. E., & Startup, M. (1996). The IIP-32: A short version of the Inventory of Interpersonal Problems. *British Journal of Clinical Psychology*, 35(1), 21-35. <https://doi.org/10.1111/j.2044-8260.1996.tb01159.x>
- Beck, A. T., Epstein, N., Brown, G., & Steer, R. A. (1988). An inventory for measuring clinical anxiety: Psychometric properties. *Journal of Consulting and Clinical Psychology*, 56(6), 893-897. <https://doi.org/10.1037//0022-006x.56.6.893>
- Beck, A. T., & Steer, R. A. (1993). *Beck anxiety inventory manual*. Psychological Corporation.
- Beck, A. T., Steer, R. A., & Garbin, M. G. (1988). Psychometric properties of the Beck depression inventory: Twenty-five years of evaluation. *Clinical Psychology Review*, 8(1), 77-100. [https://psycnet.apa.org/doi/10.1016/0272-7358\(88\)90050-5](https://psycnet.apa.org/doi/10.1016/0272-7358(88)90050-5)
- Beck, A. T., Ward, C. H., Mendelson, M., Mock, J., & Erbaugh, J. (1961). An inventory for measuring depression. *Archives of General Psychiatry*, 4(6), 561-571. <https://doi.org/10.1001/archpsyc.1961.01710120031004>
- Berg-Cross, L., Jennings, P., & Baruch, R. (1990). Cinematherapy: Theory and application. *Psychotherapy in Private Practice*, 8(1), 135-156. [https://doi.org/10.1300/J294v08n01\\_15](https://doi.org/10.1300/J294v08n01_15)
- Brannen, J. (2008). The practice of a mixed methods research strategy: Personal, professional and project considerations. In M.M. Bergman (Ed.), *Advances in mixed methods research* (pp.53-66). Sage Publications Ltd.
- Brockfeld, T., Muller, B., & de Laffolie, J. (2018). Video versus live lecture courses: A comparative evaluation of lecture types and results. *Medical Education Online*, 23(1). <https://dx.doi.org/10.1080%2F10872981.2018.1555434>
- Clarke, H., Rees, A., & Hardy, G. E. (2004). The big idea: Clients' perspectives of change processes in cognitive

- therapy. *Psychology & Psychotherapy: Theory, Research & Practice*, 77(1), 67-89.  
<https://doi.org/10.1348/147608304322874263>
- Conklin, L. R. & Strunk, D. R. (2015). A session-to-session examination of homework engagement in cognitive therapy for depression: Do patients experience immediate benefits? *Behaviour Research and Therapy*, 72, 56-62.  
<https://doi.org/10.1016/j.brat.2015.06.011>
- Crenshaw, J. T. (2012). Use of video-feedback, reflection, and interactive analysis to improve nurse leadership practices. *Nursing Administration Quarterly*, 36(3), 260-267.  
<https://doi.org/10.1097/naq.0b013e318258c4e0>
- Creswell, J. W. (2017). *Designing and conducting mixed methods research*. SAGE Publications Inc.
- Cuijpers, P., Van Straten, A., Andersson, G., & Van Oppen, P. (2008). Psychotherapy for depression in adults: A meta-analysis of comparative outcome studies. *Journal of Consulting and Clinical Psychology*, 76(6), 909-922.  
<https://doi.org/10.1037/a0013075>
- Cuijpers, P., Karyotaki, E., Reijnders, M., & Ebert, D. D. (2019). Was Eysenck right after all? A reassessment of the effects of psychotherapy for adult depression. *Epidemiology and Psychiatric Sciences*, 28(1), 21-30.  
<https://doi.org/10.1017/s2045796018000057>
- Dantas dos Santos, I. R., & Brazorotto, J. S. (2018) Video feedback for families of hearing impaired children. *CoDAS*, 30(1). <https://doi.org/10.1590/2317-1782/20182016256>
- Derogatis, L. R., Lipman, R. S., & Covi, L. (1973). SCL-90: An outpatient psychiatric rating scale – preliminary report. *Psychopharmacol Bull*, 9(1), 13-28.
- Elo, S., & Kyngäs, H. The qualitative content analysis process. *Journal of Advanced Nursing* 2008, 62(1), 107-15.  
<https://doi.org/10.1111/j.1365-2648.2007.04569.x>
- Farmer, R. F., & Chapman, A. L. (2016). *Behavioral interventions in cognitive behavior Therapy: Practical guidance for putting theory into action* (2nd edition). American Psychological Association.
- First, M. B., Gibbon M., Spitzer R. L., Williams, J. B. W., & Benjamin, L. S. (1997). *Structured clinical interview for DSM-IV Axis II personality disorders (SCID-II)*. American Psychiatric Press, Inc.
- First, M. B., Spitzer, R. L., Gibbon, M., & Williams, J. B. W. (2002). *Structured clinical interview for DSM-IV-TR Axis I disorders, research version, patient edition. (SCID-I/P)*. Biometrics Research, New York State Psychiatric Institute.
- Flückiger, C., Del Re, A.C., Wampold, B. E., Symonds, D., & Horvath, A. O. (2012). How central is the alliance in psychotherapy? A multilevel longitudinal meta-analysis. *Journal of Counseling Psychology*, 59(1), 10-17.  
<https://doi.org/10.1037/a0025749>
- Galletta, A. (2013). *Mastering the semi-structured interview and beyond: From research design to analysis and Publication*. Sage Publications.
- Gilbert, P. (2010). *The compassionate mind: A new approach to life's challenges*. New Harbinger Publications.
- Goldman, H. H., Skodol, A. E., & Lave, T. R. (1992). Revising axis V for DSM-IV: A review of measures of social functioning. *The American Journal of Psychiatry*, 149(9), 1148-1156.  
<https://doi.org/10.1176/ajp.149.9.1148>
- Halkola, U. (2013). A photograph as a therapeutic experience. In D. Loewenthal (Ed.), *Phototherapy and therapeutic photography in a digital age* (pp. 21-30). Routledge.
- Hofman, S. G., Asnaani, A., Vonk, I. J., Sawyer, A. T., & Fang, A. (2012). The efficacy of cognitive behavioral therapy: A review of meta-analyses. *Cognitive Therapy and Research*, 36(5), 427-440. <https://doi.org/10.1007/s10608-012-9476-1>
- Holi, M. M., Sammallahti, P. R., & Aalberg, V.A. (1998). A Finnish validation study of the SCL-90. *Acta Psychiatrica Scandinavica*, 97(1), 42-46.  
<https://doi.org/10.1111/j.1600-0447.1998.tb09961.x>
- Horowitz, L. M., Rosenberg, S. E., Baer B. A., Ureno, G., & Villasenor, V. S. (1988). Inventory of interpersonal problems: Psychometric properties and clinical applications. *Journal of Consulting and Clinical Psychology*, 56(6), 885-892.  
<https://psycnet.apa.org/doi/10.1037/0022-006X.56.6.885>
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, 33(7), 14–26.  
<https://doi.org/10.3102/0013189X033007014>
- Kennedy, H., Ball, K., & Barlow, J. (2017). How does video interaction guidance contribute to infant and parental mental health and well-being? *Clinical Child Psychology and Psychiatry*, 22(3), 500-517.  
<https://doi.org/10.1177%2F1359104517704026>
- Kim, H. Y., Lundh, L. G., & Harvey, A. (2002). The enhancement of video feedback by cognitive preparation in the treatment of social anxiety. A single-session experiment. *Journal of Behavior Therapy and Experimental Psychiatry*, 33(1), 19-37. [https://doi.org/10.1016/s0005-7916\(02\)00010-1](https://doi.org/10.1016/s0005-7916(02)00010-1)
- Krippendorff, K. (2018). *Content analysis: An introduction to its methodology*. Sage.
- Klein, M. J., & Elliott, R. (2006). Client accounts of personal change in process-experiential psychotherapy: A methodologically pluralistic approach. *Psychotherapy Research*, 16(1), 91-105.  
<https://psycnet.apa.org/doi/10.1080/10503300500090993>
- Koffert, T., Luutonen, S., Niemi, P. M., Tiuraniemi, J., Nordström, E., Keinänen, M., & Hietala, J. (2019) Patient-made videos as a tool of self-observation enhancing self-reflection in psychotherapy: Description of the method and a clinical case. *Journal of Contemporary Psychotherapy*, 49, 187-195. <https://doi.org/10.1007/s10879-019-09425-8>
- Liebowitz, M. R. (1987). Social phobia. In D. F. Klein (Ed.), *Anxiety: Mod Trends Pharmacopsychiatry*, 22, 141-173.  
<https://doi.org/10.1159/000414022>

- Loewenthal, D. (2013). Introducing phototherapy and therapeutic photography in a digital age. *Phototherapy and Therapeutic Photography in a Digital Age*, 5-20.
- Markowitz, J. C., Milrod, B., Heckman, T. G., Bergman, M., Amsalem, D., Zalman, H., Ballas, T., & Neria, Y. (2020). Psychotherapy at a distance. *The American Journal of Psychiatry*.  
<https://doi.org/10.1176/appi.ajp.2020.20050557>
- Marques, L., Chosak, A., Simon, N. M., Dieu-My, P., Wilhelm, S., & Pollack M. (2009). Rating scales for anxiety disorders. In L. Baer, & A. M. Blais (Eds.), *Handbook of clinical rating scales and assessment in psychiatry and mental health* (pp. 37-72). Humana Press.
- Martin, R. (2013). Inhabiting the image. Photography, therapy and re-enactment phototherapy. *Phototherapy and Therapeutic Photography in a Digital Age*, 69-81.
- McPherson, S., Wicks, C., & Tercelli, I. (2020). Patient experiences of psychological therapy for depression: A qualitative metasynthesis. *BMC Psychiatry*, 20(313), 1-18.  
<https://doi.org/10.1186/s12888-020-02682-1>
- Munder, T., Flückiger, C., Leichsenring, F., Abbass, A. A., Hilsenroth, M. J., Luyten, P., Rabung, S., Steinert, C., & Wampold, B. E. (2019). Is psychotherapy effective? A re-analysis of treatments for depression. *Epidemiology and Psychiatric Sciences*, 28(3), 268-274.  
<https://doi.org/10.1017/s2045796018000355>
- Neuendorf, K. A. (2017). *The content analysis guidebook*. Sage.
- Nilsson, T., Svensson, M., Sandell, R., & Clinton, D. (2007). Patients' experiences of change in cognitive-behavioral therapy and psycho-dynamic therapy: A qualitative comparative study. *Psychotherapy Research*, 17(5), 553-566. <https://doi.org/10.1080/10503300601139988>
- Norcross, J. C., & Karpiak, C. P. (2017). Our best selves: Defining and actualizing expertise in psychotherapy. *The Counseling Psychologist*, 45(1), 48-60. <https://doi.org/10.1177/0011000016655603>
- Orr, E. M. J., & Moscovitch, D. A. (2010). Learning to re-appraise the self during video feedback for social anxiety: Does depth of processing matter? *Behaviour Research and Therapy*, 48(8), 728-737.  
<https://doi.org/10.1016/j.brat.2010.04.004>
- Rodebaugh, T. L., Heimberg, R. G., Schultz, L. T., & Blackmore, M. (2010). The moderated effects of video feedback for social anxiety disorder. *Journal of Anxiety Disorders*, 24(7), 663-671.  
<https://psycnet.apa.org/doi/10.1016/j.janxdis.2010.04.007>
- Rosenberg, M. (1965). *Rosenberg self-esteem scale: Society and the adolescent self-image*. Princeton University Press.
- Sasangohar, F., Bradshaw, R., Carlson, M. M., Flack, J. N., Fowler, J. C., Freeland, D., Head, J., Marder, K., Orme, W., Weinstein, B., Kolman, J. M., Kash, B., & Madan, A. (2020). Adapting an outpatient psychiatric clinic to telehealth during the COVID-19 pandemic: A practice perspective. *Journal of Medical Internet Research*, 22(10), e22523. <https://doi.org/10.2196/22523>
- Sheibani, H., Sheibani, K. A., Amreei, N. N., & Masrour, M. J. (2019). An investigation of the effects of the acceptance and commitment therapy in groups on the cognitive strategies of emotion regulation and self-control in coronary heart disease patients. *Journal of Medicine and Life*, 12(4), 361-367. <https://doi.org/10.25122/jml-2019-0035>
- Talevi, D., Socci, V., Carai, M., Carnaghi, G., Faleri, S., Trebbi, E., Di Bernardo, A., Capelli, F., & Pacitti, F. (2020) Mental health outcomes of the COVID- 19 pandemic. *Rivista di Psichiatria*, 55(3), 137-144.  
<https://doi.org/10.1708/3382.33569>
- Topor, D. R., AhnAllen, C. G., Mulligan, E. A., & Dickey, C.C. (2017). Using video recordings of psychotherapy sessions in supervision: Strategies to reduce learner anxiety. *Academic Psychiatry*, 41(1), 40-43.  
<https://psycnet.apa.org/doi/10.1007/s40596-016-0605-0>
- Young, J. E. (1990). *Schema-focused cognitive therapy for personality disorders: A schema focused approach*. Professional Resource Exchange
- Van Bronswijk, S., Moopen, N., Beijers, L., Ruhe, H. G., & Peeters, F. (2019). Effectiveness of psychotherapy for treatment-resistant depression: A meta-analysis and meta-regression. *Psychological Medicine*. 49(3), 366-379. <https://doi.org/10.1017/s003329171800199x>
- Wang, C., & Burris, M. A. (1997). Photovoice: Concept, methodology and use for participatory needs assessment. *Health Education & Behavior: The Official Publication of the Society for Public Health Education*. 24(3), 369-387. <https://doi.org/10.1177/109019819702400309>
- Warnock-Parkes, E., Wild, J., Stott, R., Grey, N., Ehlers, A., & Clark, D. M. (2017). Seeing is believing: Using video feedback in cognitive therapy for social anxiety disorder. *Cognitive and Behavioral Practice*, 24(2), 245-255. <https://doi.org/10.1016/j.cbpra.2016.03.007>
- Watts, S. E., Turnell, A., Kladnitski, N., Newby, J. M., & Andrews, G. (2015). Treatment-as-usual (TAU) is anything but usual: A meta-analysis of CBT versus TAU for anxiety and depression. *Journal of Affective Disorders*, 1(175), 152-167.
- Weiser, J. (1999). *Phototherapy techniques: Exploring the secrets of personal snapshots and family albums*. PhotoTherapy Centre.
- Zessin, U., Dickhäuser, O., & Garbade, S. (2015). The relationship between self-compassion and well-being: A meta-analysis. *Applied Psychology: Health and Well-Being*, 7(3), 340-364. <https://doi.org/10.1111/aphw.12051>

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## APPENDIX 1

*Social and Occupational Functioning Scale (SOFAS)* (Goldman et al. 1992)

SOFAS rates a person's social and occupational functioning on a scale from excellent to grossly impaired; the higher the score, the better the person's functional capacity.

*Symptom Checklist (SCL-90)* (Derogatis et al. 1973), Applying the Global Severity Index (GSI) as the average for interpreting SCL-90 scales. According to a Finnish study (Holi et al. 1998), the average GSI scores were 0.60 and 1.56 in a community sample and in a psychiatric open care sample, respectively.

*Beck Depression Inventory (BDI)* (Beck et al. 1961)  
A BDI score of 0–9 suggests no depression, 10–18 mild to moderate, 19–29 moderate to severe, and 30– severe depression (Beck et al. 1988).

*Beck Anxiety Inventory (BAI)* (Beck et al. 1988).  
A BAI score of 0–7 suggests minimal anxiety, 8–15 mild, 16–25 moderate, and  $\geq 26$  severe anxiety (Beck and Steer 1993).

*Inventory of Interpersonal Problems (IIP-32)* (Horowitz et al. 1988)  
Barkham and Hardy (1996) observed that the average total IIP-32 scores were 0.98 and 1.51 for the general population and for patients in open psychiatric care, respectively.

*Liebowitz Social Anxiety Scale (LSAS)* (Liebowitz 1987)  
In the Liebowitz Social Anxiety Scale (LSAS) measuring social phobia and avoidance, we utilized the total score, a score of 50–65 suggesting moderate social anxiety, 65–80 marked, 80–95 severe, and 95 or more very severe social anxiety (Marques et al. 2009).

*Rosenberg Self-Esteem Scale (RES)* (Rosenberg 1965)  
In the Rosenberg Self-Esteem Scale (RES) the maximum score is 40, and the higher the score, the better the respondent's self-esteem.

*Sense of Coherence (SOC)* (Antonovsky 1987)  
Sense of Coherence (SOC) scores vary from 13 to 91. A higher score indicates a greater sense of coherence. A score of 21–59 indicates low, 60–74 average, and 75–91 high sense of coherence (Antonovsky 1993).