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The Therapeutic Usefulness of Video Narrative Playback: A Pilot Comparative Effectiveness Study

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The Therapeutic Usefulness of Video Narrative Playback: A Pilot Comparative Effectiveness Study

Abstract

Background: An individual's video recorded narration and playback allows for cognitive, emotional, and behavioral messages to be experienced from both a subjective and objective viewpoint. These sometimes divergent points of view may become more fully integrated through the use of video narrative playback (VNP).

Objective: The study's purpose was to examine the impact of video narration and playback on insight and selfobject needs. It was hypothesized that VNP would increase insight, and satisfy selfobject needs for the narrator more than video narration alone.

Participants and Methods: 54 adult participants were randomly assigned to an experimental (narrative and playback) or control (narration alone) group. Insight and selfobject needs were quantified using standardized measures. Data were collected at baseline and at two post intervention intervals, over a 2-day period. After each intervention, participants also completed a brief qualitative questionnaire.

Results: Paired-sample *t* tests were conducted to address contamination between conditions, as controls partially viewed narratives. Results indicated a statistically significant increase in both self-reflection and insight for the experimental group after the second day. On both days, avoidance of mirroring (fear of rejection) significantly increased compared to baseline. The control group showed a significant decrease in hunger for twinship (a decrease in alienation) compared to baseline. Findings from the qualitative analysis were consistent for the experimental group. Experimental participants reported increased insight and self-reflection among other benefits.

Conclusions: These preliminary findings suggest that VNP had an overall therapeutic effect. Further research is recommended. Implications for practice and research are discussed.

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THE THERAPEUTIC USEFULNESS OF VIDEO NARRATIVE PLAYBACK: A PILOT
COMPARATIVE EFFECTIVENESS STUDY

Scarlett Leas Robertson, LCSW

A DISSERTATION

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in

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DEDICATION

This dissertation is dedicated to my husband Bill
whose kindness and understanding made this journey possible.

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I would first like to acknowledge and thank my Chair, Phyllis Solomon, Ph.D., for her unwavering support. Her sense of humor, keen intellect, and generosity of spirit were pivotal to this process, and I am immensely grateful to have had the opportunity to work with her on this research. I am also indebted to my other committee member, William Salton, Ph.D., who was always available with encouragement. His perspective helped guide, organize, and deepened my thinking. Thank you to all of the professors in the DSW program and members of my cohort, who have contributed to my learning and experience. Special thanks to Stephanie Nathanson for her good sense and humor. I would also like to acknowledge all the participants whose contributions made this study possible.

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ABSTRACT

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Scarlett Leas Robertson, LCSW

Phyllis Solomon, PhD

Background: An individual's video recorded narration and playback allows for cognitive, emotional, and behavioral messages to be experienced from both a subjective and objective viewpoint. These sometimes divergent points of view may become more fully integrated through the use of video narrative playback (VNP).

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CHAPTER 1: INTRODUCTION

A person experiences himself as a cohesive, harmonious unit in space and time which is connected with its past and directed toward a creative and productive future, [but] only if he has the experience at every stage of his life that certain representatives of his human environment react enthusiastically to him, are available as sources of idealized strength and calm, present in nursing, but essentially always able to understand his inner life more or less correctly so that their reactions and his needs are in tune and he is permitted to comprehend their inner life if he requires such support. (Kohut, 1984, p. 84)

General Introduction

A recurring obstacle in all forms of psychodynamic treatment is the client's inability to recognize and understand the thoughts, behaviors, and emotions that contribute to personal barriers. However, due to advances in technology, video cameras can now be easily employed as therapeutic tools to address such impediments to treatment. *Video narrative playback* (VNP), is a therapeutic process in which an individual narrator videotapes himself/herself talking about a personal conflict or problem and watches the playback of the recording immediately afterward. VNP has the potential to facilitate therapeutic change by providing a vehicle for both self-confrontation and self-reflection. This, in turn, leads to self-discovery, better understanding, and improved psychological functioning. The reflective function of VNP has been conceptualized from a self psychology theoretical framework and will be discussed later in the paper.

In a typical course of psychodynamic treatment, significant time is needed for a client to experience the type of self-discovery that leads to cognitive, affective, and behavioral change. In addition to deepening insight and fostering confidence, VNP may help bring awareness to previously unconscious thoughts, needs, and behaviors by gently undermining defenses and allowing the individual to confront himself/herself using a medium that has become ubiquitous in today's world.

Moreover, self-confrontation techniques have become increasingly necessary, as people are now less accustomed to engaging in self-reflection on their own due to the advent of disruptive technologies. Information exchanges that may once have taken days now take seconds, as applications such as Facebook, Twitter, and Instagram afford anyone with a computing device the ability to share and digest vast amounts of information without deliberation.

While the benefits of technological growth are evident, the rapid and constant consumption of information has also had unintended side effects, including an overall decrease in formal writing proficiency and reduced attention span and patience for self-reflection (Bronowicki, 2014). The quiet contemplation that may once have taken place on the train ride home from work or on a coffee break has been replaced with fervent information access and intake. In fact, according to a study by Wilson et al., (2014) participants left alone in a room, for up to 15 minutes, preferred any kind of external activity over being left in quiet solitude. The majority of subjects preferred to be doing anything rather than nothing; even when that something included electric shock –we have become so accustomed to constant external stimuli that we prefer even negative consequences over self-reflection (Wilson et al., 2014). Although technology has made people less likely to engage in self-reflection, it may also provide a solution in the form of video narrative playback.

The Origins of Video Narrative Playback (VNP)

VNP is a psychotherapeutic intervention that was accidentally discovered by this author. Before sending a videotaped narrative greeting to a friend, I watched the playback and was profoundly affected by the experience. I initially enjoyed the process of recording and felt much less inhibited expressing my thoughts and feelings. However, I was also completely surprised by

what I observed during the playback. Until that moment, I had been completely unaware of how my feelings physically manifested themselves. In a less than 2-minute recording I had gained tremendous insight and perspective regarding how self-conscious I appeared in expressing my feelings and began to associate as to why that might be. Paradoxically, I was both upset by my experience and strangely motivated to change my inability to convey the sincerity of my feelings on video. It was this shift in intention and perspective that caused me to hypothesize that something unconscious had also occurred and to wonder if it might be explained through a self psychology perspective.

Shortly after this playback experience, a once-a-week psychotherapy client of mine reported that she had made a “video entry” wherein she recorded herself speaking about an interpersonal problem she was having and that we had previously explored together in treatment. When she watched the playback of her video, she was stunned by how well she was able to articulate her thoughts and feelings. She commented that she saw aspects of herself and the situation that had previously been underscored in session, but until now could not see for herself. Her confidence had been noticeably buoyed by her video experience, and we were able to explore these insights further. I was excited about the potential of this intervention, but did not feel it would be appropriate to practice with my clients until I had more evidence of its therapeutic benefit.

Months later, I told a colleague about the concept of video narration and playback as a topic for my dissertation. She thought it sounded interesting and was willing to try videotaping herself talking about a current problem. Her response to the exercise was enthusiastic and inspiring, and there was a dramatic shift in her perspective toward herself and her situation. Through the short process of recording herself talking about a problem and watching the

playback, she had gained tremendous insight into how vulnerable she felt and described not wanting to expose herself to a potentially threatening situation. She reported feeling “sympathetic” for herself, and the experience directly influenced her decision not to participate in a potentially unhealthy situation. Her new found self-compassion resulted in an improved ability to assert herself. A sense of compassion for oneself can result in great therapeutic gains in treatment, including self-acceptance and a willingness to change (Neff, Rude, & Kirkpatrick, 2007).

Motivated by these outcomes, I recruited my husband to partake in the videotaping exercise, but he reported no effect. Curious about his response, I asked to view his recording, hoping to catch something he may have missed. As I watched him report his narrative, about an intense personal experience, I noticed he was having difficulty catching his breath. Was his shortness of breath anxiety, or did it have multiple meanings? I found it interesting that after spending so much time together I had never noticed his struggle for breath. Perhaps, VNP could be useful for the therapist’s insights as well, I thought. Ironically, VNP helped diagnose and treat his leaky heart valve, which was the primary reason for his shortness of breath, and which was otherwise out of both his awareness and mine!

My curiosity piqued, and I then turned to the literature. The existing research showed that Carl Rogers (1942) was the first to use photographs with phonographic recording as a learning and therapeutic tool. Video playback¹ (VP) was used to help teach psychotherapeutic technique and help psychiatric students with issues of “personal maladjustments” (Rogers, 1942).

However, it was not until the late 1950s that Cornelison and Arsenian (1960) conducted the first study researching the benefits of “self-image confrontation” using photography and film with

¹ *Video playback* (VP) refers to the tape recording of a personal or interpersonal interaction in which the clinician is always present. *Video narrative playback* (VNP) is a videoed narrative that is executed and reviewed in private by the client. The narrator has the option of sharing the narrative at a later point in time with the clinician.

psychiatric patients diagnosed with psychosis. Despite positive results in reducing symptoms, it took until the late 1960s before VP became more widely used. The existing research showed that video and playback has been used in couples, group, and individual therapy sessions to further insight. In the 1970s, VP was also used to treat addictions (Fuller & Manning, 1973). VP has also been used to study eating disorders (Stein et al., 2006). More currently, many parent–child studies have effectively used video and playback to enhance attunement and underscore the meaning of the nonverbal dialogue (Beebe, 2010). However, beyond these parent–child studies, the majority of the literature is outdated and no studies have employed video and playback in the manner proposed in this study: as a therapeutic tool for the client to use and a potential adjunct to psychotherapy.

Video Narrative Playback (VNP)

VNP is similar to a video journal but focuses specifically on a problematic experience or emotional conflict. The technology needed for this intervention already exists—there is a video camera on almost every smartphone, tablet, and computer made today. VNP is an inexpensive intervention that is widely available, and easy to use for even those less technologically savvy. Additionally, VNP can be adapted and fully integrated into most clinical settings. Clients, who utilize VNP between sessions, have the ability to share their recordings with clinicians for further understanding and insight, a process that may accelerate the treatment. VNP also has the potential to advance the therapeutic process by engaging the reluctant or the increasingly hard-to-reach client by providing him/her with a familiar tool that may foster change and improve insight through self-confrontation.

VNP is the video-recorded narration of a personal problem or experience. The narrator video records his or her story in privacy and immediately watches the playback. The following

day, he or she is required to record and playback the same issue. There are several reasons for the repetition. First, the initial focus on appearance may distract from the experience (Fuller & Manning, 1973; Bene, 2014). Second, some of the research suggests that playback may create a “transference reaction” to oneself (Petitti, 1989; Urwin, 2006). What this means is that viewing one’s image may provoke negative feelings associated to past experiences, but these negative reactions can be reduced by repetition (Geertma & Revitch, 1965; Kubie, 1969). Third, allowing time between playbacks reinforces what has been made conscious and gives the individual time to integrate what has been learned (Gasman, 1992; Kubie, 1969). Last, there are many studies that suggest moving back and forth between moments of focused and unfocused thinking, or sleep, promote insight (Öllinger & Knoblich, 2006; Raichle et al., 2001). The next day requirement allows for sleep to take place between each narration. Wagner et al., 2004 posit that sleep can also facilitate a sudden change in insight

Self-Confrontation

“The only learning which significantly influences behavior is self-discovered self-appropriated learning” (Rogers, 1982, p. 302)

According to *The Medical-Dictionary* (Mosby, 2010) , self-confrontation is defined as “a technique for behavior modification that depends on a patient’s recognition of and dissatisfaction with inconsistencies in his or her own values, beliefs, and behaviors, or between his or her own personal system and that of a significant other” (“Self-Confrontation,” n.d.).

There is a confrontational approach toward the patient in almost every form of psychotherapy (Berger, 1970). For example, the confrontational aspects of the therapist making an interpretation, or choosing which question to ask the client, suggests an element of evaluation in which the patient is asked to respond (Berger, 1970). For such interventions to be of benefit,

the patient must first be willing to confront and recognize inconsistencies in his or her own belief system. Only then does the patient find validity and understanding in such a confrontation.

Therefore it is suggested that all psychotherapeutic interventions, including confrontational ones, require self-confrontation before acceptance and change can begin.

There is significant evidence to support the importance of self-confrontation and personal understanding in facilitating the integration of previously disavowed aspects of the self (Kimball & Cundick, 1977). Without self-knowledge, it is difficult to resolve interpersonal as well as intrapsychic conflict.

The reflective function of the spoken and written narrative may lead to self-confrontation and could both be important to improve insight and develop critical thinking skills. However, only VP offers the additional benefit of literally and psychologically mirroring the narrator's feelings, thoughts, and behaviors using a multisensory approach that informs both conscious and unconscious processes. Lawrence Kubie (1969) posits that one's self image has many conscious and unconscious layers of meaning which are harder to deny and easier to access using VP. VNP offers easy access to the client's self-image for both the clinician and the client.

Gill and Brenman (1959) found that VP confronts the viewer in a manner that produces a "deautomatization" of the usual way of experiencing his or herself. Accordingly, VP forces the viewer to see an image he had learned not to see. This new experience stimulates recall, produces associations, and undermines defenses (Gill & Brenman, 1959, p.178).

Self-Reflection

Reflective functioning has been described as “a sophisticated way of mentalizing” (Alan, Fonagy, & Bateman, p.3, 2008). *Mentalization* is “a way of thinking about feeling and feeling about thinking”; it requires the ability to “see the self from the outside and the other from the inside” (Alan et al., 2008, p. 3). Self-reflection is important for emotional regulation and helps the observer to comprehend and interpret emotional responses and interpersonal misunderstandings (Decety & Lamm, 2006). The self-referential kind of processing that increases emotional awareness has been shown to decrease brain activity in the portion of the brain that enhances emotional regulation (Herwig, Kaffenberger, Jäncke, & Brühl, 2010). Without emotional awareness, these same areas of the brain increase in activity (Herwig et al., 2010).

Watching one’s narrative playback involves exercising one’s reflective functioning. VNP also appears to enhance meta-cognition which is the acknowledgement and regulation of one’s cognitions. Bene (2014) conducted a study with students who were asked to make short videos of self-selected topics. After viewing their videos, quantitative analysis showed an increase in the students’ meta-cognition. The process of self-reflection promotes insight. It requires perspective and an emotional capacity to hold, regulate, and experience one’s feelings and thoughts (Slade, 2005). The capacity to contain both the positive and negative parts of oneself appears to be essential to the ability to engage in meaningful interactions and relationships (Jurist, 2008; Steele, Steele, & Johansson, 2002). VNP facilitates the self-reflective process by distinguishing between the subjective experience felt from within and the objective experience that is seen and heard (George Downing, Ph.D. personal communication, February 15, 2015).

Theoretical Framework

Self psychology is a psychoanalytic theory that is premised on the idea that healthy childhood development is dependent on the responsiveness of significant others during infancy. Self psychology has been built upon the psychological construct of selfobjects. Parental figures serve as selfobjects by providing attunement and empathy for healthy psychological functioning. A failure to meet those needs during childhood may result in deficits in emotional regulation and self-esteem. As a consequence of such poor attunement in childhood, the individual becomes dependent on external “selfobjects” (people, experiences, and culture) to provide those functions (Kohut, 1971, 1977, 1984). Although dependence on selfobjects is reduced as one grows older, the need for self-regulation remains active throughout the life course and the dependence on selfobjects remain to a lesser or greater degree (Rowe & Mac Isaac, 1991). Selfobjects are experienced as part of the self that require sympathy and understanding for intrapsychic structures to develop (Banai, 2005, p. 225).

This study will utilize *self psychology* as a theoretical basis to examine the satisfaction of “selfobject” needs through the use of VNP. When the unconscious satisfaction of these needs are met it enables self-regulation, ambition, productivity, and engenders self-esteem. It is proposed that the reflective function of VNP will be experienced as a selfobject for the narrator.

Purpose

The purpose of this study was to develop a therapeutic tool that can be used as an adjunct to a variety of therapies in which selfobject needs are satisfied and insight is deepened. Alger (1969) found that videotaped sessions that were played back and processed with patients promoted a greater equality within the therapeutic relationship, increased patients’ communication skills, and enhanced their self-awareness. The taped narrative of an individual’s story is intended to bring about conscious and cognitive insight, while fostering the development

of critical thinking and self-understanding for the narrator. The narrative process allows for free association and the uncovering of previously unconscious thoughts, feelings and motivation.

Ronchi and Ripple (1971) asserted that VP increases a belief in the personal consequences of one's behavior and arouses the person into action. Recording a video entry and watching the playback gives the narrator an alternative perspective, externalizes the subject matter, and provides a freedom of expression without worries about grammar or concerns about facing the therapist directly.

Research Question

Research is needed to examine the therapeutic usefulness of VNP. In a majority of past studies, VP was processed with the therapist (Alger, 1969; Alger & Hogan, 1969; Beebe, 2003; Boyd & Sisney, 1967). It remains unclear what brings about therapeutic change—watching the playback of the video or processing the content with the clinician. Thus, the current study will examine only the effects of video narration with and without playback. The specific research question in this study is as follows: Is VNP more effective at satisfying selfobject needs and increasing insight (as measured by the Selfobject Needs Inventory Scale and the Beck Cognitive Insight Scale) for the narrator than video narrative without playback? (Banai, Mikuliner, & Shaver, 2005; Beck, Baruch, Balter, Steer, & Warman, 2004).

Hypothesis

It was hypothesized that the reflective function of VNP will be more effective at increasing insight and meeting selfobject needs for the narrator more than video narratives without playback.

The Significance of VNP

VNP therapy can easily be adapted to almost any therapeutic treatment model. When used as a therapeutic tool, VNP may shorten the length of treatment, help to reduce costs and caseloads, improve outcomes, and increase the availability of treatment. Clients can utilize VNP on their own and choose to share their recordings or perceptions during scheduled therapy sessions. Further, when narratives are shared with the therapist, they can validate the client's perceptions, empower the client, and improve the level of equality within the therapeutic dyad (Alger, 1969). Additionally, the implementation and development of new, empirically supported, and cutting-edge interventions can benefit the social work profession.

The multisensory effect of VNP cannot be duplicated in any other way. When used therapeutically, VNP promotes responsibility on the part of the client who is better able to see and understand things for himself/herself. When narratives are spoken and recorded privately, there can be a disinhibiting effect that for some people can result in a therapeutic breakthrough (Suler, 2005). Privacy creates a sense of safety, which allows individuals to express their vulnerability more freely; and the anonymity of the exercise allows individuals to disclose more than they would face-to-face. This gentle undermining of defenses allows for therapeutic breakthroughs. While reviewing the video, the narrator's feelings, insights, and previously disavowed aspects of his or herself can be acknowledged and integrated. VNP is aligned with self psychology in that they both strive to develop an improved sense of self.

Additionally, video narratives and playback elicit a deeper understanding of one's experience (Alger & Hogan, 1969). Moreover, the use of VNP can be used between sessions and may be helpful to clients who do not have immediate access to therapy. Decreased costs and user-friendly technology make video recording increasingly accessible to a wide variety of populations. The rapidly growing interest in technology for all client populations offers social

workers an opportunity to take the lead with this new, potentially therapeutic tool which could shorten treatment time, increase positive outcomes, and has the potential to decrease caseload pressures.

Review of Video Playback (VP) Research

Past research using VP has varied in design, rigor, and sample size. The bulk of the research is no longer current and no studies to date have addressed the impact of VNP specifically. Early studies assessed the effect of video recording and playback under a variety of circumstances and therapeutic settings, and results were mixed. Further, the few randomized control trials that were available for review provided no additional benefit over standard approaches. However, designs on these studies were problematic.

In their earliest review of the literature, Bailey and Sowder (1970) were especially critical of prior study designs and lack of theory guiding the self-confrontational techniques used in VP. However, they concluded that playback afforded numerous benefits to psychotherapy, such as overcoming resistance, desensitizing phobic responses, tracking progress, effecting behavioral changes, and improving subjective psychiatric ratings. Despite these benefits they claimed empirical evidence was lacking.

Psychiatric Hospital Patients

In one particular study by Moore, Chernelle, and West (1965; as cited in Bailey & Sowder, 1970), hospital patients were divided into an experimental group that watched a VP of their therapeutic interviews and a control group that did not see the playbacks. A chi-square test revealed a “significant difference that favored the playback subjects with subjective psychiatric ratings representing change” (Bailey & Sowder, 1970, p. 131). Bailey and Sowder (1970) dismissed these findings based on methodological deficiencies. They asserted that the primary

intent of Moore et al.'s (1965) study was to measure the effectiveness of the hospital's psychiatric program; VP was only one of several variables investigated and was not the focus of the research.

Bailey and Sowder (1970) were also critical of Boyd and Sisney's (1967) controlled experiment with hospital patients. Boyd and Sisney found that a single exposure to VP decreased pathology and negative attitudes toward the self. By contrast, the control group's level of pathology either remained stable or increased. Bailey and Sowder's criticisms of the study were as follows: (a) small sample size; (b) questionable validity of the interpersonal checklist, which was used as the research instrument; and (c) the potential for interviewer bias (i.e., each interviewer knew the group participants were assigned to). They concluded that the positive results found in previous studies were mitigated by weaknesses in design, and asserted that further research was needed to adequately test the merits of VP.

Hung and Rosenthal (1978) found that VP reduced the discrepancy between subjective self-concepts and objective observations. This finding was substantiated further in other studies, which looked at the improvements in the accuracy of the patients' self-descriptions (Boyd & Sisney, 1967; Braucht, 1969; Gasman, 1992; Parikh, Janson, & Singleton, 2010). Patients who watched playback sessions where they saw themselves interacting, developed a more realistic view of themselves. This change in self-concept correlated with improved therapeutic outcomes.

In other studies, student teachers whose classroom performance was videoed and played back consistently rated themselves higher in ability than student teachers who had not been videotaped (Blount & Pedersen, 1970). Gasman (1992) asked his private patients to watch videotaped sessions unsupervised and away from the office before filling out self-report surveys. Patients who watched the video were compared to patients who had not been assigned to the

intervention. Findings revealed that patients who watched the videotaped sessions showed improved self-esteem, reduced resistance to treatment, and gained an openness and confidence about the process of psychotherapy. Patients also obtained quicker results in treatment, and sustained improvements in mood and symptomology. Gasman (1992) posited that the telling of the story may also be therapeutic in and of itself.

Videotaped narratives and playback used in behavioral modification programs in schools have also been shown to improve self-reflection and affect regulation. They empower individuals and foster a sense of agency by offering choice, flexibility, and the ability to change (Winslade & Monk, 1993).

In a 2008 study, VP produced significant improvement in levels of insight in patients diagnosed with psychotic disorders (Vikram, Yarger, Coxell, & Maier, 2008). Improvement was sustained at the 3-and 6-month mark. Similarly, a meta-analysis conducted by Pijnenborg, van Donkersgoed, David, and Aleman (2013) revealed that all but two studies using playback promoted cognitive insight in patients with psychotic disorders. Davidoff, Forester, Ghaemi, and Bodkin (1998; as cited in Pijnenborg et al., 2013) found that video confrontation was associated with insight. However, the sample size was small and dropout rates were high, which may have skewed the results. When Davidoff, Forester, Ghaemi, and Bodkin (2012) attempted to duplicate the study with a larger sample size, participants did not show improvements in insight; instead, they reported decreased levels of depression after engagement in VP. Pijnenborgs et al.'s (2013) study confirms the need for further research on the effectiveness of VP and its impact on the development of insight.

Arauzo, Watson, and Hulgus (1994) and Gantt and Tinnin (2007) found video therapy to be beneficial in working with both adult survivors of sexual abuse, as well as suicidal patients.

VP has also been effective with participants diagnosed with social anxiety. In a randomized control trial, researchers tested VP on anxious participants required to give a speech. Compared to a control group, participants who used VP showed improved self-perception and reduced anticipatory anxiety prior to making a speech (Orr & Moscovitch, 2010; Rodebaugh, Heimberg, Schultz, & Blackmore, 2010).

Video Journaling Changes Behavior

Video journaling is similar to VNP in that there is a narrative that is explored, though it is different in that a specific problem is not analyzed during playback. Nonetheless, video journaling may share similar benefits. When Melton, Bigham, and Bland (2013) examined the impact of video journaling on stages of behavioral change, their results revealed that 89% of the group using video journaling was in the process of changing (action stage) or had already made the behavioral change (i.e., they were in the maintenance stage of change). This was in contrast to the 63% rate of change in the group that used a more traditional, pen-and-paper method of journaling. Video journals were also used in a phenomenological study of student school counselors during their first year internship. Results showed that video journaling initially increased the students' apprehension, but also encouraged the students' authentic feelings, improved confidence, and deepened their understanding of the work (Parikh et al., 2010). These findings indicate that video journaling improved self-reflective skills, which are linked to improved therapeutic outcomes, and increased sense of agency and resilience (Parikh et al., 2010).

In addition, Bello (2011), a narrative therapist, used VP of past sessions to examine changes in self-concept over the course of treatment. VP allowed clients to view their progress on the screen, which enabled them to witness their own change process. A frequent

explanation for the efficacy of VP is that it allows individuals to externalize the situation, increasing objectivity, recall, and insight (Alger, 1969; Bello, 2011). These findings were consistent with those of Hollander and Moore (1972), who found that the positioning of the actor in relation to the audience promoted different kinds of subjective analyses. The observer looks at the actor's behavior and consequence of his/her action, while the actor is more focused on his/her own motivation. VP allows the participant both points of view and thus offers the viewer a means to examine other dimensions of his/her behavior and thinking.

Potential Risks

Some studies have found that VP can trigger negative emotions (Bello, 2011; Gasman, 1992), though there is some evidence to suggest that repeated viewing of the video can reduce anxiety (Geertsma & Reivitch, 1965). In a review of four studies, Gur and Sackeim (1978) found that VP showed harmful effects ranging from decreased self-esteem to severe depression in three of the four studies. The authors also reported that all four of the studies reviewed had "various methodological weaknesses" (Gur & Sackeim, p. 263). These included an inadequate number of participants, measures with poor psychometric properties, and lack of double-blind designs. Gur and Sackeim recommended exercising caution when using VP to confront patients in therapy.

Faia and Shean (1978) videoed intoxicated patients on admission to the hospital and later replayed the tape to the patient in a group setting. Although the intervention may have been helpful in maintaining sobriety, the method seems punitive as well as an abuse of power. It is an extreme example of how VP could also contribute to an already skewed power dynamic in the therapeutic relationship.

Sigurd Reimers (2001), a family therapist from the United Kingdom and an advocate of VP in family counseling, cautions therapists against the abuse of power when using playback as

an intervention. This can occur if a therapist uses session playback to prove that he or she is right. Reimers (2001) suggested that VP be used instead as an externalizing method to deepen understanding of both the topic and the therapeutic relationship. The collaborative aspect of sharing the video can be beneficial to the relationship and can also lead to therapeutic action (Reimers, 2001).

Similarities to Therapeutic Writing and Journaling

VNP and therapeutic writing may have similar outcomes. Both interventions use self-expression to increase insight and improve psychological health. The advantages of therapeutic writing include a broad range of physical and psychological benefits, including but not limited to, improved health and functioning (Smyth, 1998); effective coping and affect regulation (Pennebaker, 1990); decreased depressive symptoms and enhanced working memory (Klein & Boals, 2001); and an increase in positive emotions, thoughts, and behaviors (Donnelly & Murray, 1991).

Written expression has also been found to improve emotional health (Greenberg, Wortman, & Stone, 1996; Pennebaker & Francis, 1996; Spera, Buhrfeind, & Pennebaker, 1994). Reflective journaling is associated with a decrease in levels of anxiety and improvements in mood. For example, Lepore (1997) found that writing about a future stressful event can reduce symptoms of anxiety by moderating intrusive thoughts. Graf, Gaudianob, and Gellerc (2008) suggested that expressive writing reduces stress levels in individuals who otherwise cannot easily express themselves. Kerner and Fitzpatrick (2007) suggested that “therapeutic writing can facilitate cognitive changes and help in making meaning out of negative experiences” (p. 334). Pennebaker and Graybeal (2001) concluded that journaling can improve interpersonal behaviors and positively impact relationships. Vygotsky (1986) explained how writing helps students better

understand their relationships to themselves and others. Journaling provides an opportunity to connect and find meaning in thoughts, feelings, and actions (Vygotsky, 1986). Journaling has been shown to improve academic (Cameron & Nicholls, 1998) and athletic performance (Scott et al., 2003), as well as working memory (Klein & Boals, 2001).

Conversely, not all studies have found therapeutic writing to be beneficial. Kerner and Fitzpatrick (2007) reported only low to moderate treatment effects in their analysis of studies on therapeutic writing. Niles et al. (2013) found no significant reduction in emotional or physical symptoms. In a meta-analysis, Frattaroli (2006) found that therapeutic writing had positive effects in only six out of 32 studies. According to Stanton and Danoff-Burg (2002), writing has greater benefits for individuals who have difficulty verbally expressing emotion than for those who find it easy (Stanton & Danoff-Burg, 2002). Niles et al. (2013) suggested that individuals who are able to easily express themselves through written word likely benefit more from therapeutic writing than individuals who have difficulty with written expression.

Compared to therapeutic writing, VNP enables participants' easier access to their words regardless of education or writing skills. Furthermore, videotaped communication is conveyed and understood on many levels; Human brains process the sounds of words differently on videotape than when written or read (Fenichel, 2000; Liberman, 1971). VNP allows the viewer a subjective visual, auditory, and kinesthetic perspective that serves to deepen understanding, fosters self-reflection, and improves critical analysis. Additionally, it allows the narrator to identify feelings, behaviors, and distortions that were previously unrecognized in session (Geertsma & Reivich, 1965).

The Need for Further Research

After reviewing 36 studies, Hung and Rosenthal (1978) concluded that VP needed further research, but appeared to aid in family and marital therapy, behavioral programs, and in teaching social skills (Ray & Saxon, 1992; Reimers, 2001; Silk, 1972; Spruill, 1994). VP has been shown to improve the learning of new skills and is particularly useful in supervision with new therapists (Berger, Sherman, Spalding, & Westlake, 1968). VP techniques may change people's perception of themselves and others in a way that encourages them to seek additional psychotherapeutic treatment. VP has its maximum impact when used adjunctively with other therapies, making it an ideal therapeutic tool for a variety of therapeutic modalities (Gasman, 1992; Gur & Sackeim, 1978; Sanborn, Pyke, & Sanborn, 1975). VP is thus a potentially valuable intervention that could be extremely useful for working through many of the obstacles found in clinical social work practice.

More recently, Beatrice Beebe's (2003, 2004, 2010) work with VP with parents and their infants has shown tremendous progress. Beebe films parent-child interactions, and after judicious editing, plays the recording back to the caretaker on a split screen, which shows the faces of both baby and caretaker. The split screen enables the parent to simultaneously view both the action and reaction in the infant-parent dyad. Beebe's research has shown to increase the caretaker's reflective functioning, to reduce projective identification, and improve object relations—all of which unconsciously influence relationships. According to Beebe (2004), VP offers the viewer new ways of relating that were previously out of awareness. Further, Beebe and Lachmann (2014) asserted that both the therapist, as well as the patient, can teach themselves to observe implicit and nonverbal interactions in a way that expands individual awareness.

Virtual Reality

In a recent pilot study by Micheli and Kroeker (2014), a virtual replica of a fragile underwater environment was created (Bailenson, 2014). In a short film that portrayed the effect of acid rain on the environment, “virtual viewers” became the disintegrating and endangered coral reef of the future. As the audience watched and experienced their own demise due to ravaging acid rain, viewers became more sympathetic toward the destruction of the ravaged coral reef environment (i.e., their virtual selves). One week later, these same observers continued to experience an increase in their compassion (Bailenson, 2014). One could claim that the action in the virtual video is reflected in such a way that the viewer’s neurobiology gets triggered and consequently he/she responds from a new sense of felt experience. An observer’s virtual experience stimulates and enhances empathy and compassion for what is occurring and being experienced in vivo. Insight and compassion are thus gained when an individual can see or feel himself/herself in another’s situation. VNP may provide a similar experience. Heinz Kohut (1984) described *empathy* as “the capacity to think and feel oneself into the inner life of another person” (p. 82). Virtual reality manufactures that capacity by placing the viewer in the position of the other. It is known that virtual reality mimics experience. According to Beebe and Lachmann (2013), mimicry facilitates meaning in ways that go beyond linguistic forms of empathy and understanding. VNP is a literal form of mimicry that can facilitate similar outcomes.

Neuroscience

Research in neuroscience provides evidence for the impact of self-reflection on brain activity. Self-reflection promotes changes in brain activity in the medial prefrontal cortex and

leads to increased objectivity with regard to feeling states (Anderson, Koulomzin, Beebe, & Jaffee, 2002; Iacoboni, 2009; Jenkins & Mitchell, 2011). Self-reflection is important to emotional self-regulation (Herwig et al., 2010).

In the early 1990s, a group of Italian neuroscientists studying specific cells in the premotor cortex of the brain in the macaque monkey accidentally discovered brain cells currently known as “mirror neurons.” Individual neurons in the monkeys’ brains were monitored for motor activity. The researchers observed that these specific neurons fired when the monkey would grasp or pick up food (i.e., during action execution; Hickok, 2014; Iacoboni, 2009; van der Kolk, 2014). Surprisingly, the same cells that fired when the monkey picked up or grasped an object were activated when the monkey watched one of the experimenters pick up a piece of food (van der Kolk, 2014). Since then, numerous experiments studying the role of mirror neurons have followed, suggesting that mirror neurons play a role in one’s capacity for empathy, imitation, synchrony, and the development of language (Iacoboni, 2009).

Infant research has demonstrated that interactive mirroring between mother and infant triggers the release of high levels of opiates in the baby’s growing brain and influences positive social interaction (Hoffman, 1987; Panksepp, Nelson, & Siviy, 1994; as cited by Schore, 2003). The nonverbal dialogue that occurs between an infant and caretaker lays down the neural circuitry for affect regulation (Schore, 2003). Mirror neurons may play an important part in the neural circuitry that affects how we regulate and interpret the emotions and behaviors of others as well as ourselves (Decety, & Lamm, 2006). Fortunately, the brain has a lifelong capacity to adapt its neuronal networks by way of experience and social interaction (Shore, 2003).

Despite recent evidence in the literature the function of mirror neurons is disputed by some. Hickok (2014), for example, argued that movements do not define meaning, which is

dependent on context and interpretation. However, Iacoboni (2009) argues this point, stating the ability to interpret the actions of others requires the activation of mirror neurons.

Kilner and Lemon (2013) reviewed 25 studies on mirror neurons and found that they are present in different regions of the motor system of the brain. Ongoing research is needed to determine how these cells connect and function when activated, but it appears that the neuronal system plays a part in how we interpret what we see, feel, and do (Beebe & Lachmann, 2014; Niedenthal, Mermillod, Maringer, & Hess, 2010).

Interestingly, in one study where individuals saw pictures of themselves, mirror neurons became highly activated (Iacoboni, 2009). When fMRIs were used to study the brain activity in children with and without autism, areas of the brain known for empathy became activated when both groups of children saw pictures of their own faces (Uddin, Davies, Scott et al., 2008). However, when pictures of other people were shown to both groups only the brains of individuals without autism became activated, suggesting a significant difference in brain activity between the two groups (Uddin, Davies, Scott et al., 2008). In still another study cited by Iacoboni (2009), fMRIs were used with children with and without autism who were asked to observe and imitate the emotional expression of others. Again, specific areas of the brain known for empathy were activated only in the brains of typically developing children. It appears that just observing the emotions of others stimulates mirror neuron activity and activates empathic feelings (Iacoboni, 2009, p. 165). In another study, Gu et al. (2012) found evidence to support that empathy is mediated in a specific area of the brain called the anterior insular cortex. Empathy deficits in patients with brain damage in this part of the brain were similar to empathy deficits in the brains of individuals diagnosed with borderline personality disorder,

schizophrenia, and conduct disorders including autism spectrum disorders. These findings suggest that empathy occurs in a part of the brain that is part of the mirroring neural system.

Thus it is proposed that the mirroring effect of VNP activates the brain's neuronal system in such a way as to enable self-reflection, regulate emotions, increase empathy, and promote insight. In the future, neuroscience may lend additional evidence to support the function of mirroring selfobjects and may serve to further the theory of self psychology developed by Heinz Kohut decades earlier.

History of Self Psychology

The theory of *self psychology*, developed by Heinz Kohut (1959, 1966, 1971), coincided with post-World War II ideology and America's political agenda to spur economic growth with "the promise of self-liberation through consumption and consumerism" (Cushman, 1995, p. 171). The GI bill provided millions of returning veterans with the opportunity to financially establish themselves with loans for housing, education and help reentering the job market. The effect of the GI bill was a burgeoning of prosperity and growth for the U.S. middle class. As an unintended result, the past values of community gave way to individualism (Cushman, 1995). In fact, Lessem (2005) noted that "it was a time when the middle class became focused on the cultivation of the self, personal happiness and a preoccupation with one's own psychic life" (p. 160). Consumerism strengthened the U.S. economy, but resulted in a profound sense of emptiness and alienation for the individual (Cushman, 1995).

Cushman (1995) posited that Kohut's psychology of the self spoke to "America's newfound narcissism" and made it possible to treat personality disorders that were previously thought untreatable. Kohut's theory was both a developmental and a theoretical model used for psychodynamic treatment. According to Kohut (1984), "empathetic failures" during childhood

produce fragmentation and prevent self-cohesion: “All flaws of the self are due to disturbances of selfobject relationships in childhood” (p. 53). Kohut suggested that empathic reflection is needed to promote self-cohesion. Further, he postulated that empathic failures throughout life promote feelings of inadequacy and humiliation that overwhelm individuals’ sense of self and decrease self-esteem. During treatment, these needs get activated and transferred onto the clinician. When the clinician responds appropriately, this reaction is internalized by the client, eventually undoing previous empathic failures and, in turn, promoting developmental healing, growth, and a cohesive sense of self.

Tripolar Model of the Self

Kohut (1984) used a “tripolar” model to describe the structure and various parts of the self. These distinct poles—named the grandiose self, the idealized parent imago, and the twinship, or alter ego—are associated with specific selfobject needs. Kohut described *selfobjects* as external objects that are experienced as part of the self. These selfobjects are sources of energy and cohesion to the self. Traumatic disturbances in selfobject needs in childhood result in severe pathology, including borderline and narcissistic personality disorders. High-functioning adults also need selfobjects to defend against narcissistic injury (Greenberg & Mitchell, 1983). The overdevelopment of one pole can compensate for deficits in another (Goldberg, 1980). Moreover, the transmission of selfobjects from external sources (i.e., people, objects and/or culture) facilitates the internalization of resources within the individual and creates a newfound sense of cohesion within the self (Kohut, 1984). Internalized selfobjects provide self-soothing to the individual (Baker & Baker, 1987; Kohut, 1984). The internalization of stable selfobjects eventually serves to diminish the intensity of needs and reduce idealization, ultimately resulting in greater health (Baker & Baker, 1987). Accordingly, it is this process that becomes activated in

treatment and can be used therapeutically to help consolidate “fragmentation in the self.” (Kohut, 1984).

Grandiose Self Pole

The first pole, the *grandiose self*, needs a selfobject that will mirror the individual in a way that helps him or her to develop the core of identity and individuality, which in turn brings about vitality, confidence, acceptance, and assertiveness (Kohut, 1984). When these needs are met in treatment, the clinician does not reenact the missing admiration from the client’s childhood, but rather mirrors his or her needs through understanding, acceptance, and empathy. Kohut (1984) understood this mirroring process to activate the client’s previously unexpressed grandiosity and unmet developmental needs from childhood. Once the individual is able to express this aspect of himself/herself, it can be worked through in treatment.

Idealized Parent Imago Pole

The second pole, the *idealized parent imago*, seeks to merge with an idealized other. The experience of merger allows the individual to find similar attributes within himself or herself that calm, uplift, and provide a sense of confidence in his or her goals, values, and strengths (Kohut, 1977). When this same need is transferred onto the clinician, it again can facilitate the potential for development and growth through the therapeutic process.

Twinship Pole

The third pole, the *twinship pole*, sometimes called the alter ego, seeks others who are similar to oneself in order to develop a sense of belonging and legitimacy (Berzoff, Flanagan, & Hertz, 2011). The experience of twinship evolves over a developmental continuum, beginning

from a merged quality and gradually changing into an experience of increased individuation and acceptance of differences (Lessem, 2005). During the Oedipal phase, for example, twinship with the same-sex parent helps consolidate a gendered identity (Kohut, 1984).

The transmission and internalization of all selfobject needs—grandiosity, idealization, and twinship—make it possible to recognize the resources within oneself, and results in an integration and cohesion of the self. When infant needs of any kind have been met, they provide a sense of security and stability, emotional meaning, and affect regulation (Beebe, 2010; Schore, 2003). Further, the caretaker’s cooperative response improves mentalization and reflective functioning (Fonagy, György, Elliot, & Target, 2002). Kohut (1984) postulated that individuals who have been severely deprived of selfobject needs will defend against potential frustration and hurt through avoidance and denial of those needs (Kohut & Wolf, 1978). In sum, Kohut described individuals’ selfobject needs throughout the course of life. The adult self may exist in varying degrees of cohesion, and adults may use symbols, metaphors, objects, as well as other people to meet selfobject needs.

Application of Kohut’s Theory to VNP

The three poles of the tripartite self and their selfobject needs may be internalized through the use of VNP. Kohut (1971) suggested that “optimal frustration” is needed for growth and self-reliance (p.6). Frustration is inherent in the patient’s internalization of the selfobject function and the missing self-structure (Kohut, 1971, p. 6). Kohut (1971) referred to these phenomena as “transmuted internalizations” (p.49). This same process of growth occurs through empathic attunement as well as minor failures in attunement (Kohut, 1984, p. 70).

VNP has the potential to provide an optimal degree of balance between gratification and frustration. Playback may not always replicate the function of the selfobject exactly but it is

similar enough to provide an opportunity for growth and self-cohesion. When the playback is reviewed and analyzed with a clinician it may serve as an additional opportunity to create “transmuted internalizations” of selfobjects within the therapeutic relationship (Kohut, 1971).

VNP may impact the poles of the self in different ways. The grandiose pole requires mirroring selfobjects to feel strength, calm, and a sense of wellbeing. The mirroring image of the self during playback is not only a symbolic representation, but also a literal selfobject that can be internalized and realized. Kohut (1971) described the scene from a movie he had watched to demonstrate this phenomenon. He stated that in the film, “A blind girl responds with undisguised narcissistic delight when she suddenly recognizes that it is her own musical performance that is played back to her via a tape recorder. Here the tape recorder fulfills the function of a mirroring selfobject” (Kohut, 1971, p. 118). By association, VNP is an extension of Kohut’s explanation of the mirroring selfobject.

The idealized parental imago pole represents the need to experience merger with an idealized person, or thing in order to gain a sense of confidence, hope, ambition and productivity. Through repeated playback, participants may begin to identify with the more idealized parts of themselves, thereby meeting the needs of this pole.

Lastly, a relationship with the twinship pole or alter ego brings security, belonging, and acceptance. VNP meets the needs of the twinship pole by ending the search for a similar other. Self psychology posits that healthy selfobjects must be available for therapeutic change to occur. VNP may help to meet selfobject needs, thus facilitating therapeutic change. The playback is an extension of the self and it is believed can function similarly if not literally to a selfobject.

VP has been used in a variety of ways, but the private use of video journaling and playback has not yet been studied. Previous studies have varied in design, rigor, and sample size,

and the majority of the research conducted is not current or did not examine the impact of VP on selfobject needs. Further, earlier studies generally had mixed results. Nonetheless, some research has demonstrated that it is helpful for patients to watch and process VP with their therapist (Alger, 1969; Ray & Saxon, 1992). VP appears to have aided in family and marital therapy, behavioral programs, and in teaching social skills (Ray & Saxon, 1992; Reimers, 2001, Silk, 1972; Spruill, 1994). VP has also had a significant impact on self-awareness when used with different types of patients, including people diagnosed with schizophrenia (Berger, 1978; Stoller, 1968; Vikram et al., 2008).

CHAPTER 2: RESEARCH DESIGN AND METHODS

Study Design

This pilot comparative effectiveness study examined the efficacy of a new intervention intended to increase insight and satisfy selfobject needs. Participants were randomized into one of two groups: (a) VNP (experiment condition), or (b) video narrative without playback (control condition).

Participants and Recruitment

The sample consisted of 54 volunteer participants. The investigator worked collaboratively with psychodynamic training institutions and universities to recruit participants for the study. Recruitment was also conducted through word of mouth, flyers (see Appendix A), social media sites, and email announcements. The sample was reflective of individuals who would be professionally or personally interested in such an intervention. Individuals were eligible to participate in the study if they were 18 years or older and owned a smartphone, computer, or tablet with a camera. Participants who completed the study had the option of entering a raffle to win a \$200 gift certificate from Amazon. Respondents were given a link to access and participate anonymously in the study. Enrollment was conducted on a rolling basis from October 16, 2014 through December 12, 2014.

Ethical Considerations

This study (No. 821112) was approved by the University of Pennsylvania's Institutional Review Board. The primary researcher completed the human subjects training course (CITI) and passed the required examination. This study followed the required procedures to protect human subjects. All efforts were made to protect participants' identity. All study participants provided informed consent prior to participation in the study. Participants were informed about the

procedures taken to protect their confidentiality since all data collected remained anonymous. Responses could not be linked to individual participants. Participants were asked to destroy their videos after completing the last step of the study.

It is believed that the knowledge gained from this study outweighed any potential risk. Few studies have examined VP and none have examined the effects of watching the playback of a personal narrative. In previous studies, participants reported that VP initially caused some anxiety, but that it did not persist over time; in some studies, participants' reported that their anxiety actually reduced over time (Gantt & Tinnin, 2007; Gur & Sackeim, 1978; Heilveil, 1983; Orr & Moscovitch, 2010; Rodebaugh et al., 2010). Participants were asked to videotape themselves in private, and delete their videos after they had finished each day of the study. Questions were phrased broadly so that participants could choose how much they wanted to share. Participants also volunteered for this study and knew that they could withdraw at any time.

Procedure

Data were collected using Qualtrics, an online survey software program. Participants were given a link to complete the survey. Prior to completing the survey, each participant was asked to provide informed consent (see Appendix B). If they did not provide consent or were not 18 years or older, they were not able to access the rest of the survey. Participants were required to fill out a basic demographic form (see Appendix C) with items on age, gender, race/ethnicity, and history of psychotherapy before being blindly randomized into one of two groups. The experimental group was assigned the intervention video narration with playback. The control group was assigned to video narration without playback. Outcome from self-reports were collected at baseline (prior to random assignment) and at two post intervention intervals, over a 2-day period. Measurements were taken at (a) baseline, (b) post-Day 1, and (c) post-Day 2 (see

Appendix D). As stated earlier the justification for the two day requirement was that previous research indicated that potentially negative reactions could be reduced over time (Geertma & Revitch, 1965; Kubie, 1969), positive reactions reinforced (Gasman, 1992; Fuller & Manning, 1973), and moments of insight prompted and deepened (Öllinger & Knoblich, 2006; Raichle et al., 2001).

Day 1

Participants completed baseline measures for both insight and selfobject needs. They were then randomly assigned to either the control or experimental group. Each group was given a different intervention. Experimental Group 1 ($n = 29$) used VNP; Control Group 2 ($n = 25$) used video narrative without playback. Internal validity was strengthened by random assignment and through baseline measures. Participants in both groups were instructed to find a private place where they could spend no more than 5 minutes describing their feelings and thoughts about a personal conflict or problem. They were instructed to use their video camera (on their computer, smart phone, or tablet) to record themselves as they described their current conflict or problem. When they were finished filming their narrative, participants then completed two self-report scales as well as a brief qualitative survey. Only the experimental group was asked to watch the playback.

At the end of the survey, participants were given a new link to access the survey the next day. Participants were also assigned a four-digit identification number, which they entered on the survey the following day. Identification numbers allowed the researcher to determine group assignment and link responses from each day to individual respondents.

Day 2

On Day 2, participants in both groups entered their identification numbers and were asked to follow the same steps as the day before. Again only the experimental group was asked to watch the playback. After each group had completed their video assignment they were asked to answer the qualitative and quantitative questions for the final time. When they had finished they were told to delete their video.

Data on Refusers and Attrition

One hundred twenty-seven participants gave their consent to participate in the study. Four respondents went to the site but did not give their consent to participate. An additional 43% of the sample either dropped out or was excluded due to missing data. The largest drop in retention (33 participants) occurred when participants were asked to videotape themselves on Day 1. Fifteen participants completed Day 1 but not Day 2, and were consequently excluded.

According to Chudoba (2011), surveys with more than 15 questions have about a 5 to 20% attrition rate. The attrition rate in this study was likely much higher due to participants' reluctance to videotape themselves, the two day requirement, the number of questions, and technological problems with the site.

Implementation and Contamination Issues

Many participants experienced technological difficulties and were unable to toggle between the camera and the survey on the same device. After one participant contacted the researcher complaining of technical problems, the directions were changed on the Qualtrics site. Participants were instructed to take the survey on the computer and to film the narrative on their smartphone or tablet. Retention improved dramatically after this change, confirming the extent of

this technical problem. However, the process became quite cumbersome for participants who needed to use two devices.

Fidelity Assessment

The control group was asked not to watch the video but instead to go immediately to the survey after recording their narration. In an effort to improve fidelity, all the participants were asked if they watched the video. Results showed that 76% of the control group reported having watched at least a portion of their playback. Many did not give a reason, but some said they “forgot that they weren’t supposed to” or that they “only watched a portion of it.” Thus, the control group appeared to have been compromised and design was contaminated. To address contamination, paired sample *t* tests were used to compare scores during different intervals within each group—control and experimental—instead of directly comparing groups.

Quantitative Measures

Beck Cognitive Insight Scale (BCIS)

The BCIS is a 15-item self-report measure comprised of two subscales (see Appendix C). To calculate a score for insight, the sum total of the six-item Self-Certainty subscale (Items 1, 3, 4, 5, 6, 8, 12, and 15) is subtracted from the nine-item Self-Reflection subscale (Items 2, 7, 9, 10, 11, and 13). According to Beck et al. (2004), a higher capacity for self-reflection and less self-certainty are indicative of greater insight. In several studies, the BCIS has been shown to be reliable, and has demonstrated convergent, discriminate, and construct validity (Martin, Warman, & Lysaker, 2010; Riggs, Grant, Perivoliotis, & Beck, 2010). Minimally acceptable levels of internal consistency (Self-Reflectiveness: $\alpha = .68$; Self-Certainty: $\alpha = .60$) were found for a mixed sample of patients (Beck et al., 2004). The BCIS was originally validated with a

quantitative sample of patients diagnosed with depression, schizophrenia or psychosis, but it has also demonstrated both reliability and validity in non-psychotic populations (Martin et al., 2010).

Cronbach's alpha scores for the self-certainty subscale consisted of 8 items ($\alpha = .69$), and the self-reflectiveness subscale consisted of 6 items ($\alpha = .75$). The Beck Cognitive Insight Scale demonstrated acceptable levels of internal consistency (15 items; $\alpha = .72$) in this study.

Selfobject Needs Inventory (SONI)

The second measure, the SONI, was developed by Banai et al. (2005). The SONI is a 38-item self-report instrument that measures whether an individual is seeking to meet, avoid, or deny selfobject needs (see Appendix C). These needs were broken down into five quantifiable factors for analyses. The factors as reported by Banai et al. (2005) are as follows: Factor 1 included eight items that measured a "hunger for twinship" (e.g., "I feel better when I and someone close to me share similar feelings toward other people," "It is important for me to feel that a close friend and I are 'in the same boat'"). The second factor included 11 items that measure an avoidance of the selfobject needs for idealization and twinship (e.g., "I would rather not belong to a group of people whose lifestyle is similar to mine," "I find it difficult to accept guidance even from people I respect"). The authors of the scale reported that an avoidance for idealization and twinship were indistinguishable and therefore were measured together. Factor 3 included seven items that assessed the need for idealization (e.g., "I am attracted to successful people," "I feel better about myself when I am in the company of experts"). Factor 4 included six items that were constructed to gauge the need for mirroring (e.g., "I do not function well in situations where I receive too little attention," "I feel hurt when my achievements are not sufficiently admired"). Finally, Factor 5 included six items which assess avoidance of mirroring

(e.g., “I do not really care what others think about me,” “I do not need support and encouragement from others).

All the items are rated on a 7-point Likert scale (1 = *not at all*, 7 = *very much*); 21 of these items measure the hunger for selfobject needs and 17 items measure avoidance or denial of selfobject needs. Items for each factor are summed and divided by the item number to calculate the mean. The mean of each factor constitutes a separate score (Banai et al., 2005). The authors reported that the SONI has demonstrated internal consistency reliability. Alpha coefficients for mirroring, idealization, and twinship ranged from .84 to .87. The SONI demonstrated test–retest reliability over a 2-month period. The SONI also demonstrated concurrent validity with Robbins and Patten’s scale of Superiority and Goal Instability and Lee and Robbin’s Lack of Connectedness, as well as discriminant validity (Banai et al., 2005).

For this study, Cronbach’s alpha coefficients for each factor were as follows: Hunger for Twinship, $\alpha = .88$; Denial or Avoidance of Idealization or Twinship, $\alpha = .78$; Hunger for Idealization, $\alpha = .79$; Hunger for Mirroring, $\alpha = .66$; and Avoidance for Mirroring, $\alpha = .76$.

Qualitative Measures

Qualitative questions were designed to better understand different perspectives and variations in outcomes, to locate themes, to generate new ideas, and to provide an in-depth description of the phenomenon (Zhang & Wildemuth, 2009). The open-ended questions helped to explore participants’ subjective view of the process and their perceptions of the effectiveness of the intervention. Results from the qualitative questions may help refine the intervention for future studies. Participants were asked the following questions:

- What was notable for you about the process?

- Describe your thoughts and feeling as you watched the playback. (experimental group only)
- Describe your feelings and thoughts as you made the video. (control group only)
- What, if anything, did you learn about yourself or the situation you described?
- Were you able to watch the video?

On the second day both groups were asked an additional question:

- Did anything change in the telling of the story from the first to second time (thoughts, feelings, the narrative, etc.)?

Data Analysis

Quantitative Analysis

Chi-square and paired sample *t* tests were conducted to determine significant insight and selfobject needs within the two groups (VNP and VNP without playback). Due to contamination, paired sample *t* tests were used to compare scores during different intervals within each group, as opposed to comparing the two groups to each other. The statistical significance level was set at $p < .05$.

Qualitative Analysis

A qualitative content analysis was used to analyze the data on an ongoing basis. The reactions of both groups were coded line by line into meaningful and relevant open codes, using both the manifest and latent content. In the next level, axial coding helped to join similar codes when relevant while extraneous codes were deleted. Axial coding helped further connections and finally selective codes became relevant and meaningful themes (Creswell, 2007). Memo writing was used at each stage of the coding process, which helped to describe and develop some of the concepts (Saldaña, 2003). After all the responses had been coded, a research assistant with a BA

in psychology was given all the responses to code blindly; this was another form of triangulation and it was used as a means of establishing intercoder agreement (Campbell, Quincy, Osseman, & Pedersen, 2013) and assisted in improving trustworthiness of the data (Padgett, 1998). A new code, *appearance*, was discovered and eventually collapsed into the larger theme Self-Image.

There also seemed to be a discrepancy in the frequency of occurrence for one theme, Self-Compassion; however, when discussed with the assistant researcher, it was determined to be a miscount. In the end, 91% of the coding was agreed upon, establishing intercoder reliability (Campbell et al., 2013). Moreover, disconfirming evidence that did not correspond to the researcher's interpretation was searched for throughout the analysis and improved both reliability and validity (Lincoln & Guba, 1986). To reduce bias and improve reliability a peer review of the data analysis process was also conducted by a colleague from the DSW program (Rubin & Babbi, 2011).

Reactivity

As stated earlier in this paper, the researcher previously had a positive experience with the intervention. To control for researcher bias, self-reflection and triangulation were used in this study. The utilization of an independent coder with a different theoretical perspective allowed for inconsistencies in the data to emerge. Further, the mixed-method approach allowed for comparison of quantitative and qualitative data.

CHAPTER 3: RESULTS

Quantitative Analysis

A total of 54 volunteers completed their participation in their assigned groups over a 2-day period. Grouping by condition is outlined in Table 1. Participants were randomly assigned to one of two conditions: (a) VNP (experiment condition), or (b) video narrative without playback (control condition).

Table 1

Grouping by Condition

	<i>n</i>	%
Experimental	29	53.7
Control	25	46.3
Total	54	100.0

Characteristics of Two Groups

A chi-squared test was used to examine differences between the two groups in terms of demographic characteristics to ensure equality of groups. Table 1 presents the grouping by condition. Table 2 presents the results of the chi-squared tests. The chi-square was not statistically significant for age, $\chi^2(4, N = 54) = 1.24, p = .87$. Thus, there were no statistically significant differences between the two groups based on age. The chi-square test was not statistically significant for gender, $\chi^2(1, N = 54) = 0.02, p = .56$. Thus, there were no statistically significant differences between the two groups based on gender. The chi-square value was not statistically significant for race, $\chi^2(3, N = 54) = 4.85, p = .18$. This means that there were no statistically significant differences based on race.

For psychotherapy, the chi-square test was not significant, $\chi^2(1, N = 54) = 0.79, p = .27$. There were no statistically significant differences between the two groups in terms of having

been to psychotherapy. Thus, there were no statistically significant differences between the groups in terms of age, gender, race, or psychotherapy experience. We can therefore assume that the two groups were equal on these characteristics at baseline.

Baseline Comparison

Baseline test scores were compared for the two groups. Independent sample *t* tests were used to examine group differences in baseline scores. Table 3 shows the baseline scores for each group. The results of the independent sample *t* tests indicate that there were no statistically significant differences between the two groups. Thus, we can assume that two groups had the same levels of insight, and selfobjects needs at baseline.

Effect of Intervention

To examine the effectiveness of the intervention (VNP) on the dependent variables (insight and selfobject needs), paired-samples *t* tests were used to compare (a) baseline score and post-Day 1 scores, (b) baseline score and post-Day 2 scores, and (c) Day 1 and Day 2 scores for each group. Comparisons for the experimental group are summarized in Table 4.

First, scores for the experimental group were compared. Results of the paired-sample *t* tests indicate that there were statistically significant differences for the seven comparisons; there was a marginal difference for one comparison. Comparing baseline to post-Day 1, SONI Factor 5, Avoidance of Mirroring significantly increased. Comparing baseline to post-Day 2, Self-Reflectiveness significantly increased. Self-Certainty marginally decreased.

Table 2

Chi-Square Tests for Demographic Variables

		Group			χ^2	<i>p</i>
		Experimental	Control	Total		
Age					1.24	.87
18–15	Count	2	1	3		
	% within Group	7.1%	4.0%	5.7%		
26–34	Count	2	3	5		
	% within Group	7.1%	12.0%	9.4%		
35–54	Count	8	5	13		
	% within Group	28.6%	20.0%	24.5%		
55–64	Count	12	13	25		
	% within Group	42.9%	52.0%	47.2%		
65 or over	Count	4	3	7		
	% within Group	14.3%	12.0%	13.2%		
Total	Count	28	25	53		
	% within Group	100.0%	100.0%	100.0%		
Gender					0.02	.56
Male	Count	17	15	32		
	% within Group	60.7%	62.5%	61.5%		
Female	Count	11	9	20		
	% within Group	39.3%	37.5%	38.5%		
Total	Count	28	24	52		
	% within Group	100.0%	100.0%	100.0%		
Race					4.85	.18
White/Caucasian	Count	24	24	48		
	% within Group	85.7%	96.0%	90.6%		
Other	Count	4	1	5		
	% within Group	14.3%	4.0%	9.4%		
Total	Count	28	25	53		
	% within Group	100.0%	100.0%	100.0%		
Psychotherapy					0.79	.27
Yes	Count	19	14	33		
	% within Group	67.9%	56.0%	62.3%		
No	Count	9	11	20		
	% within Group	32.1%	44.0%	37.7%		
Total	Count	28	25	53		
	% within Group	100.0%	100.0%	100.0%		

Table 3

Baseline Comparison

Variables	Group Mean (<i>SD</i>)			<i>t</i>	<i>P</i>
	Experimental	Control	Total		
Self-Reflectiveness	23.22 (3.36)	22.17 (2.07)	22.73 (2.85)	1.327	.191
Self-Certainty	12.44 (2.53)	11.83 (2.12)	12.16 (2.35)	0.926	.359
Cognitive Insight	10.81 (4.93)	10.52 (3.21)	10.67 (4.17)	0.237	.814
Hunger for Twinship	4.00 (1.13)	3.72 (1.08)	3.87 (1.10)	0.902	.371
Denial or Avoidance of Twinship	2.31 (0.72)	2.07 (0.76)	2.20 (0.74)	1.178	.244
Hunger for Idealization	3.53 (1.18)	3.48 (0.96)	3.50 (1.07)	0.193	.848
Hunger for Mirroring	4.03 (1.00)	3.82 (0.75)	3.92 (0.88)	0.850	.399
Denial or Avoidance of Mirroring	2.81 (0.94)	3.23 (0.80)	3.01 (0.90)	-1.703	.100

* $p < .1$. ** $p < .05$.

Table 4

Comparisons for Experimental Group

	Variables	Mean (SD)		<i>t</i>	<i>p</i>
		Baseline	Post-Day 1		
Comparison 1: Baseline vs. Post-Day 1	Self-Reflectiveness	23.27 (3.42)	23.65 (4.43)	-.866	.395
	Self-Certainty	12.44 (2.53)	12.00 (2.48)	1.162	.256
	Cognitive Insight	11.12 (4.76)	12.00 (5.94)	-1.330	.196
	Hunger for Twinship	3.97 (1.15)	4.02 (1.05)	-.514	.612
	Denial or Avoidance of Twinship	2.31 (.74)	2.46 (.82)	-1.580	.126
	Hunger for Idealization	3.53 (1.18)	3.65 (.92)	-.864	.396
	Hunger for Mirroring	4.03 (1.00)	4.08 (.86)	-.461	.649
	Denial or Avoidance of Mirroring	2.84 (.96)	4.00 (1.06)	-3.527	.002**
Comparison 2: Baseline vs. Post-Day 2		Baseline	Post-Day 2		
	Self-Reflectiveness	23.58 (3.37)	25.17 (4.63)	-2.658	.014**
	Self-Certainty	12.44 (2.53)	11.67 (2.25)	1.876	.072*
	Cognitive Insight	11.42 (4.62)	13.79 (5.76)	-2.871	.009**
	Hunger for Twinship	3.91 (1.15)	4.05 (1.25)	-.856	.400
	Denial or Avoidance of Twinship	2.31 (.74)	2.44 (.92)	-1.345	.190
	Hunger for Idealization	3.46 (1.15)	3.54 (1.06)	-.560	.581
	Hunger for Mirroring	4.09 (1.01)	3.93 (.74)	1.025	.316
Denial or Avoidance of Mirroring	2.81 (.94)	3.25 (.73)	-3.115	.004**	
Comparison 3: Post-Day 1 vs. Post-Day 2		Post-Day 1	Post-Day 2		
	Self-Reflectiveness	24.40 (4.66)	25.52 (4.86)	-2.076	.049**
	Self-Certainty	12.14 (2.54)	11.82 (2.35)	1.140	.264
	Cognitive Insight	12.64 (6.13)	14.12 (5.87)	-2.092	.047**
	Hunger for Twinship	3.96 (1.10)	4.09 (1.29)	-1.203	.242
	Denial or Avoidance of Twinship	2.48 (.83)	2.46 (.93)	.267	.792
	Hunger for Idealization	3.70 (.94)	3.60 (1.04)	1.220	.233
	Hunger for Mirroring	4.03 (.92)	3.85 (.77)	1.602	.122
Denial or Avoidance of Mirroring	4.02 (1.05)	3.32 (.78)	2.589	.016**	

* $p < .1$. ** $p < .05$.

Cognitive Insight and Avoidance of Mirroring significantly increased. Comparing post-Day 1 to post-Day 2, Self-Reflectiveness and Cognitive Insight significantly increased. Avoidance of Mirroring significantly decreased.

Second, scores for the control group were compared (see Table 5). Results of the paired-sample *t* tests indicated that there was a statistically significant difference for one comparison and marginal difference for one comparison. Comparing baseline to post-Day 1, Hunger for Twinship significantly decreased. Comparing baseline to post-Day 2, SONI Factor 1 Hunger for Twinship also significantly decreased.

Summary of Quantitative Findings

The experimental group shows a significant increase for Self-Reflection and a marginal decrease in Self-Certainty post intervention on Day 1. Insight significantly increased post-intervention Day 2. Findings also indicate an increase in the avoidance of mirroring selfobjects (see Table 6). Although avoidance for mirroring decreased over time, the increase in contrast to baseline remained significant the second day. The control group did not experience significant avoidance for mirroring. Avoidance of mirroring is defined as a fear of rejection that develops in early childhood.

Another factor, Hunger for Twinship, had a significant decrease on both days for the control group. Kohut (1971) defined this developmental need as a desire to be similar to others. A decrease in hunger does not equate to an avoidance of twinship, but instead indicates an improved sense of self and belonging, as well as an ability to connect with others (Banai et al., Shaver 2005).

Table 5

Comparisons for Control Group

Variables		Mean (<i>SD</i>)		<i>t</i>	<i>p</i>
		Baseline	Day 1		
Comparison 1: Baseline vs. Post-Day 1	Self-Reflectiveness	22.17 (2.07)	22.21 (2.48)	-0.070	.945
	Self-Certainty	11.73 (2.12)	11.95 (2.60)	-0.547	.590
	Cognitive Insight	10.50 (3.29)	9.95 (3.69)	0.843	.409
	Hunger for Twinship	3.69 (1.09)	3.45 (1.18)	2.731	.012**
	Denial or Avoidance of Twinship	2.06 (0.78)	2.09 (0.92)	-0.341	.736
	Hunger for Idealization	3.48 (0.96)	3.49 (0.95)	-0.215	.831
	Hunger for Mirroring	3.83 (0.76)	3.72 (0.68)	0.969	.343
	Denial or Avoidance of Mirroring	3.25 (0.82)	3.45 (1.18)	-0.606	.550
			Baseline	Day 2	
Comparison 2: Baseline vs. Post-Day 2	Self-Reflectiveness	22.05 (2.08)	22.27 (2.49)	-0.344	.734
	Self-Certainty	11.73 (2.12)	12.36 (2.64)	-1.578	.129
	Cognitive Insight	10.62 (3.32)	9.95 (3.24)	0.933	.362
	Hunger for Twinship	3.72 (1.08)	3.43 (1.29)	2.411	.024**
	Denial or Avoidance of Twinship	2.07 (0.76)	2.18 (0.86)	-1.281	.213
	Hunger for Idealization	3.48 (0.96)	3.45 (0.92)	0.297	.769
	Hunger for Mirroring	3.82 (0.75)	3.78 (0.70)	0.278	.783
	Denial or Avoidance of Mirroring	3.23 (0.80)	3.25 (0.70)	-0.146	.885
			Day 1	Day 2	
Comparison 3: Post-Day 1 vs. Post-Day 2	Self-Reflectiveness	22.00 (2.48)	22.27 (2.49)	-0.539	.596
	Self-Certainty	11.83 (2.62)	12.13 (2.81)	-0.585	.564
	Cognitive Insight	10.32 (3.98)	10.32 (3.60)	0.000	.999
	Hunger for Twinship	3.45 (1.18)	3.37 (1.28)	0.729	.473
	Denial or Avoidance of Twinship	2.09 (0.92)	2.17 (0.88)	-1.195	.244
	Hunger for Idealization	3.49 (0.95)	3.45 (0.92)	0.494	.626
	Hunger for Mirroring	3.72 (0.68)	3.79 (0.71)	-0.811	.426
	Denial or Avoidance of Mirroring	3.45 (1.18)	3.23 (0.71)	0.779	.444

* $p < .1$. ** $p < .05$.

Table 6

Summary of Quantitative Findings

Variables		Group	
		Experimental	Control
Baseline	Hunger toward twinship	—	Significantly decreased
vs. Post-Day 1		Significantly increased	
	Avoidance of mirroring	Significantly increased	—
	Self-Reflectiveness	Significantly increased	—
Baseline	Self-Certainty	Marginally decreased	—
vs. Post-Day 2	Cognitive Insight	Significantly increased	—
	Hunger toward twinship	—	Significantly decreased
	Avoidance of mirroring	Significantly increased	—
Day 1	Self-Reflectiveness	Significantly increased	—
vs. Post-Day 2	Cognitive Insight	Significantly increased	—
	Avoidance of mirroring	Significantly decreased	—

Qualitative Findings

Table 7 presents the frequency and percentage of participants from each group who reported subjective findings over time. Both groups expressed similar experiences, but the frequency differed for each group. The control group watched at least some of the playback, which might account for similarities in themes and differences in frequency.

Emergent Themes

The major themes that emerged from the coding of the data fell into six different categories, and represent participants' subjective responses to the intervention. They include Positive Affect, Insight, Self-Image, Negative Affect, Defense Mechanisms and Motivation. Specific codes associated with these themes are noted in the following sections using illustrative quotes to underscore their meaning. Some themes had overlap with one another and appeared to be interrelated. For example, newfound compassion for oneself or another person requires a substantial shift in perspective and can lead to insight. Quotes have been written verbatim except where noted.

Table 7

Frequency of Themes

Variables		Day 1		Day 2	
		<i>n</i>	%	<i>n</i>	%
Experimental Group					
Comparison: Post-Day 1 vs. Post-Day 2	Positive Affect	22	76	28	97
	Insight/Self-Reflection	19	66	22	76
	Self-Image	15	52	9	31
	Negative Affect	7	24	1	3
	Defense Mechanism	7	24	9	31
	Motivation	8	28	9	31
Control Group					
Comparison: Post-Day 1 vs. Post-Day 2	Positive Affect	22	88	14	56
	Insight/Self-Reflection	10	40	15	60
	Self-Image	7	28	7	28
	Negative Affect	10	40	4	16
	Defense Mechanism	9	36	6	24
	Motivation	5	20	2	8

Positive Affect

Positive affect had the highest frequency of all the major themes, and may have been the greatest therapeutic effect. It is well-known that how one feels contributes to all forms of health (Fredrickson & Losada, 2005). Increased self-esteem, self-acceptance, compassion, and empathy were included into the overall theme of Positive Affect. These feelings increased over time, but with greater frequency for the experimental group. Healthy self-esteem can lead to improved mental health and social interaction. According to Kohut (1978), improved self-esteem contributes to affect regulation and the development of a secure sense of self. By contrast, poor self-esteem is associated with a broad range of mental health problems, such as depression, anxiety, eating disorders, and has been associated with criminal activity, substance abuse, and violence (Mann, Hosman, Schaalma, & de Vries, 2004).

Compassion for oneself was another concept that was collapsed into the larger theme, Positive Affect. Self-compassion has been shown to help defend against anxiety and is associated with psychological wellness (Krakovsky, 2012; Neff et al., 2007). Without self-compassion it is difficult if not impossible to have genuine empathy for others (Neff et al, 2007). Self-compassion promotes empathy which was also identified in the responses. The following quotes appear to have increased ego strength as well as self-compassion. Like most of the examples, there were overlapping concepts within the category. For example, a negative attitude about appearance did not seem to diminish a sense of confidence and compassion for oneself as stated by the following individual:

I was really surprised at how old and tired I look, as I'm not used to seeing myself on video. However, I was also pretty articulate and I have a good sense of what I am struggling with. I have more compassion for myself than I realized as I watched myself.

After watching the playback, many participants stated that they felt better or were surprised about how they presented themselves. They expressed confidence in their ability to interact with the world. One male who continued to gain an increase in confidence each day of the study demonstrated the ability for self-reflection, a gain in insight, a deepening understanding, as well as an increase in mood:

When watching myself, I was struck by how articulate I was in explaining the issue. . . I felt empowered while watching the video. My thoughts were focused more on seeing the situation differently. . . I felt as though the situation I described was much easier to overcome than I felt before watching the video . . . that sometimes I do know the answer to a problem. I just need to allow myself time to accept it. Feels a bit weird to talk to a video when you are not used to it, but it ended feeling therapeutic to face the issue.

Insight

One major theme that emerged from both groups and supports the literature was insight. The level of insight continued to deepen with each narration for both groups; participants in the experimental group reported even greater gains in insight on both days. The importance of

insight and self-reflection was discussed earlier in this paper, and their relationship to psychological well-being has been written about extensively. Insight and self-reflection offer individuals an opportunity to understand emotions and patterns of behavior that might otherwise be out of conscious awareness (Beebe, 2004). Self-reflection, insight, and the ability to see a situation from different perspectives encompass the meaning of insight and are essential ingredients for self-understanding, emotional regulation and healthy interpersonal relationships (Rowe & Mac Isaac, 1989). Further, insight and self-reflection enhance the ability for mentalization, which in turn deepens emotional meaning (Alan et al., 2008). The repetition of the exercise allowed for deeper understanding and further self-reflection. Many of the participants voiced a similar experience. The following insightful response from a male participant demonstrates an improved ability for mentalization.

The second time was a deeper process, and compared to the first, I can more clearly see how resigned I am to not having things work out well with the problem I described. I look sadder in the second video. I was more relaxed with the process of videoing myself the second time so I was able to share more with myself. Seeing the playback was insightful. . . I could “see” my feeling.

A shift in perspective also served to diminish the intensity of the problem and generated a sense of compassion and understanding for several of the respondents. On the first day, a female participant reported little insight: “[I] just saw myself talking about my problem”; however, by the second playback she stated, “By giving the issue so much attention, I stopped caring as much. It’s not such a big deal . . . I had some thoughts since the last video and gained more clarity and empathy.”

Self-Image

Self-image was another major theme initially represented to a greater extent on the first day but decreased over time for both groups. The quantitative data demonstrated a significant

avoidance of mirroring for only the experimental group; by contrast, findings from the qualitative analysis suggests that some respondents from both groups had either a positive or negative response to seeing their image played back to them.

In fact, the majority of participants were initially focused on their appearance. Some participants gained insight in seeing themselves objectively, while others became anxious and hyper focused on their looks. When their image was unexpected—possibly incongruent with their image of themselves—it appears to either increase their confidence or trigger greater anxiety. All participants reported decreased negative reactions to their image on the second day. One male reported the following: “I kept thinking about how I looked in the video and how I could look better. Also, how weak I am for allowing this to even become an issue in my life.”

Here, the participant’s image seems to conflict with his idealized self-image of being strong. His focus on his appearance and desire to “look better” may have been used defensively as a way to mitigate the pain of feeling “weak.” By Day 2, the same participant appears to have integrated these disparate aspects of himself (Gasman, 1992; Kubie, 1969). He has gained enough confidence to shift his focus away from his appearance and instead address his feelings more deeply. He also appears to have become motivated and begins to develop a “plan to take action.” It is conjectured that the process was also “disinhibiting” in such a way that he was able to think and act differently about the problem (Suler, 2005).

It felt easier this time to shoot the video. It was still a little difficult but not nearly as much as yesterday. . . I thought that these were all things I’ve felt before, but it was good articulating them so I could make a plan to take action.

In contrast, a female participant gained confidence and a new perspective after recognizing a previously distorted and negative self-image:

[I was] pleasantly surprised that I don’t appear as old and unattractive as I sometimes feel, and also that I’m authentic and earnest in my desire to change the problem. Seeing

my facial expressions when I spoke about certain parts of the problem allowed me to open up to the possibility that the way I had been thinking was peripheral around the problem and maybe that the heart of the problem is different than I had perceived.

Perhaps her new found confidence was also motivating for this individual to “change the problem.”

Defense Mechanisms

Defensive reactions surfaced for some of the participants, and this emergence was a welcomed discovery. Defense mechanisms serve a protective and often necessary function for individuals. Freud (1894/1962) was the first to develop the idea of unconscious defenses. He postulated that a defensive mechanism occurs to protect individuals from becoming conscious of undesirable impulses and overwhelming anxiety (Cramer, 2006). The current meaning of defense has been broadened to include a protective reaction to any internal or external source (Cramer, 2006). Severe psychological distress can result if defenses are weakened before the individual is ready. Fortunately, this level of distress was not reported by any of the participants.

The following example was from a woman whose defensive structure on the first day was gently undermined, but by the second day, she had defended against her emerging self-awareness. Ironically, the participant’s newfound positive regard appears to have threatened her negative self-image (“damaged goods”):

[Day 1] I seemed much more mature and eloquent than how I perceive myself to be. Maybe there’s always deep down this opinion of myself as being “damaged goods.” I often don’t think of myself as being able to express myself verbally very well, but I thought I was really measured and clear and mature in the video, so it was a pleasant surprise.

[Day 2] Today was really different, which I didn't know it would be when I started filming myself talking about the same issue. Yesterday, as I said, I felt very mature and confident about the issue, and had positive feelings about where I need to go with this. Today, I found myself more negative about there being a positive outcome. So, very interesting how it changed in a day.

Another example demonstrates the working through of defenses and results in an increased insight for another participant. On the first day when asked to describe his thoughts and feelings he defended against whatever emotion he may have felt and focused on his thoughts: “[I had] no particular emotion or feelings that I was aware of and the thoughts were being vocalized in keeping with the exercise/action.” However, after completing the exercise the following day his defenses seem less rigid:

Well, with this question I'm learning that my mind wandering, ease of becoming bored and jumping tracks is real, is a true problem/issue, causes me to become anxious and focus on hunkering down to control all the above. There's a level of impatience laced in fear and wrapped in stubborn insistence on seeing to everything and giving each my all at the expense of losing the ship.

Negative Affect

A negative affect was also reported by some of the participants. For the experimental this was as high a 24%, but dropped to 3% by the second playback. Negative feelings were sometimes prompted by the topic or personal circumstance described and perhaps underscored by the playback. Negative affect is defined in this research as any statement that implies some degree of emotional discomfort. One participant stated feeling “hopeless” about her circumstance ever changing, and thought that playback “was emphasizing an already not-good issue even more.”

A small percentage of the participants used their negative feelings about their image or the process to defend against facing deeper and more threatening emotions. A female participant reported:

This is a process that I don't like. It is not easy to talk facing yourself. I feel that I have nothing to say that could be worth being on video. [The intervention] only confirmed what I know about my difficulty to put myself out there.

By the second day, this respondent stated feeling more frustrated with herself, but this discomfort appeared motivating: “I am more decided to act upon the situation because it felt annoying to continue to talk about it.” A certain degree of discomfort is often a necessary source of motivation for change (Fuller & Manning, 1973).

Another female participant who reported intense sadness over the many traumatic losses in her life, was stabilized by her gratitude for the things she could appreciate. She gained insight into never having grieved the many losses in her life.

Another example follows where a male participant’s lack of ability to focus on the process may have been used as a defense against feeling his problem. He even stated that he was distracted from the problem:

I had a difficult time talking to myself—seeing my image and feeling very self-conscious. My concentration was divided between thinking about the problem and watching myself in the video. . . I became really distracted looking at my facial features, hearing my voice talking, and the setting, rather than the problem being described. . . I learned that I do not like watching myself. It is amusing but made me uncomfortable. And most importantly, it really made it impossible to focus on the problem.

Conversely, defense mechanisms were gently undermined (Bailey & Sowder, 1970) for the majority of the population and resulted in positive responses.

Motivation

Motivation was a theme that was underreported, but it is essential for behavioral and psychological changes. As one participant described his experience he remarked, “There was definitely more of a sense of action the second time—instead of just telling the story, I included steps to reach closure.” Ronchi and Ripple (1971) stated that VP arouses the person into action and this study lends support to that finding. The questions in the qualitative survey did not focus on therapeutic action, which might explain why motivation was underreported; nonetheless, it is important to consider motivation for future studies.

All of the major themes discussed above helped to better understand the process and elucidate the therapeutic benefits of VNP. For a summary of themes, see Table 8. Overall, results indicate that VNP had a beneficial therapeutic effect. Both groups reported positive feelings on Day 1. There was a decrease for the control group and an increase for the experimental group on Day 2. Insight increased for both groups with a higher frequency for the experimental group. The control group was more defended and reported greater negative affect.

Table 8

Themes and Illustrative Quotes

Participant	Day 1	Day 2
<u>Major Theme: Positive Affect</u>		
#1618 White Male 3 years in therapy Codes: agency, confidence	I felt as though talking to the camera allowed me to quickly open up about the issue and freely explore it in a very comfortable and safe way.	When watching myself I was struck by how articulate I was in explaining the issue. I was struck by how watching myself talk about an important issue in my life was a really powerful way to listen to myself in a new way.
#3656 Female Race: Other Age: 26–34 0 years in therapy Codes: empathy, self-compassion, self-esteem	I felt empathetic towards this person (myself); I observed myself judging myself, and letting it go; I felt that I was also quite wise, even in being lost, about the depth of my own questioning and struggle.	I felt self-conscious; proud; empathetic; curious. I thought about how well I know myself, and also realized how rarely I give myself the opportunity to speak to myself in this way—to consider myself in this way.
#5378 White Male Age: 26–34 0 years in therapy 1 year in therapy Codes: therapeutic, self-esteem	It feels therapeutic to talk through my issue out loud even if it's only to myself. Puts things in better perspective.	That sometimes I do know the answer to a problem. I just need to allow myself time to accept it.
#3619 White Female Age: 55–64 15 years in therapy Codes: self-esteem, self-compassion	I had compassion for the person on the screen. I'm not such a bad person.	I felt connected to the person talking in a profound way.... That I'm not such bad person

Table 8 (continued)

Participant	Day 1	Day 2
<u>Major Theme: Insight</u>		
#1618 White Male Age: 26–34 3 years in therapy Codes: self-reflection, understanding	That I am more articulate than I give myself credit for. The video exposed how the story I have of myself can be very different than reality.	I felt empowered while watching the video. My thoughts were focused more on seeing the situation differently.
#5378 White Male Age: 35–54 1 years in therapy Codes: shift in perspective, understanding, self-reflection	It feels therapeutic to talk through my issue out loud even if it's only to myself. Puts things in better perspective. That sometimes I do know the answer to a problem. I just need to allow myself time to accept it.	So I think I do know myself but saying things out loud gives you a slightly different perspective then just thinking it internally.
#3938 Male Race unknown Age: 35–54 0 years in therapy Codes: insight, self-reflection, empathy	I learned that within the situation, I have very unrealistic expectations.	I learned that within the situation, I have very unrealistic expectations. In fact, I expect others to see/feel/experience things the way that I do, and don't really consider well enough that these are different people with their own wants and needs and fears and even senses of logic. Trying to figure out how to be more open and accepting really illuminated for me how closed I actually am.
<u>Major Theme: Self-Image</u>		
#2273 White Female Age: 55-64 1 year in therapy Codes: foolish, I'm O.K.	I actually think I said what I have to say more succinctly than I expected, I thought I would look and sound foolish	I always think I sound less articulate no matter what people say. I need people to tell me I did ok but watching this video I see I did sound ok.
#1613 White Male Age: 65+ 3 years in therapy Codes: looked odd, camera doesn't lie, facial expression, how I came across, gestures express feelings	It was unusual to see and hear myself on the screen, and it felt sort of odd that I look and sound like that but the camera doesn't lie. I didn't feel badly about how I came off, however. I also did get to express my feelings by verbalizing them along with the accompanying facial gestures and pauses and breaths, which was interesting and perhaps reflected stress / and other feelings	I could pick up expressions, movements, and pauses for breath as I was going through the dialogue. / They seemed to relate to the stress and other feelings that were being expressed during the recording

Table 8 (continued)

Participant	Day 1	Day 2
# 3122 White Female Age: 35-54 0 years in therapy Codes: upset on my face, facial expression gave insight into feelings	I could see how upset it makes me on my face, and it was harder to articulate than I thought, but it did make me stop and think why I react to the problem the way I do.	How much my facial expression changed during the process, how old I looked!
#1761 White Female Age: 55-64 2 years in therapy Codes: presentation, demeanor, disappointment	When watching I thought maybe part of the problem is my demeanor, but then I don't think I usually am so cold (I hope not) / Was disappointed in my presentation / was mumbling which surprised me.	Came to the realization that what I was looking for was specific steps to take and potholes to avoid. / It was good to know what help I was seeking about a difficult person in my life. / Realized I may come across colder than I feel and that may make things harder when interacting with the other person
Participant	Day 1	Day 2
<u>Major Theme: Negative Affect</u>		
#8054 White Female Age: 26-34 0 years in therapy Codes: discomfort, reluctance, easier	I felt quite uncomfortable with the process. I felt reluctance to speak aloud about my problem.	I learned that these exercises become easier and less awkward over time. I told the story with more emotion this time, more convinced.
#2865 White Female Age: 55-64 0 years in therapy Codes: frustrated, hopeless	I felt frustrated that I was presenting the topic as a fait accompli with no sense or feeling that there could ever be a resolution. That there is simply no hope	Any struggle I had was only because it wasn't particularly enthralling. It just re-emphasized a dilemma that I live with every second or every day. Only this time I was watching me work through the issues instead of just rolling it over and over in my head
#1021 White Female Age: 18-25 1 year in therapy Codes: anxiety	I felt my throat get very tight as I started to talk about my issue, and that stayed with me throughout the narration process	I felt comfortable watching myself in the playback, and didn't have any of the throat tightness from yesterday.
#5260 White Male Age: 26-34 2 years in therapy Codes: defensive, embarrassed, self-conscious, shy	It was difficult to formulate a cohesive description. . . . [I felt] embarrassed and unsure. I don't like being filmed.	It was very difficult. . . . I felt shy and had trouble thinking of what to say next.

Table 8 (continued)

Participant	Day 1	Day 2
<u>Major Theme: Defense Mechanism</u>		
#4076 Hispanic Female Age: 35–54 4 years in therapy Codes: tired, ambivalence	That I'm really sick and tired of where I am in tjis [this] situation.	It's how I usually feel about it. One day I'm ready to leave, the next day I'm ready to just stay in the situation. I thought to myself, "is this the way others see me when I talk about this?"
#5473 White Female Age: 35–54 22 years in therapy Codes: distracted by phone, in my head, detached	Sadly I was distracted. I asked my husband to leave so that I could do this video. He left but also left his phone which started ringing and it started making very loud sounds like a voice message alert.[I learned] Nothing because it's been in my head. I was annoyed about my husband's cell phone distracting me.	I felt detached like I was talking to a reflection in a pond or even a stranger or someone who resembled my sister physically.
#8054 White Female Age: 26–34 0 years in therapy Codes: discomfort, anti-psychotherapy	I felt uncomfortable with the process. I felt reluctance to speak I learned I have a natural disposition that is anti-psychotherapy.	I noticed that making the video this time, I felt less uncomfortable. I told the story with more emotion this time, more convinced.

Participant	Day 1	Day 2
<u>Major Theme: Motivation</u>		
#6631 White Female Age: 55–64 22 years in therapy Codes: Goals, Strategy	It was difficult to watch myself. It took patience to get comfortable talking about my problem to myself. But I got used to it by the end. I recognized a specific goal that I had been avoiding.	Yes. I realized that I had most of the tools I needed to deal with the situation that initially overwhelmed me and I was able to start organizing a strategy to deal with them.
#3208 White Female Age: 65+ 0 years in therapy Codes: take responsibility, empowered	I seemed reflective and was willing to take responsibility for part of the problem.	Going through the process made me move from describing and reflecting on the issue to deeper thinking and problem solving. By the second video viewing, I became empowered by my ability to think beyond my initial beliefs and understanding.
#1710 White Male Age: 18–25 0 years in therapy Codes: action, problem solving	I thought that these were all things I've felt before, but it was good articulating them so I could make a plan to take action.	It wasn't so much me complaining this time. It was more ideas of how to solve the problem

CHAPTER 4: DISCUSSION

The purpose of this study was to evaluate video narrative playback's effectiveness in developing the capacity for reflective function. A mixed method approach examined the therapeutic benefit of VNP. A review of the literature revealed that video playback had been utilized for individual, group, and family therapy, but not as a therapeutic tool that the client could use independently as an adjunct to individual psychotherapy. In past studies, clinicians' videotaped therapy sessions which were played back to patients as a way to foster insight, reduce resistance, confront behaviors, and promote change. In most studies, it was unclear if positive outcomes were due to the clinician's skill, the playback itself, or a combination of both. This study was an attempt to assess the effects of playback alone by limiting confounding variables. The findings from this research suggest that VNP by itself promotes self-reflection and insight and may contribute to self-compassion, motivation, increased positive affect, realistic self-appraisal (self-image), sense of agency (confidence), a decrease in resistance (defense), and willingness for therapeutic change (motivation). Additionally, VNP has the potential to increase anxiety, which may both serve to motivate as well as deter therapeutic goals.

Analyses uncovered no statistical difference in the characteristics between the two groups. Therefore, when the control group watched at least part of the playback, it was presumed that the control group's response would be similar to that of the experimental group. However, this was not the case. In fact, a significant increase in insight and self-reflection occurred only for the experimental group. While self-reflection increased post intervention on both days, it was not until the second day that insight also significantly increased. These findings imply that repeated playback contributes to an increase in both self-reflection and insight. It is thus surmised that the control group did not experience enough of the playback to have had a similar effect. Although

the two groups may have shared the same demographic characteristics, clinically, they appeared to be different. For instance, the control group did not always follow directions, and sporadic viewing of the playback resulted in a different experience. This may explain any inconsistencies in outcomes for insight and self-reflection between the two groups.

SONI scores also showed differences between the two groups. The control group showed a decrease in a hunger for twinship, which Kohut (1971) defined as the need for a relationship with a twin or “alter-ego.” When this need is satisfied, feelings of alienation are decreased and the ability for relationships with others is improved. The difference in group scores for twinship might reflect several possible explanations. Again, because the control group watched more of the playback a decrease in the need for twinship may have occurred. Watching the playback may have caused the realization that there are others similar to the viewer, thereby decreasing alienation and a need for twinship. It is conjectured, however, that this decrease in the need for twinship in the control group may have been due to other characterological differences not measured for this study. For example, a closely knit family structure might impact twinship needs. Moreover, the control’s baseline score for twinship was lower than the experimental group’s, which may have had a clinical, if not statistical, effect. The lower baseline score could have contributed to a further decrease. In addition, the specific material that the control group chose to explore in their narratives may have led to a further decrease in feelings of alienation. Gasman (1992) posited that the telling of the story may be therapeutic in and of itself.

Another factor, the avoidance of mirroring, increased for only the experimental group. Seeing oneself on video may initially feel threatening to participants, but as the findings indicate, this avoidance was reduced somewhat by the second day. According to Kohut (1971), the avoidance of mirroring originates in the lack of validation and admiration received from parental

figures in childhood; in adulthood, this can manifest in the avoidance of any potentially negative response. Video narrative playback offers the individual an opportunity to see themselves as others might. The potential for such an appraisal may feel too threatening to the subject's self-image (Kubie, 1969; Boyd & Sisney, 1967) and result in avoidance. This psychological threat could also explain a difference in scores between the two groups. The control group did not experience the same degree of avoidance, possibly because the prospect of watching the video was not as threatening to them. The control group was instructed not to watch or react to the playback, which may have had an effect. Thus, variance in SONI scores may more likely be due to unknown psychological differences between the two groups.

Avoidance of mirroring was also shown to be higher at baseline for the experimental group. Though this finding was not statistically significant, it may have practical as well as clinical significance. It is possible that participants already had an inclination toward avoidance, which was further triggered by seeing one's image on the screen. Avoidance of mirroring may also have been related to the defensive reaction or other negative attitudes reported. The qualitative data show that some patients were initially uncomfortable and defensive with the process, but that by the second day, they reported that the exercise was "easier" and that their ability to self-reflect had improved. Perhaps these reportings reflect the decrease in avoidance that was measured the second day. Still, a small number of participants remained defensive, anxious, hopeless, and/or sad. The review of the literature showed that though anxiety could increase (Gasman, 1992; Parikh et al., 2010), depressive reactions were not as deleterious as reported by Gur and Sackeim, (1978). In fact, the group that watched the video only in part reported a 60% greater increase in negative affect than the experimental group. This finding

suggests that complete and repeated viewing diminishes anxiety, and other negative affect as noted in the research (Gasman, 1992; Kubie, 1969).

VNP has also been reported to increase the capacity to contain contradictory aspects of oneself (Jurist, 2008; Steele et al., 2002). This seemed apparent with the participants who became more realistic about their self-concept (Geertsma & Reivich, 1965; Kubie, 1969). For example, the female participant who was taken by surprise by her own “cold demeanor” soon realized that her behavior might be interfering with her relationships. She was then better able to accept this contradiction between her subjective estimation of her personal warmth and her objective view of her coldness. In addition, she gained important insight into how her “demeanor” might be influencing a problematic relationship. It is this kind of “deautomatization” of seeing one’s image that can undermine defenses (Geertsma & Revitch, 1965; Gill & Brenman, 1959).

This study’s findings addressed many of the questions and issues raised in past literature. Findings support the notion that VNP encourages self-confrontation in such a way that inspires change (Melton et al., 2013; Winslade & Monk, 1993), builds self-esteem (Berger, 1970; Gasman, 1992; Heilveil, 1984), and offers an overall therapeutic benefit for the majority of participants (Alger, 1969; Berger, 1970; Gasman, 1992; Geertsma & Reivich, 1965; Heilveil, 1984). The positive outcomes of this research replicated those of many earlier studies. However, empathy, which has more typically been addressed in the neuroscience and scientific literature, and was of particular interest in this study. Increases in self-compassion suggest that VNP expands the capacity for both mentalization and for empathy (Alan et. al., 2008). Results indicate that watching oneself experience a problem can increase our ability to interpret our experiences less critically and more compassionately. Results of this study support prior research

suggesting that that both insight and self-reflection are necessary for the development of empathy and self-compassion (Bailenson, 2014; Iacoboni, 2009) and serve to deepen emotional meaning (Alan et al., 2008, Beebe, 2003). Empathy is, in fact, the cornerstone of self psychology. It is what is needed for self-cohesion and emotional stability. Kohut's view of psychic development requires empathy and understanding (Rowe & Mac Isaac, 1989). Similarly, the objective experience of seeing oneself as the other may provide the external function of a selfobject, and in so doing meet the psychological need(s) for emotional stability, psychic growth, and a cohesive sense of self.

Prior research also noted negative reactions from video playback confrontation (Gur & Sackheim, 1978; Kubie, 1969), which too was found in the qualitative data for this study. The data suggest that overly anxious or significantly depressed individuals may not benefit from the intervention and further research may want to substantiate these findings. Shyness, for example, was unexpectedly overcome for some participants but remained anxiety producing for others.

Results from the current study's data indicate that VNP confrontation offers individuals an opportunity to understand themselves more deeply and in new ways. It remains unclear how to empirically test self psychology concepts, given the extent to which selfobject needs were satisfied for this study. It may take numerous playbacks before selfobject needs can be fully met or measured. In addition, the SONI measure may be insensitive to the amount of change that was qualitatively expressed. Nonetheless, the current data suggest that insight, self-reflection, motivation, compassion and other positive affect were increased and these findings speak to the foundation of self psychology. Kohut (1957) stated, "If we observe without introspection and empathy we cannot fully understand the unconscious determinants of our actions . . . Introspection and empathy are essential ingredients to every psychoanalytic observation" (p. 25).

It appears that the mirroring effect of VNP serves to promote both introspection and empathetic understanding and leads to psychological health.

Implications

VNP is a potentially important intervention that could be particularly useful in working through many of the obstacles found in clinical practice. Its practical use could advance treatment for a broad range of client populations. The intervention's novelty and technological appeal is attractive to all ages, as demonstrated by the age range of volunteer participants for this study.

VNP may also be helpful in treating teenage populations who are developmentally struggling with issues of identity and are often reluctant to engage in treatment. Although untested, repeated playback of their narrative may help individuals on the autistic spectrum increase empathy for others and improve social cues. Individuals diagnosed with autistic spectrum disorders are highly self-focused and repeated playback of their narrative may increase understanding through their own nuanced behaviors.

VNP can also be used for a variety of professionals including, but not limited to: psychoanalysts, school counselors, drama therapists, case managers, psychologists, mental health counselors, and clinical social workers. Given its potential to shorten the length and cost of treatment, VNP can greatly benefit social workers and other mental health care providers managing heavy caseloads or responding to increased budget cuts. The use of VNP may also contribute to empirical support, and a need for a greater use of evidence-based practices. Additionally, VNP is an intervention that promotes the values of the profession in that it empowers the client and fosters mutuality within the therapeutic dyad.

Taped narratives are the legal property of the client. The safety and privacy of the recording remains the responsibility of the client which helps to insure privacy. However, technological devices can be lost or hacked into and clients should be advised to delete videos or use password protection. When video narratives are shared in treatment, both client and clinician are provided a different perspective and a deepened clinical understanding. The use of VNP can thus enhance the complexity of the therapeutic experience.

Depending on the choice of narrative, VNP could also be useful as an assessment tool in helping define the client's problem and determining a diagnosis, and it may offer insight into the client's needs and functioning. VNP is an intervention that does not require costly training, and it can be adapted to almost any treatment modality or theoretical perspective. Lastly, the client's level of confidence in the therapeutic process may increase in response to how quickly he or she experiences a benefit from it. Such a hopeful reaction may lead to a good prognosis for treatment, exemplifying its use in the field of social work.

Limitations of the Study

Despite attempts to establish rigor, there were several limitations to the study that should be noted. Perhaps the greatest limitation was contamination of the two study conditions, thus reducing internal validity of the design. Additionally, there were limitations with the measures utilized. The SONI was onerous and time-consuming, and the phrasing of the questions was sometimes confusing. To the knowledge of this author, the SONI scale has only been standardized by the researchers who developed it. Furthermore, while Cronbach's alpha scores demonstrated internal consistency for this study as well as for the original authors of the scale, the scale must be tested and retested further to establish greater reliability and validity.

There were also technological difficulties in conducting the study. For example, if participants wanted to access the survey using their smart phone or tablet, the program was exceedingly slow and it was difficult to toggle back and forth between the camera and the survey. This may have resulted in a loss of participants that were different from those who volunteered.

Retention was another limitation. As previously mentioned, earlier attrition rates were high which may affect external validity. Participants who dropped out before videotaping their narrative may have had a different experience or be different characterologically. Their responses could have potentially enriched the quality of the data. Lastly, findings from this study are limited in generalizability because of the small sample size and lack of demographic diversity.

Suggestions for Future Research

This study is only the first step in discovering the many and complex variables that are associated with VNP. Additional research is needed with larger, more diverse samples in order to examine the full impact of VNP. To prevent future contamination, the control group might be given a video device with a locking system that would prevent playback. An alternative measurement to the SONI would also simplify participation and analysis of data.

A larger sample size could explore individual differences between clients, or what types of clients or character structure would benefit the greatest from VNP. Additionally, multiple measures of the same construct would help validity. In a larger sample, measures for empathy, personality, motivation and negative affect might be useful to determine the broad spectrum of responses to VNP. Short-term and long-term effects might be measured as well. Moreover, the use of qualitative interviewing following the intervention would allow for more follow-up

inquiry and elicit a deeper understanding of the process. Additionally, single case studies would be helpful in determining the viability of such an intervention for psychodynamic treatment.

Summary

Video narrative playback is an intervention which, like any other, is not appropriate for all clients. However, as with many participants in this study, this simple exercise may help to facilitate individual growth, improve mood, and increase empathy. Further research is needed to examine the effectiveness of VNP as a therapeutic tool. VNP is not intended to replace therapy, but may enrich the therapeutic relationship by empowering the client and reducing the power dynamic within the therapeutic dyad. When used as an intervention in psychodynamic treatment, the clinician can collaborate with the patient to further understanding and aid in identifying unconscious meaning, unresolved conflicts, and self-defeating patterns of behavior that negatively impact clients' lives.

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APPENDIX A: FLYER



YOUR PARTICIPATION IS NEEDED

I am conducting IRB approved research on the effects of video narration

If you are 18 years old or older, own a smart phone, computer, or tablet device with a video camera and would like to participate please go to the following link

Your contribution will take less than 45 minutes to complete
and will occur over a two day period.

<http://tinyurl.com/videonarration>

You will have the opportunity to win a \$200.00 gift certificate

For more information contact Scarlett Leas Robertson, LCSW

Email: robs@sp2.upenn.edu

APPENDIX B: INFORMED CONSENT

**University of Pennsylvania
Informed Consent Form****The Therapeutic Usefulness of Videotaped Narratives**

Principal Investigator: Scarlett Leas Robertson, LCSW email: Robs@SP2. upenn.edu

You are being invited to participate in a research study. Before you agree there are a number of things that I must explain. These include:

The purpose of the study: I am researching the therapeutic usefulness of using videotaped narratives. This study is being conducted by a researcher at the University of Pennsylvania.

How many people will be enrolled: 60 participants will be enrolled in this study. Procedures for this study will take approximately 45 minutes to complete and will occur over a two day period.

Procedures: You will be asked to provide some basic demographic information before beginning the study. On each day you will be asked to find a private location where you won't be interrupted for approximately 25 minutes. You will then be required to fill in a survey before and after being asked to discuss a problem or conflict you are currently having. If you decide to participate you will be asked to use the camera on your computer, smartphone, or tablet where you will video yourself discussing your chosen problem or conflict. The following day you will be asked to repeat the process. Both days should take less than 55 minutes in total.

Information and Privacy: Your video should be done in private and no one but you will have access to the content. At the end of the study you will be asked to delete the video from your files. Any information that you supply will be recorded in an anonymous form and cannot be linked back to you. Your identity will be unknown.

Risks to the Study: Your contribution to this study will be invaluable to the research. There is no anticipated risk to you as a result of your participation beyond those of every day, other than the inconvenience of the time to complete the exercises. Your participation may not have a direct benefit to you but the knowledge gained may be helpful to others

Your participation in this research is voluntary; if you decide not to participate you are free to leave the study at any time. You may also call the Office of Regulatory Affairs at the University of Pennsylvania at 215-898-2614 to talk about your rights as a research subject. Whether you choose to partake or not will be unknown to anyone.

Compensation: Your time is also valuable and I am most appreciative of it. If you complete this study you may enter your email address for a chance to win a \$100.00 gift certificate to Amazon.

IRB Approval: This research project has been approved by the University of Pennsylvania Institutional Review Board.

Agreement: Agreement: I have read and have a complete understanding of the present study and agree to participate in this study by clicking "yes" on this electronic form. If you do not wish to participate click "no" and exit from this site.

YES (1)

NO (2)

APPENDIX C: DEMOGRAPHIC FORM AND MEASURES

DEMOGRAPHIC INFORMATION

Q2 How old are you?

Under 18 (1)

18-25 (2)

26-34 (3)

35-54 (4)

55-64 (5)

65 or over (6) _____

If Under 18 Is Selected, Then Skip To End of Survey

Q3 What is your gender?

Female (1)

Male (2)

Other (3)

Q4 What is your race?

White/Caucasian (1)

African American (2)

Hispanic (3)

Asian (4)

Native American (5)

Pacific Islander (6)

Other (7)

Q5 Have you ever been in psychotherapy?

Yes (1)

No (2)

Q6. what year(s) were you in treatment? (For example: 2012-2013)

Beck Cognitive Insight Scale (BCIS)

Below is a list of sentences about how people think and feel. Indicate how much you agree or disagree with each statement by clicking on the bubble next to your response..

1. At times, I have misunderstood other people's attitudes towards me.

Do not agree at all Agree slightly Agree a lot Agree completely

2. My interpretations of my experiences are definitely right.

Do not agree at all Agree slightly Agree a lot Agree completely

3. Other people can understand the cause of my unusual experiences better than I can.

Do not agree at all Agree slightly Agree a lot Agree completely

4. I have jumped to conclusions too fast.

Do not agree at all Agree slightly Agree a lot Agree completely

5. Some of my experiences that have seemed very real may have been due to my imagination.

Do not agree at all Agree slightly Agree a lot Agree completely

6. Some of the ideas I was certain were true turned out to be false.

Do not agree at all Agree slightly Agree a lot Agree completely

7. If something feels right, it means that it is right.

Do not agree at all Agree slightly Agree a lot Agree completely

8. Even though I feel strongly that I am right, I could be wrong.

Do not agree at all Agree slightly Agree a lot Agree completely

9. I know better than anyone else what my problems are.

Do not agree at all Agree slightly Agree a lot Agree completely

10. When people disagree with me, they are generally wrong.

Do not agree at all Agree slightly Agree a lot Agree completely

11. I cannot trust other people's opinion about my experiences.

Do not agree at all Agree slightly Agree a lot Agree completely

12. If somebody points out that my beliefs are wrong, I am willing to consider it.

Do not agree at all Agree slightly Agree a lot Agree completely

13. I can trust my own judgment at all times.

Do not agree at all Agree slightly Agree a lot Agree completely

14. There is often more than one possible explanation for why people act the way they do. Do not agree at all Agree slightly Agree a lot Agree completely

15. My unusual experiences may be due to my being extremely upset or stressed.
 Do not agree at all Agree slightly Agree a lot Agree completely

Selfobject Need Inventory (SONI)

INSTRUCTIONS: Please mark the response that most applies to you with (1) being “not at all” and (7) being “very much”.

1. I feel hurt when my achievements are not sufficiently admired.

1 2 3 4 5 6 7

2. It's important for me to be around other people who are in the same situation as me.

1 2 3 4 5 6 7

3. When I have a problem, it's difficult to accept advice even from experienced people.

1 2 3 4 5 6 7

4. Associating with successful people allows me to feel successful as well.

1 2 3 4 5 6 7

5. I don't need other people's praise.

1 2 3 4 5 6 7

6. I would just not be involved with people who suffer from problems similar to mine.

1 2 3 4 5 6 7

7. I'm disappointed when my work is not appreciated.

1 2 3 4 5 6 7

8. I seek out people who share my values, opinions, and activities.

1 2 3 4 5 6 7

9. I find it difficult to accept guidance even from people I respect.

1 2 3 4 5 6 7

10. I identify with famous people.

1 2 3 4 5 6 7

11. I don't function well in situations where I receive too little attention.

1 2 3 4 5 6 7

12. I feel good knowing that I'm part of a group of people who share a particular lifestyle.

1 2 3 4 5 6 7

13. I feel bad about myself after having to be helped by others with more experience.

1 2 3 4 5 6 7

14. It's important for me to feel that a close friend and I are "in the same boat".

1 2 3 4 5 6 7

15. When I'm doing something, I don't need acknowledgment from others.

1 2 3 4 5 6 7

16. It bothers me to be in close relationships with people who are similar to me.

1 2 3 4 5 6 7

17. I am attracted to successful people.

1 2 3 4 5 6 7

18. I have no need to boast about my achievements.

1 2 3 4 5 6 7

19. I feel better about myself when I am in the company of experts.

1 2 3 4 5 6 7

20. I would rather not be friends with people who are too similar to me.

1 2 3 4 5 6 7

21. I feel better when I and someone close to me share similar feelings to other people.

1 2 3 4 5 6 7

22. It's important for me to be part of a group who share similar opinions.

1 2 3 4 5 6 7

23. I don't really care what others think about me.

1 2 3 4 5 6 7

24. I know that I'm successful, so I have no need for others' feedback.

1 2 3 4 5 6 7

25. I'm bored by people who think and feel too much like me.

1 2 3 4 5 6 7

26. It's important for me to be around people who can serve as my models.

1 2 3 4 5 6 7

27. I feel stronger when I have people around who are dealing with similar problems.

1 2 3 4 5 6 7

28. It's difficult for me to belong to a group of people who are too much like me.

1 2 3 4 5 6 7

29. In order to feel successful, I need reassurance and approval from others.

1 2 3 4 5 6 7

30. When I'm worried or distressed, getting advice from experts doesn't help much.

1 2 3 4 5 6 7

31. I try to be around people I admire.

1 2 3 4 5 6 7

32. I gain self-confidence from having friends whose beliefs are similar to mine.

1 2 3 4 5 6 7

33. I need a lot of support from others.

1 2 3 4 5 6 7

34. I find it difficult to be proud of the groups I belong to.

1 2 3 4 5 6 7

35. Most of the time I feel like I'm not getting enough recognition from my superiors.

1 2 3 4 5 6 7

36. It's important for me to belong to high-status, "glamorous" social groups.

1 2 3 4 5 6 7

37. I don't need support and encouragement from others.

1 2 3 4 5 6 7

38. I would rather not belong to a group of people whose lifestyle is similar to mine.

1 2 3 4 5 6 7

APPENDIX D: INSTRUCTIONS TO PARTICIPANTS

Instructions - Find a place of privacy where you will not be disturbed for the next 25 minutes. Please go to the Qualtrics link and begin the survey. At the end of the survey you will be given an identification number that you will need to remember for this study. Your identification number will allow the study to track your answers over time, while keeping all of your answers confidential. It is recommended that you write down this number so that you can make sure that it is accurate in the future.

Step 1. (Approximately 10 minutes) Please sign the consent to participate before answering all the questions on the demographic section and the following sections.

Step 2. (Approximately 15 minutes) Think of a non-traumatic conflict or problem that you are currently experiencing. Go to “photo booth” on your Apple computer or use the video camera on your computer (PC). Video record yourself talking about the problem/conflict for 5 minutes or less. You can also use a smartphone or tablet to make your video recording but use the computer to answer the survey questions. Only you will have access to this video. To ensure your privacy you will be asked to delete the video when you have completed the study. Make sure the lighting allows you to see your expression as you video your narrative. The problem you choose to describe should be meaningful to you. Immediately after watching the playback, return to the Qualtrics link, and answer all the questions.

The following are only suggestions of the kind of problems one might talk about.

1. I have a medical issue but I'm too afraid to see the doctor
2. Why do I keep surrounding myself with the same type of people expecting a different result and getting disappointed?

3. I want to take an action (attend graduate school, move to a new location, break up with my significant other, find a new job, etc.) but what's stopping me and why?

4. Why do I get so annoyed at my mother/father/friend despite my best efforts to be nice?

Whatever the problem is that you decide to talk about it will be important to talk about how it makes you feel and why.

Step 3. After you finish recording your problem, watch the playback. The control group will not have to take this step.

Step 4. Immediately after watching the playback, return to the survey, and answer all the questions. If you can't return to the page go to the original link and you will be returned to the survey.

Step 4C is modified for the control group. Immediately after you have made the video, return to the page. If you can't return to the page go to the original link and you will be returned to the survey.

Both groups will take a brief open ended survey which asks the following questions and will be followed by the same scales used at baseline. (56 questions)

1. What was notable for you about the process?
2. Can you describe your feelings and thoughts as you watched the playback?
- 2C. (control group) Can you describe your feelings and thoughts making the video?
3. After completing the process do you perceive the problem/conflict any differently? If so how?
4. Did you learn anything new about yourself or the situation you described?
5. Were you able to watch the playback?

Step 5. (Approximately 25 minutes) Now that you have finished answering the questions delete your video from your device. Tomorrow you will repeat the same process. It is important for the research that you explore the same problem tomorrow. Before you sign off be sure that you have copied your identification number as you will need this to log back on to the survey. Here is the link you will need for tomorrow <https://tinyurl.com/videonarrationday2> Please copy and paste it into your records, or write it down somewhere, so you can easily retrieve it tomorrow. You will not be able to return without going to this link and entering the identification number you received earlier.

Day Two Instructions

Step 1 Enter your identification number and answer all the questions.

Step 2. Video yourself talking about the same problem as yesterday (no more than five minutes).

Again, focus on your feelings.

Step 3. Watch the playback of your video right after making it. Then return to the survey on your computer and answer the questions for the last time.

Step 3C. (Control Group) Immediately after making the video return to the survey on your computer and answer the questions for the last time.

4. Did anything change in the telling of the story from the first to the second time? (Thoughts, feelings, the narrative, etc.)

5. Were you able to watch the playback?

Step 9. When you have completed all the steps delete the video recording from your device.