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Master's Thesis
Academic Year 2022

Effectiveness of Doll Making to Achieve Self-distancing and Adaptive Self-reflection

Keio University
Graduate School of Media Design

Jiaxin Guo

A Master's Thesis
submitted to Keio University Graduate School of Media Design
in partial fulfillment of the requirements for the degree of
Master of Media Design

Jiaxin Guo

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Abstract of Master's Thesis of Academic Year 2022

Effectiveness of Doll Making to Achieve Self-distancing and Adaptive Self-reflection

Category: Design

Summary

An increasing number of research in psychology and other areas suggests psychological distance plays the key role of the positive and negative outcome when people try to understand their feelings and emotions. Most studies agree on the conclusion of self-distancing promotes positive results for self-reflection. A large size of academia research relies on visualization/imagination as the methodology for enhancing psychological distance. This research is designed to provide an alternative methodology for self-distancing in a creative fashion: to study whether doll making is effective in promoting self-distancing for adaptive self-reflection. The effectiveness is tested using a comparison group testing with doll making and visualization for self-distancing. Although the limited sample size can not provide promising significant difference of the result of two groups, the outcome still suggest positivity of the level of effectiveness of self-distancing of doll making as an alternative methodology.

Keywords:

psychological distance, self-reflection, third person perspective, art therapy

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Chapter 1
Introduction

1.1. Background

Human beings are driven to perform the action of understanding and investigating their emotions and behavior. [1]When people attempt to understand their negative emotions, sometimes succeed and at other times fail. [2]Recently, research studying the reason determining the outcome of analyzing one's feelings put the spotlight on the perspective ones take when perform analysis. [3–5]

When the concept of psychological distance is proposed, research across different areas start making inquiry of the level of importance and the role of psychological distance plays for self-reflection and adaptive coping.Decades of research on self-distancing implies that the decentering(vs. egocentric) perspective not only promotes adaptive self-reflection [6], but also benefits self-control, emotion regulation and wise reasoning. [7]

1.2. Motivation

The importance and merit of self-distancing is well researched across various fields as mentioned above. However, the majority of these studies employed visualization in third person perspective and third person perspective writing to test self-distancing when running experiments.c [3] The possibility of decentering in an artistic fashion or through a creative outlet is still questionable. While different clinical research highlights the function of art therapy, the application of using art as a method of self-distancing can still be explored. Doll, as a kind of toy created based on human likeness even back in the Bronze Age, also as a form of art therapy is widely applied for children and elderly with dementia. We see its own potential as a media for enhancing psychological distance.

1.3. Research Problem

As stated, although the study on self-distance is done across various field, the most common method used in testing is to lead participants to visualize their past experiences in a self-distanced perspective. Like E. Kross and O. Ayduk in their study of self-distancing made their participants "asked to take a few steps back so that they could watch the experience happening to them from the vantage point of a fly on the wall" [3]. We want to make a connection between self-distancing and use of doll making to test whether the use of doll making can carry the capability of the help people to adopt a self-distanced perspective. We are also curious about if the making of dolls, the good company for many children in childhood period can bring any other benefits after the children grow up to adults.

1.4. Research Objective

The main focus of this study is to examine if doll making can be effective in self-distancing for adaptive self-reflection. The research objectives of this thesis are as follows:

- To test the effectiveness of doll making in self-distancing for adaptive self-reflection.

- To explore other potential benefits of doll making as a daily self-coping technique outside of therapy.

1.5. Contribution

This thesis introduces a creative approach for self-distancing and adaptive self-reflection. Doll making as a method to achieve self-distancing for adaptive self-reflection can be developed into a daily technique for self-coping. With the observation and discussion made by this study, inspiration and insights about doll making may be gained for further study in the future.

Chapter 2
Related Works

The original inspiration of this study came from a psychology book I read earlier in my life, The Road Less Traveled. The idea of looking at one's experience from a third-person perspective can be beneficial one's mental health was first introduced to the author. In our research we figured out this process of psychologically remove oneself in one's point of view is called self-distancing, which will be introduced more thoroughly in the following chapter. This section includes the three main area that we drew insights from: Self-distancing, Art Therapy and Gestalt Therapy.

2.1. Self-distancing

2.1.1 Solomon's Paradox

King Solomon, one of the kings of Jewish Kingdom, who ruled from about 970 BC to 931 BC, was said to be one of the wisest monarchs of ancient times. People reportedly traveled great distances to seek his counsel.However, when it comes to his personal life decisions, he did not show the same kind of wisdom as when looking at problems of his people. This phenomenon is later referred as the Solomon's Paradox in psychology, people reason more wisely about other people's social problems than about their own–they are psychologically removed from the event. [8]

2.1.2 Point of view in memory recalls

When we recall past experiences, it can take on either first-person or third-person perspectives. In fact, researchers have found that approximately one-third of spontaneous memory recalls in adults are in third-person perspective and the rest

two-third of recalling are in first-person perspective. [9] Over a century years ago, Freud points out in his study of screen memory that when one recalls the past in a passive observer's point of view, it was a means to separate oneself from difficult emotional life moments in childhood. [9]

Prior research in cognitive psychology also find that the perspective during recall can be shifted even during the memory recalls.). That means, for example, if a person recalls a past event from first-person perspective, he or she can choose to voluntarily shift the view point to the third-person perspective. Interesting finding from studies about post traumatic disorder points out that a large number of traumatized patients approach their traumatic experiences from a third-person perspective rather than the first person perspective. Other research also agreed on that people's capability of reflecting over past negative experiences from either a self-immersed point of view or self-distanced perspective. [10] [11]

These authors propose that the increase in third-person perspective in memory recall is a vulnerability factor in psychopathology and that any increase in third-person perspective can be regarded as an explicit shifting (coping strategy) from a first-person perspective to a third-person perspective during recall.

2.1.3 Psychological distance and self-reflection

Human beings are motivated to analyze and understand their emotions and behavior. [5]Years of research examining the behavior of people trying to understanding their own feelings leads to contradictory findings: On the one hand, there is theory and research indicating that understanding one's reactions to negative experiences facilitates adaptive coping and leads to a host of mental and physical health benefits; On the other hand, there is an equally compelling size of work showing that people's attempts to analyze their feelings often lead to rumination – a process in which people repeatedly focus on what they feel and why they feel a certain way, which exacerbates and maintains negative affect rather than reducing it. Many research suggest this kind of maladaptive self-reflection lead towards rumination and brings harmful mental influence for people vulnerable to depression, anxiety and other mental issues. Mor and Winquist in their meta-analysis about self-reflection made the conclusion that rumination "was the form most strongly and consistently related to depressive symptoms" [12]

In more recent years, studies on self-distancing's role for adaptive vs. maladaptive self-reflection suggest that when people analyze their feelings of negative past experiences from a self-distanced perspective, it results them to sense less emotional and physiological reactivity in the short-term, while providing relief from negative outcomes from rumination over time. [6]

Research on construal level theory made it evident that enhancing psychological distance can serve to help people adopt broader perspective on events, which means helping people to view the "big picture" instead of paying redundant focus on concrete details. [5]

Kross and Ayduk in their research shows that manipulating individuals to analyze their feelings form a self-distanced perspective could help them prevent recounting the emotionally arousing elements of their past negative events, rather than self-immersed perspective. This shift in perspective could also bring people to less recounting and more re-construing, so that they are less disturbed by emotional arouse and gain more meaning and closure out of the self-reflecting process. [6]

2.1.4 Other Benefits of Self-Distancing

Studies in variety of fields indicate the importance of psychological distancing for self-control and adaptive coping. Research in social psychology on delay of gratification points out that children's use of psychological distancing strategies directly affects their ability to let-go of immediate gratification in behalf of goals in the long-term. Other work also shows that the enhancement of psychological distance helps promoting positive changes in construe of oneself. [6]

In recent years, psychological distance also finds its place in clinical research, theory and practice. The process of self-distancing is identified as an importance precondition for facilitating effective cognitive therapy. Similarly, variety of cognitive behavioral therapy like Mindfulness Based Cognitive Therapy start focusing on use of "decentering" as a precondition for therapeutic change: when therapists tell their patients to take a step back from their thoughts and feelings and observe them. [5]
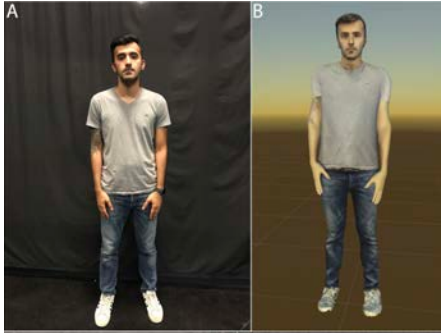
(Source: Slater's paper [13])

Figure 2.1 Participants being scanned

(Source: Slater's paper [13])

Figure 2.2 Participant's view(top) vs Freud's view(bottom)

2.1.5 Self-distancing using VR technology

Mel Slater and others conducted a study on self-dialogue with enhanced psychological distance using Virtual Reality technology. All participants were digitally scanned into Virtual Reality. Slater adopted a comparison group test: the control group, also referred as Scripted group(group S) [13] talks about their own problem to a virtual image of Sigmund Freud and the virtual Freud would ask them questions and make comments to maintain a dialogue; the treatment group also called as Self-Conversation group(group SC) would also talk about their problem to virtual Freud but then switch to virtual Freud's perspective where they would look at their virtual self explaining problem and give out advice to themselves. Eventually the SC group would complete a self-conversation by altering between two virtual bodies and look at themselves in a distanced perspective. (See Figure 2.1, Figure2.2)

By measuring different aspect of the problem mentioned by participants and participants reaction, participants in the SC group had a result of a greater conception and help by the experiment compared to the Scripted group. Outcome of the study shows that this method for self-distancing can create better under-

standing towards the problem and the possibility of this experiment as a strategy of self-counseling [13].

2.1.6 Self-distance on Social Media

The website of EBM(Evidence Based Wisdom) is a website built for "translating the new science of wisdom research [14]". Drawing insights from research in psychological distance, created a poster to introduce the concept of self-distancing to the pubic in their "EBW WISDOM TOOLS SERIES"(See Figure 2.3). The poster includes the scientific resource of the self-distancing, the context of it, when to use it and how to use it when needed. The method EBW suggests is that visualizing one's situation as the scenario of one's friend's situation.
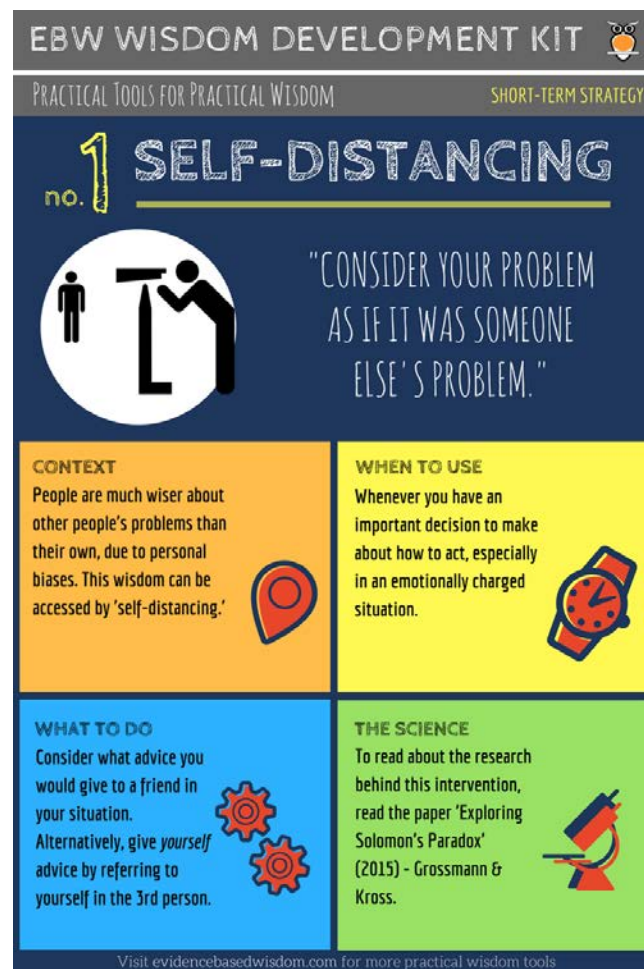
(Source: Evidence Based Wisdom [14])

Figure 2.3 EBW WISDOM TOOLS SERIES: No.1 – Self-Distancing

Conflict resolution education, writer and coach Tammy Lenski presents her way of enhancing psychological distance during conflict and the reasons behind them in her website [15]. The five technique of increasing self-distance that Lenski posted are:

- Mentally watch yourself from a distance.

- Lean Back. (In a physically sense, to lean back on the chair)

- Picture the scene or person moving away from you.

- Picture the decision from the perspective of your future self.

- Play the "as if game" in your head (to respond to the stimulus as if you are something else than what you currently are). [15]

As described above, most of the self-distancing techniques introduced by social media are mental activities like visualization. It's worth noting that most of the related research on self-distancing mentioned earlier chapter also takes similar approach as method for enhancing self-distancing when testing.

2.2. Art Therapy

2.2.1 Overview

Art therapy first appeared in the late 1940s, when artist Adrian Hill described the therapeutic application of image making in therapy as the term "art therapy". Hill learned the therapeutic benefits of drawing and painting for patients during recovery from tuberculosis. As he described, it brought the patient strength to "build up a strong defense against his misfortunes". [16]

Later more scholars joined the study of the use of art in therapy. Art therapy, formally as a form of psychotherapy is defined by the American Art Therapy Association as: "The therapeutic use of art making, within a professional relationship, by people who experience illness, trauma, or challenges in living, and by people who seek personal development. Through creating art and reflecting on the art products and processes, people can increase awareness of self and others, cope with symptoms, stress, and traumatic experiences; enhance cognitive abilities; and enjoy the life-affirming pleasures of making art." [17]

2.2.2 Doll Therapy

Dolls and figures have existed in history for thousands of years and have remained and developed to carry various and symbolism. [18] The therapeutic value of doll usage comes from its ability to enable the opportunity for play and narrative based interventions, along with artistic intervention to be performed in therapy. In more contemporary cultures, dolls are more connected with children. Therefore,

the use of dolls and figures in therapy are helpful especially for unique issues such as sexually abused or traumatized children, who may have not yet mastered the language enough to express their feelings. [18] Not only for children, but doll therapy is also often used for elderly patients or patients who have dementia. Benefit of doll therapy for dementia patients is well studied. One of the leading benefits suggested by the findings is "improvement in communication between the person living with dementia and other residents or care stuff" [19].

The use of dolls with hospitalized children and adolescents

In early 1990s, the Child Life Research Project had an experiment with children and adolescents in hospital on dolls: Kids were provided with cloth stuffed, body-outline dolls and permanent markers to make the doll their own. The presents of the doll with children were not only during session, but also after the session while still in hospital and when children were discharged from hospital.

Members of Child Life Research Project had interesting observations on more than just children but also their parents and siblings (if presented). First by offering children and adolescents the activity of coloring the doll, the staff was able to make initial contact with them which seemed nonthreatening and supported. Participants were witnessed to show pleasure and acceptance towards this process-oriented, unstructured and entertaining opportunity, which was shown by children's more relaxed body posture, increased positiveness and interest, especially obvious for children who appeared to be extremely scared and overwhelmed by the hospital setting. Parents were also noticeably less anxious and more calm as they watched their own kids' level of anxiety decreases.

In the hospital environment, where "much is taken away from individuals, both literally and figuratively" (e.g., patients have to wear hospital gown, change their diet and daily life habitat, etc.), the event of doll making showed up as a gesture of giving. This opportunity told children that hospital can be a place where fun things can happen, where people care about children's feelings and needs, rather than just frightening and threatening building(s). The doll colored by the children also served as a effective vehicle for information assessment. Instead of directly asking children "Why did you have to come to the hospital?", staff was able to ask children question like "Why did your doll need to come to the hospital?"

to gain glue of children's understanding and its accuracy of information when in health care. Similarly, doll as a functional link between parents and staff, can be used to educate children how to learn and accurately process information [20].

Doll therapy for complex trauma

Complex trauma, as the outcome of exposure to multiple traumatic events especially continuous and repetitive ones, is often seen in the case with child sexual abuse, domestic violence and other form of abuse or neglect [21].People diagnosed with complex trauma constantly suffer from a range of post traumatic symptoms like intrusive thoughts and recalls, severe avoidance and backfires. Research suggests that talking treatment has limitation when treating this kind of patients, additional therapeutic approach involving sensory, physical, somatic process may be needed in order to create more significant healing result. [22]

Sonia M. Stace introduced the case of her patient Jess(pseudonym) who suffered from post-traumatic stress disorder and depression as the result of family violence by her father and sexual abuse from her brother. In Jess's therapy session, she made four self-portrait dolls and two dolls representing her mother and grandmother, respectively in each session. Upon comparison and reflection of the four self-portrait dolls made from the beginning to the end, Jess had remarkable therapeutic outcome. She had the chance to securely undergo, express and manage her intense emotions. The doll making also helped her better understood her childhood traumatic experiences and their dynamics. Her level of happiness, level of self-acceptance and level of integration were also improved by the doll therapy.

The value of doll making in various therapeutic settings is because both the process of making and the product itself are meaningful. Based of the concept that an art expression means more than the final product itself but also the process which the product is developed. They both stand for significant processes one's going through psychologically, telling substantial truth about the creator's inner world. [23]

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2.3. Gestalt Therapy

2.3.1 Overview

The word "gestalt" originated form German, with no equivalent word in English, is generally translated to pattern, form or configuration. [24] Gestalt therapy was founded by Frederick "Fritz" Perls along with other collaborators. Different from the classic therapy's dependence on the analysts' interpretation of the unconsciousness, gestalt therapy takes an experiential and humanistic approach which engages patients' awareness and awareness skills.

One of the fundamental compositions of gestalt therapy is field theory, born in science, is a way of interpreting how one's context impacts one's experiencing. A patient's narrative story cannot tell what actually happened in his or her history, but it can rather disclose how this patient enduring his or her past right here, right now. The patient's interpretation of past is shaped to some degree by his or her current "field conditions". Field theory argues that what forms one's experience is how one retains a memory of a certain event. This event happened years ago is influential to how one may formulate one's perception in the field.

There are three main concept in gestalt therapy:

- Contact: being linked to what is occurring here and now from second to second.

- Awareness: which becomes in need when in situations associating with complexity or conflicts, which require higher level of contact.

- Experimentation: the action of venturing something new to enhance understanding, which differs from the psychoanalyst's completely verbal methods and behavior therapy's behavior control moves. [25]

2.3.2 Gestalt Therapy

Gestalt art therapy is the kind of therapy uses art resources in and as therapy following gestalt theory and philosophy. It is process-centered, which the creating of art, creation of art and reflection of what is created are believed to have potential for therapeutic value. Gestalt art therapy is founded based on the notion that

creativity is internally connected with the process of life, and the aptitude of expressing oneself via verbal and non-verbal languages is a natural capacity within all human beings.

In gestalt art therapy, people are considered to have the ability to be agents for their own health and developmental growth, searching for meanings with personal relevance for themselves. In a gestalt therapy session, therapists are facilitators and companions of the patient's creating process rather than interpreter of their art work. Therapists' task may also include giving patients experimental suggestions in order to smooth the exploration process and revealing their inner dynamics and realities.

As mentioned in the previous section, the three main concepts of gestalt therapy are: contact, awareness and experimentation. Selma Ciornai in Gestalt Art Therapy: A Path to Consciousness Expansion writes:

"When the quality of contact is poor, the figures that appear in awareness are weak, cloudy, undefined, or opaque. In turn, the person may feel confused, unhappy, anxious, anguished, or depressed. Contact needs to bed heightened, and energy brought up to the experience in order to facilitate new insights and understandings, eventually leading to reconfigurations and new openness in one's inner world [26]."

In the process of "contact", before talking can come in to help organize what we contacted, seeing, smelling, sensing and moving are what can be called primary contact activities. Art is powerful in this way because it engages the sensory motor, the emotional, the cognitive and the instinctive levels of human functions. Therefore, in gestalt art therapy, by making contact using one's senses, the mobilization of energy and emotion along with unveiled insights from reflections make it possible for one to perceive, reconfigure relations with oneself, others and even the world. [26]

Chapter 3
Design

Based on the related work and literature review, we noticed that although Self-distancing is researched and proved to be effective for adaptive self-reflection based on the review of literature and related works, a large body of research uses third-person perspective writing [27] or asking participants to simply just imagine their experiences in self-distanced angle [3, 5, 6] (from the observer's point of view) in order to examine the effectiveness of self-distancing for mental and emotional influence.

The intention of this research is to explore an alternative way for people to adopt the self-distancing perspective which might have the opportunity and potential to be beneficial for self-coping on a daily basis.

3.1. Doll Making as an Alternative Approach

Inspired by art therapy, we want to take a different approach for self-distancing which can engage our senses. Doll making was considered because of various reasons.

In 2020, Statista released a survey about toys available for children to play in household in the US. Despite electronic devices (game consoles, smartphones, tablets, etc) takes dominant shares of children's attention(80% of households have electronic devices available for children to play with), dolls and stuffed animals still has its place(73%) in children's home [28]. As one of the most popular toys even till today, many people shared childhood memories with dolls and stuffed animals. We want to believe that seeing, touching, making this "old close friend" can possibly bring more enjoyable factors to the self-reflection process.

Doll has its unique bond and connection with human beings:human likeness.

Human's fascination with their own likeness and form can be traced back to thousands years ago. Doll as a figure representing ourselves has been created, used, given different cultural, religious meanings and purposes across different cultures and regions [18].Because of this special connection with human image, doll as an agent serving for taking self-distanced perspective is worth exploring.

If doll making is to be seen as a daily technique for self-distancing and self-reflection, the accessibility of materials and tools required for doll making must be taken into consideration. Materials and tools used for this study are either available in the household or easily found in the stores. Another important factor is that the material and tools needed for doll making carries very limited danger for injury or toxicity.

3.1.1 Design Process

In the research process, we conducted a survey(see Figure 3.1) to study more about the self-distanced perspectives when people reflect on past experiences.
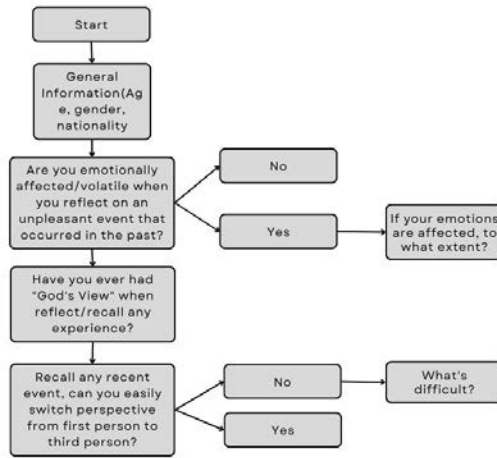

Figure 3.1 Logic Flow of Background Survey

In the 77 participants' (age 20-30) answers, 26 percent of them have never experienced self-distanced perspective when self-reflecting and 28.6 percent of them

have trouble switching perspectives from first person to third person when recall past events. These findings in background research encouraged us to discover a creative way for self-distancing so that more people can experience the self-distancing as a way of self-reflection with less risk of being exposed to rumination. We see the possibility of doll making as a way of approach for self-distancing for young adults. The experiment design and procedure will be explained in detail in the following chapter.

3.2. De-self Tape

Inspired by Mel Slater's study of using VR technology in self distancing for virtual self-counseling [13], we want to explore the possibility of using accessible technology for assisting people to adopt a self-distanced perspective. In Slate's study, he developed a system to scan participants into virtual reality using range of light sensors. Considering VR equipment and other appliance used by Slater can be hard to approach for normal households, we paid attention to cartoon camera filters on prevalent social media such as Snapchat and Instagram. According to the data from Statista, 48% of internet users aged 15-25 in the US uses Snapchat [29](as of third quarter 2020), and 71% of US young adults in the age range 18-29 uses Instagram [30](As of Feburary 2021).

Considering young adults' familiarity with these social media and possibly its cartoon filters in the camera roll of the application, our first prototype used cartoon filters as an essential element for the initial prototype. We ask participants to reflect on one of their past negative experiences, then record a video of themselves narrating the event. By applying a cartoon filter on the recorder and adding a safety curtain virtual background in the video(Figure 3.13.2), we wanted to stimulate a theatrical effect on the autobiographical video. After editing, we let the participants to watch the video again and see if they can gain a self-distanced perspective for this event. This prototype focuses on addressing two questions of the current research: (1) the effectiveness of this design for achieving self-distanced perspective; (2) the emotional effect/benefits of this design.

Unfortunately, in the initial experiment testing of De-self Tape, the result and feedback we received from the 3 participants we tested on are far from expectation.

Figure 3.2 Screenshot of Prototype 1

We consider the reason of limitation for this prototype might be: (1) Although the character in the autobiographic video is changed, the voice of monologue remains the same; (2) Since the participants are narrating the event, some of the participants paid more attention describing their feelings rather than the objectiveness of what happened in the event. These findings led us to discontinue with prototype 1 and search for other possible method for self-distancing.

3.3. Doll Making vs Visualization

In the later researching process, we gained knowledge and inspiration from different research of doll making used in therapy. Doll making, as one of art therapy, is well studied for treating people with dementia. We see the gap and potential of doll making as a possible way to achieve self-distancing for adaptive self-reflection for young adults, since doll is said to have the ability of symbolizing human beings, both ourselves and others. [19]

For this design we put our focus on examining the effectiveness of doll making as a way for self-distancing for past negative experiences(those related to/ caused sadness, anxiety, guilt, shame, etc). Here we exclude serious and traumatic past events to prevent unexpected emotional fluctuations.

3.3.1 Hypothesis

The following hypotheses are tested: Doll making can be an effective way for self-distancing for adaptive self-reflection when reflecting on past negative experiences. We expect the result of Doll Making vs Visualization in Group D has similar or higher level of effectiveness to prove the hypothesis, since the similar manner of tests in Group V done by many empirical studies confirms the compelling effect of self-distancing on adaptive self-reflection. [3]

3.3.2 Paradigm Overview

To examine the level of effectiveness of doll making for self-distancing for adaptive self-reflection in comparison with the method widely used by other research, which is to recall the past event in self-distanced perspective, we employed a between-groups experimental design. The two groups are "Doll-making" (D) group and "Visualizing" (V) group. Participants in group D were led to recall a past mid-level negative/stressful event, then apply how they view themselves in that situation in a doll/ make a doll representing themselves in the event. In group V, participants were instructed to recall the same level of negative experience from a third person perspective.

Participants

We recruited 12 participants in the age range of 20-30 from the campus of Keio University and also from the general public. The 12 participants were randomly divided into two groups, group D and group V with 6 participants in each group. Out of 12 participants, 10 are female, 2 are male. In group D there is 1 male and 6 female, where as in group V there is 1 male and 6 female as well.

Materials

Each participant in group D is provided with a plain doll handmade by the author(Figure 3.2), the reason why we provide a pre-made doll for participants is that the making of the plain doll can be rather time consuming, which might cause the time left for participants to personalize their doll to be compressed.

In fact, in the preparation stage, the time cost for each plain doll to be made is approximately an hour, on average.

Figure 3.3 Basic doll

The rest of material provided for participants in group D is as follows: a stack of felt cloth in various colors, watercolor pen and permanent markers in various colors, scissors, glue, white A4 sized paper board as pattern paper(Figure3.4).
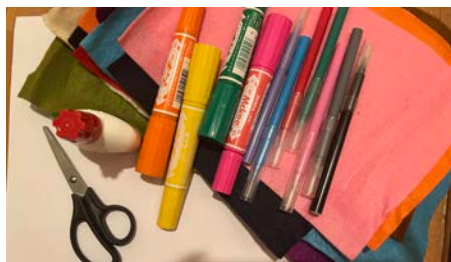

Figure 3.4 Materials provided for Group D

Procedure

Participants in both groups were given information about the test procedure and signed the consent form. Participants in both groups were given 40 minutes limit for the experiment. (Excluding the survey and interview time)

Before the actual experiment started, all participants were asked to fill in the Past and Negative Affect Schedule (PANAS) to measure their current mood/ emotional level.

Participants in the V group were told to recall then visualize their experience from an observer's view

> Take a moment to think of a past event that ended up giving you negative emotional effect. Go back to the time and place of this event you thought of and see the scene in your own eyes. Then take a few steps back. Imagine yourself as a spectator at present of the experience where you can watch the even happening from a distance and see yourself in it. Replay the memory as it unfolds in your imagination as you witness your distant self····

Participants in Group D were also asked to recall a past negative experience. They were then presented with the materials and told to make a doll of themselves in that situation.

> Take a moment to think of a past event that ended up giving you negative emotional effect. Now try to make a doll resembling yourself in that situation. You can also decorate your doll with things that possibly represent your emotional negativity in that experience····

3.3.3 Measurements

After the experiment, the participants were giving the exit survey to be answered. The exit survey contains five essential variables in order to test the effectiveness of self-distancing. [13] Knowledge: Understand, Idea/Inspiration, Control, Helped. The detail of the variables is as follows:

- Knowledge: I feel that now I have more knowledge about my problem brought by this experience.

- Understand: I feel that now I can understand my negative emotions brought by this experience better.

- Idea/Inspiration: I think I am able to think of new ideas to improve my problem.

- Control: I feel like I have better control of the situation.

- Helped: I feel this experiment helps me to have a new perspective over my past experience.

Each participant is asked to rate how they feel about the variables on the scale of 1-5 (1: Strongly disagree; 3: moderately agree; 5: strongly agree) All participants were interviewed after completing the survey.

3.4. Mini Me

Based on the feedback we received from Doll Making vs Visualization, some participants reported that they encountered difficulty picturing themselves in a particular way, especially in a negative setting. Mini Me is designed to see whether doll making can be effective for self-distancing and self reflection under a more open ended instruction.

3.4.1 Hypothesis

The following hypothesis is being tested in Mini Me: Doll making has effectiveness for self-distancing and adaptive self-reflection in a more general setting. We also expect doll making to have positive impact on other aspects for participants. Observation and reflection on other potential benefits of doll making as a daily self-coping technique is also a main goal of Mini Me.

Participants

11 participants were recruited for Mini Me from Keio University and also from the general public. Participation in Doll Making vs Visualization is not required for participation in Mini Me. 9 out of 11 participants are female, 2 are male. All participants are Asian.

Materials

Participants are provided with similar material and tools as participants in Doll Making vs Visualization group D.

Main contents includes a pre-made plain doll(Figure 3.3), a stack of felt cloth in various colors, watercolor pen in various colors, scissors, glue for cloth use, white A4 sized paper board as pattern paper(Figure3.4).

Procedure

In order to decrease decision paralysis and limitation under precise condition in participants, minimum level of instructions are given in Mini Me so that participants' creativity will be hindered less than in Doll Making vs Visualization.

Participants are given general instructions for this experiment,"Apply how you see/perceive yourself to the doll." Each participant is given 40 minutes for doll making process.

3.4.2 Measurements

Impact on Current Mood: To study whether doll making makes a difference in participants' current mood level, the Positive and Negative Affect Schedule(PANAS) (Figure3.5) is used in this experiment to measure participants' Positive Affect and Negative Affect in two assessment points: prior to the experiment and after the reflection of the doll making. The PANAS was a five-point scale developed in 1988 by psychologists David Watson, Lee Anna Clark, and Auke Tellegen, and is considered as one of the most reliable mood scale for non-clinical measurements, which has been tested and examined by various research. [31] The

	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely
Interested	□	□	□	□	□
Distressed	□	□	□	□	□
Excited	□	□	□	□	□
Upset	□	□	□	□	□
Strong	□	□	□	□	□
Guilty	□	□	□	□	□
Scared	□	□	□	□	□
Hostile	□	□	□	□	□
Enthusiastic	□	□	□	□	□
Proud	□	□	□	□	□
Irritable	□	□	□	□	□
Alert	□	□	□	□	□
Ashamed	□	□	□	□	□
Inspired	□	□	□	□	□
Nervous	□	□	□	□	□
Determined	□	□	□	□	□
Attentive	□	□	□	□	□
Jittery	□	□	□	□	□
Active	□	□	□	□	□
Afraid	□	□	□	□	□

Figure 3.5 Positive and Negative Affect Schedule scale

interpretation of the PANAS scale has two sections: the Positive Affect (PA) and the Negative Affect (NA). The score of PA is gained by adding the scores on items 1, 3, 5, 9, 10, 12, 14, 16, 17, and 19. Scores can range from 10 – 50, with higher scores representing higher levels of positive affect. The score of NA is the some of the scores on items 2, 4, 6, 7, 8, 11, 13, 15, 18, and 20. Scores can range from 10 – 50, with lower scores representing lower levels of negative affect. [32]

Spontaneous self-distancing: Subsequently participants were ask to rate their level of spontaneous self-distancing on a 7-point scale, e.g., to what extent they feel like adopting an observer point of view by the doll making process. (1= not at all, 4=moderate level, 7=predominantly observer point of view) Participants also rated the level of accuracy of the doll representing themselves. (1=not accurate at all, 7= the doll is like another me). In order to study the potential benefits/affect and factors possibly altered the result of doll making for self-distancing and adaptive self-reflection, the following additional information were requested from participants for investigation:

- Level of self-satisfaction, prior and after the session

- Level of emotional expression: if they consider themselves as good at talking about their feelings

- Experience with therapy and evaluation of the experience if there is any.

- Method for emotional expression in daily life.

- Daily technique for self-soothing: what methods they use when you deal with difficult situation/stress/negative emotions.

- Experience of using creativity outlet for stress/discomfort release if there is any.

Interview and reflection: All 11 participants were asked to interpret their doll and make reflection after the session. All participants were interviewed for additional information after session.

Chapter 4
Evaluation and Observations

4.1. Doll Making vs Visualization

In the Doll Making vs Visualization test, we made a comparison group test. We measured the Positive and Negative Affect Schedule scores for both groups before they enter the session as an assessment for the Doll Making vs Visualization test. The results of the five variables Knowledge, Understand, Idea/Inspiration, Control and Helped will be analyzed and discussed in the following section.

4.1.1 Assessment

The score of Positive and Negative Affect Schedule is a well proved measurement for positive and negative emotions and feelings for different time intervals. The 12 Participants scored and average of 19.12 (SD= 6.64) for Positive Affect and 22.17 (SD=6.36) for Negative Affect.

4.1.2 Data Analysis

In Doll Making vs Visualization, participants in group D reported similar level of the Knowledge variable, (Group D: Mean=4, SD = 0.89; Group V: Mean=3.83, SD= 1.169), Idea variable (Group D: Mean=3, SD= 1.29; Group V: Mean=3, SD=0.89) and the Control variable (Group D: Mean=3, SD=0.89; Group V: Mean=3, SD=1.169)

Participants in group D scored higher in both Understand variable(Group D: Mean=3.83, SD= 1.067) and the Helped variable(Group D: Mean 4.17, SD=0.75; Group V: Mean=3.17, SD=1.17) (Figure 4.1)
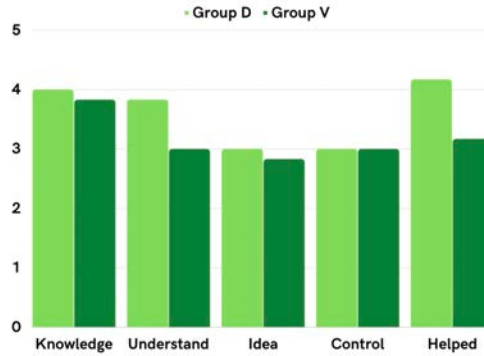
Figure 4.1 Histogram of result of 5 variables

By reading the quantitative results of Doll Making and Visualization, we understand that the doll making has positive potential as an alternative methodology of self-distancing.

4.1.3 Participants' Reflections

Upon participants' consent, some participants' doll will be displayed and discussed in the following content.

Participant 1 One of the participants made doll 1 because he's been going through serious hair loss since moving to Japan. "Every time I take a shower, I see a bunch of lost hair on the sinkhole in my bathroom. It gives me lot of stress because I'm worried I might be bald soon." He used the blue cloth to represent the water which washed away his fallen hair, and the black stripes on the blue symbolized a clump of hair he lost. "I know losing hair is normal when you change the living environment and the water might be different too, but this time is just worse than ever compared to the other countries and cities I've lived in." The doll making process provided him some relief, "I don't know how to describe it, but I feel like I can jump out of myself for a moment looking at him (the doll) ". (Figure 4.2)

Figure 4.2 Caption

Participant 2"When you asked me how I see myself in that kind of negative emotional moment, I see myself addicted in gaming and lost interest in many other things⋯"said by the other participant, who had trouble with game addiction recently. She didn't decorate the doll (Figure 4.3) itself as much and simply put a grey shirt on it because her enthusiasm for"wearing beautiful clothes and putting on make-up"has faded due to the indulgence in the world of games. "Now I look at her I feel how my parents are looking at me, and I understand why they are worried about me. It's scary"

Figure 4.3 Doll 2

4.1.4 Discussion

After participants in group D finished doll making and start reflecting, most of them (4 out of 6) mentioned that when giving shape to the factors in their negative experience, it helps clear their mind in distinguishing which part of the story is more important and factual. This helped some of them look at this negative experience more rationally.

Looking at reflection from participants in group D, 3 out of 6 participants expresses they encountered difficulty when first asked to apply themselves to the doll during certain negative experience. We consider the preset context of negative experience may cause limitation in doll making for some participants. This finding triggered the design of the Mini Me, that is to test whether people can adopt a self-distanced perspective by doll making, with open-end setting and more general instruction.

In observation of two group of subjects, we notice that participants in group D tend to reflect more than those in group V. We consider this might be caused by: People in Group D will have a medium made as the result of the experiment, so when they talk about their thoughts/feelings of the study, they were able to look at the doll and reflect on it. Their thinking and feeling might replay during the reflection time. Whereas people in group V, some thoughts and feelings might be faded by the time they reflect on their experimental experience. We consider this design has flaw with participants in group V lacks the medium/method to be able to record their thoughts/feelings during the test. A possible way of improvement is to provide pen and paper for participants in group V to record their thoughts and feelings during the visualization process. Another way of advancement is to change the visualizing process into writing process: let participants write their experience in first person narrative then rewrite in third person perspective, as third person writing is also used as a method to test for self-distance [27].

Another insufficiency we find in this test is that as the participants in group V enhance their psychological distance by mentally shifting focus away from the self-immersed perspective, the number of times of recalling the past experience and the recall process might end up differently from Group D. If this were true during the experiment for some participants, we might need to question the reliability of this comparison group testing. Therefore, we also add the column for testing

spontaneous self-distancing in the Mini Me test.

4.2. Mini Me

As the previous test the effect of Doll Making vs Visualization for self-distancing, the main focus of the second study Mini Me is on other possible benefits of doll making outside of a therapeutic setting. Considering the few inefficiency in the design of Doll Making vs Visualization experiment, the measures for whether doll making can help participants adopt self-distanced perspective is also tested in Mini Me.

4.2.1 Data Analysis

Level of Self-satisfaction

The quantitative values of self-satisfaction before and after the doll making session are displayed in the graph below. The light green color represents level of self-satisfaction before test, and deeper green colored bars represent the level of self-satisfaction after test.(See Figure 4.4)
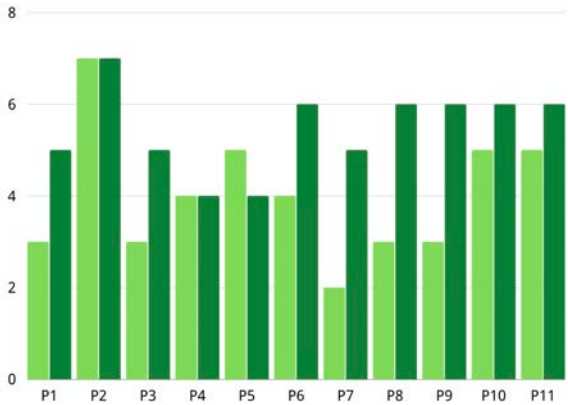
Figure 4.4 Change of level of self-satisfaction subsequently to the study

The result of statistical test is in Table 4.1.

Table 4.1 Data analysis (p-value) of self-satisfaction data

	Prior session	After session
Mean	4	5.4
Standard deviation	2	0.87
Sample size	11	11
p-value (one-tail)	0.28%	
p-value(two-tail)	0.55%	

Reading from Figure 4.4 and statistical data in table 4.1, we can see that most participants had increase in their evaluation of self satisfaction. Based on participants' feedback, doll making shows great potential in increasing confidence.

Spontaneous Self-distance

Table 4.2 shows the mean and median of participants' response of level of accuracy the doll representing themselves and level of spontaneous self-distancing subsequent to the session. Most participants' feedback shows that doll making has good potential in helping people adopt a self-distancing perspective.

Table 4.2 Data on Spontaneous Self-distancing

	Level of accuracy	Level of self-distancing
Mean	5.73	6.09
Median	6	7
Sample size	11	11
Standard deviation	1.34	1.30

Level of difficulty

Participants were also asked to rate the level of difficulty they felt during doll making process.

Table 4.3 Data on difficulty in doll making

	Mean	Median	Standard deviation
Level of difficulty	2.09	2	1.58

Change in PANAS score

Table 4.4 Data analysis (p-value) of PA score

	PA score(Prior session)	PA score(After session)
Mean	20.73	28.90
Standard deviation	3.29	5.09
Sample size	11	11
p-value (one-tail)	0.168%	
p-value(two-tail)	0.335%	

Table 4.5 Data analysis (p-value) of NA score

	NA score(Prior session)	NA score(After session)
Mean	17.09	14.09
Standard deviation	6.69	5.28
Sample size	11	11
p-value (one-tail)	0.342%	
p-value(two-tail)	0.685%	

From data analysis of the change of PANAS score, participants have an average of 8 increase in positive affect, an average of 3 decrease in negative affect. This statistical change implies that participants have positive change in mood and emotions after the doll making and reflection: Increase of Positive Affect score indicates that participants' positive mood and emotions were enhanced by the completing the task; Decrease in Negative Affect score implies the doll making study helped relieve their negative emotions and mood in certain degree.

4.2.2 Observation

Most participants seem to enjoy the process of making the doll of themselves. In the reflecting on their own dolls, some participants show the increased self-awareness and new perception about themselves that they didn't realized before, regardless of the perception of their appearance or the inner world. One of our most important intuition is that we want to make observations of participants

performance in making process and how they react to the work of their own. The doll making process, the doll itself, and the reflection of the doll have significant connection and impact on each other therefore none of the three factors shall be neglected or treated less seriously in this research.

Upon participants' consent and agreement, image of their dolls and reflection in the interview session will be shared in the rest of session. Participants' real name and private information will not be shared. A random alphabet will be used when referring a particular participant.

"I always want to be special, not like everyone else."

Figure 4.5 K's doll

K's doll has the least level of likeness with his own personal image among all the participants, even on level of likeness with human image. K didn't make ordinary clothing or accessories as decoration of his doll. We observed that almost cloth available in every bright color was used on his doll, "I just want to make it colorful, despite that I'm wearing dark color in real life." The shoes were made brown because he want to present himself as "colorful but yet still 'feet on the ground" in order to achieve what he wants to achieve. "...to be honest, making this

doll didn't really make me know more about myself because I already have good knowledge of myself and I say that with confidence." he added "but I do think this doll represents me perfectly as how I'm like in my inner world." Still, he admitted that in the making process he's reminded that he seldom reflect on himself in recent years, "now speaking of self-reflection, my assurance on self knowledge kind of trapped me into where I am now." K has high standard and expectations of himself but sometimes not able to meet them because of different limitations. "I think the most important thing I get out of this test is that I shouldn't stop reflecting only because I think I know myself pretty well. I'm encouraged to try something new in the future and see if my self-perception changes then."

"This is interesting and enjoyable for me."

Figure 4.6 Y's doll

"I have never tried to see myself from a different perspective,"Y said, "this is an interesting and new experience for me." When choosing hairstyle for the doll, she perceived the desire of changing hairstyle to short hair rather than the long hair she has now. The touching, cutting, fiddling in the making process was "stress

relieving and enjoyable" for her. She was able to reflect and gain new insights about her appearance when decorating the appearance of her doll.

"This is what I look like when I shine in my career one day "

Figure 4.7 S's doll

"I think I have good potential and ambition for career, so I made myself in a business suit." We noticed S had the act of her using her phone to search for pictures of business suit in the making process. "Because I want to make it more precise." This act made her realize again that she has a very strong personality. "I actually liked this process as a way to reflect on myself. Although I don't consider myself good at hand crafting, I will consider this method for self-reflection to check on my own personal growth in the future."

"Isn't she cute? "

Figure 4.8 Z's doll

Z expressed her fascination about fashion and the study of wearing both on her doll and verbally in her interview. "If you come to my house, you can find identical items of the clothing and accessories to what I put on the doll". she added, "I was immediately attracted to the activity and the idea of looking at myself from other perspective." This new experience or experimentation, as how gestalt philosophy would put it [24] was "relaxing and fun" for Z. Performing this process made Z emotional comfort, "as I add more stuff one by one to the doll, I feel like I love myself little more and more." "I'm happy for being a curious person because this has benefited my from my past many times. Today's feedback is an affirmation and positive reflection of how I act and behave in my daily life."

"I miss riding so much. "

Figure 4.9 W's doll

"When you asked me to make a doll of myself, the picture of me riding on mo-
torcycle immediately appeared in my brain." W said in the interview, "I used
green for the helmet because I actually have a green helmet back home, bright
bright green." Listening to W's reflection, we learned that W hasn't' been able
to go back to his home country for almost two years because of the pandemic. "I
wasn't so interested when you told me to make a doll, because I neither have any
hand craft skills nor have any interaction with dolls in my daily life. If I didn't
tell you you probably can't tell the ugly green circle on my head is a helmet."
When we asked if W would consider doll making as a daily reflection method, he
replied "I probably won't make any other doll in my life leaving this room today.
But looking at what it turned out today, it's not that bad because it remind me
of the good old days."

"Sometimes it's not that bad to leave what we use to behind."

Figure 4.10 X's doll

"You might wonder why my hand is holding a grey T-shirt, that's my old dressing style that I'm throwing away." X had a hard time with her current relationship because her partner wants her to abandon the old dressing style. "You probably think I got gas-lighted or manipulated in the relationship, I too thought so. I barely wear short skirts because I'm not fully satisfied with my body shape and I'm afraid of people's weird eye sights." X didn't deny the desire to dress in a more fashionable style or as she put it "the hot girls' style" deep down in her heart. "I wasn't happy because I hate people tell me what to do. But you know what, the moment I put on that mini skirt, I looked at myself in the mirror. I was surprised of how different I looked and it was unexpectedly good." she asked, "do you think I look prettier with bleached hair too?" "Now it feels like I opened up the door to a brand new world, and I'm even more excited to try different styles looking at the new 'me.'"

"I like the fresh air here."

Figure 4.11 F's doll

"I don't want to reveal too much but I can tell you I've paid too little attention to myself in the past years I've lived." said by F, who started living in a new environment away from family. As F is going through "adaption into new environment" and the "stage for self-exploration" "I have more attention for myself than ever now." Red color was in her thoughts as the sign of life, green leaves represents new opportunities and new version of F. "If you ask me why there is a question mark on my face, I don't know either. But I'm exited to find out."

"I didn't think I could do it too"

Figure 4.12 E's doll

E just quit smoking recently after 5 years. "Can you see my lungs breathing happily now? " The green stripes on her doll represents her relief from addiction of tobacco."The thought of quitting never occurred to me before until a friend of mine did it from reading a book." E said, "so I went read it too." Her quitting was unexpectedly easy, "I used to think I'm a person vulnerable to addictions, but it was like a magic." The success of quitting and reflecting on it enhanced her level of confidence.

"Maybe I should can be colorful too?"

Figure 4.13 M's doll

M was noticeably hesitating while choosing the colors for her doll. Later, she explained, "I wasn't hesitating, I was thinking. Looking at all the bright colors in front of me, I realize that I don't know how to use them." Most of times M dress in dark or less vivid colors because she considered herself as "not matching" and "too old for it" for these colors. "I look at these colorful cloth and by touching them, it gave me a pulse to put it on my body."

"Sometimes it's not that bad to leave what we use to behind."

Figure 4.14   J's doll

"I like to be surrounded by bright colors" said by J, "when you asked me if I'm good at emotional expression,I wondered." J's response for method of emotional expressions were "going to karaoke, shopping and hanging out." She identified herself a person with rich emotions. "Then I think of it, I actually barely talk about my feelings with other people even though I carry a lot of them (feelings and emotions)." The reason behind it was a task she had for herself after the session to find out in the future, "making the doll gave me insights about new ways of emotional expression without engaging other people."

"Constantly changing, haha"

Figure 4.15 D's doll

"I had so much ideas about how to make the doll and I can't pick nor stick to one one of them." D was observed to be the participant who had most "wasted materials" after the session. "I'm not indecisive, I'm just constantly changing." D laughed after saying this. She teased about the phrase "constantly changing" with two contrary words. "When I was just making one part of the doll, another new idea just flashed into my mind, one by one." She expected her doll to be messy with the overflowing ideas, but it turned out to be "pretty cute." "Then I told myself, what's wrong with changing? Even the our life are referred as 'new normal' now." She giggled, "I should have put a X mark on the doll, cause I'm the variable X"

4.2.3 Reflection and Discussion

Figure 4.16 **Collection of all dolls in Mini Me**

The average score of participants' level of self-satisfaction is 4 (prior to doll making)and 5.4(after doll making), with an increase of average 1.4 in level of self-satisfaction. The rise in level of self-satisfaction could be implicitly related to the possible expansion of self-knowledge while making and reflecting on the doll, the gratification brought by the completion of a task. To determine what brings the change in the level of self-satisfaction, a study about self-satisfaction and doll making in further depth is required. More assessments on self-satisfaction could help determine the relationship between doll making and level of self-satisfaction.

We did not anticipate major gender difference for the result of Mini Me test. Like Gaynard points out in his study of doll therapy [20], although the sex-role stereotypes tend to tie the connection between dolls and female, male participants can freely endow their doll with masculine features which "do not resemble the typical commercially manufactured doll" with the plain doll provided. In fact, in 2 males participated in our study, participant K's doll was one of the most colorful and creative figure out of all dolls. The other male participants W expresses higher difficulty while making the doll because he admit that he had weak hand crafting skills. When we were able to gather more balanced gender ratio for future study, we might be able to find out more gender related pattern.

8 out of 11 participants (Participant Y, S, Z, W, X, E, M, J) made their dolls' outfits referring to their daily dressing preference. The other 3 participants created their doll using symbols and shapes which doesn't necessarily resemble their real

life figure. 8 of the 11 people gained new knowledge about themselves, 2 of them are about appearance (Participant Y, M) , of them are about inner world (Participant W, J, X, F, E, D). Although we can see that most participants were able to gain new self-knowledge after the study, we do not see any distinct relationship between the realism of their doll and the self-knowledge gained. In the 2 participants who didn't earn deeper self-knowledge out of the test, they both agree that the Mini Me process helped them adopt a self-distanced perspective. Among these 8 participants who benefit in self-knowledge, Y and M gained new understanding about their preferences of appearance. We can see the trend of how Mini Me: the doll making of oneself, the product doll making and reflecting on the process and the product can possibly enhance participants' understanding towards themselves. More importantly, 6 out of 11 participants gained new knowledge about their own self after the session.

Participant X and F who were going through some life changes, in their reflection said that the doll making is extra helpful for them. Although we don't have enough information to know if other participants are going through life changes (not revealed in the reflection session), we regard this pattern between life changes and helpfulness of doll making to be possible research direction for future work.

More than 90% of participants (10 out of 11, except participant W, who claimed himself to be less talented on handcrafts) expressed their enjoyment in doll making process. Looking at participants' emotional movement measured by the PANAS, we can conclude that the participants gained distinctively positive emotional affect in Mini Me and less but still noticeable relief in negative affect.

Figure 4.17 Y and K's Dolls

In fact, participant Y and K are in relationship and both completed the doll making study. They did not interfere nor interact in their individual test. After the whole session is complete for both of them, they were able to see each other's doll. They both showed surprise and made comment on their partner's doll. Especially for Y, K's doll was "beyond Y's imagination." They communicated and shared their own reflection in Mini Me with each other. K and Y provide extra feedback after the main session that they were able to learn something new about their partners. This finding provides us for possibility of the use of doll making in relationships for the future.

Chapter 5
Conclusion

5.1. Conclusion and Observations

The intention of this study is to find an alternative approach for self-distancing other than the visualization method applied by many other studies. Reviewing the experiment results and feedback from participants in both Doll Making vs Visualization and Mini Me, we are convinced that doll making process was able to bring new perspectives to our participants and help them adopt a self-distanced perspective. In reviewing and analyzing participants' feedback and reflection on the doll making process, we are surprised to find that doll making has potential to help them gain self-knowledge, as most participants revealed that they have learned something new about themselves after the study. The result also implies that doll making can be bring positive impact on participants current mood and emotion. These findings suggest that doll making has good potential to be developed as a daily self-coping technique.

5.2. Limitations

The principal limitation of this research was the insufficiency of the sample size, especially for the comparison group testing. The topic of doll making might have induced less male participants volunteering than female participants. The result cannot conclude neutrality regarding gender.

Another possible inadequacy could be the fact that participants were provided with pre-made plain dolls instead of instructed to make a doll from scratch because of time limit. Participants may have better/worse experience when performing full doll making process.

One potential limitation in measurements of this study is that most of the assess-

ments used for both Doll Making vs Visualization and Mini Me are subjective, like interview questions. More objective approach for measurements is needed to bring more meaningful result for this study.

5.3. Future Work

The research focuses on the process of doll making for self-distancing, the influence of handling and keeping the doll after the making process is yet to be tested. People may reflect on their dolls differently one day later or even longer. The long term effects of this experiment still needs to be tested. In the future, long-term study of the doll-making and doll itself as an intervention for daily self-reflection will be tested to determine whether it is possible to be seen as a daily self-coping methodology.

Therefore, the next study will conducted in a long-term setting and see if participants' reflection on doll making changes if they get hold to the doll for a certain period of time. If doll making can be proved to be effective in the long-term, it's possible to make a tool kit with instructions for people to use doll making as a daily self-reflecting and self-coping technique.

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Appendices