A Picture is Worth a Thousand Words?
An exploratory study in self-disclosure using art and writing
among Hong Kong art students

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Date : 28 May 2007
Abstract

(1) Objectives
This study aims to explore self-disclosure by the use of Pennebaker’s writing therapy plus a drawing task on a group of art students in Hong Kong. Pennebaker’s research has shown that writing about traumatic events reduces psychological symptoms and have long-term health benefits. The first hypothesis of this study is whether a non-verbal art therapy in conjunction with a verbal writing therapy would be effective in reducing self-perceived stress and improving life satisfaction. The second hypothesis is that Hong Kong students are not as expressive as American students, and that a more indirect form of drawing would be better received than writing.

(2) Methods
Students participated in two 20-minute sessions, where they completed a drawing and writing task on his/her most stressful or upsetting event, and filled out pre- and post-questionnaires, and were debriefed at end of study.

(3) Results
The results failed to support that self-disclosure would result in improved psychological well-being. However, Hong Kong students disclosed at lower levels than American students and preferred to disclose with drawing than writing.

(4) Discussion
One limitation of this study was the small sample size and the use of art students may have biased the results. In spite of these limitations, the preference for Hong Kong students to disclose via drawing has interesting implications. Suggestions for future research will be discussed with reference to cultural sensitivity.
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Chapter 1 – Introduction

In the U.S., research has demonstrated that emotional expression and self-disclosure of traumatic or stressful events via expressive writing can significantly improve health and other psychological and behavioural measures. Most prominent are the works of James Pennebaker and his team of researchers, who have spent the last two decades investigating the topic. The results have been promising and intriguing and have inspired me to extend this line of research beyond the U.S. and into Asia. However, after conducting a literature review, no similar studies have yet been conducted in Hong Kong. Therefore, the purpose of this exploratory research is to see whether these studies are culturally relevant in Hong Kong and whether similar benefits can be found for Hong Kong participants.

There are several incentives to study the efficacy of self-disclosure in relation to personal well-being in Hong Kong. First and foremost, the nature of our city is one of high-pressure and high-stress for most residents. It is safe to assume that stressful experiences crowd our lives. At the same time, there is strong social stigma in psychological help-seeking and ever rising medical costs. Subsequently, any cost-effective, time-effective and discreet methods of preventive or self-help measures should be well suited for Hong Kong. Secondly, norms regarding self-disclosure in Asian and American cultures differ considerably (Chen, 1995). Empirical studies have generally found that Asians reveal less information about themselves than Americans on diverse topics ranging from more generic and less private information to highly personal and distressing experiences (Barry, 2003). In light of this, the question arises, are Hong Kong Chinese people at a higher risk of illness and psychological injury if
traumatic and stressful events occur, but are not being disclosed? If so, can we, as researchers, design and apply a self-disclosure method that is both culturally sensitive and effective for the people of Hong Kong?

This exploratory research study is presented in five chapters, with the first chapter being the Introduction. Chapter two reviews the current literature on emotional expression and self-disclosure. This chapter is further sectioned into self-disclosure via verbal means (writing), self-disclosure via non-verbal means (in the case of this study, drawing) and combined self-disclosure (writing plus drawing). Chapter three draws the key issues from the previous chapters and presents the methodology of this study, including the research design, a description of the research participants, the instruments used, and the research procedures. Chapter four presents the results of this exploratory research and Chapter five is a discussion that pulls from the literature, the findings, and the research questions, with recommendations for further research on this topic. The reference section lists the books and journals that were studied and the appendices will be referred, as needed, throughout the paper.

It is my personal objective, to make this exploratory research as interesting and as relevant to ourselves as possible, by pulling research into our lives, and making a contribution to the knowledge surrounding the betterment of human well-being. It is my hope that my initial effort will inspire other readers and researchers in Hong Kong to continue in this line of research on emotional expression and self-disclosure in relations to personal well-being.
Chapter 2 – Literature Review

Life is unpredictable and unexpected event happens, which colours and shades people’s lives. Research has shown that traumatic experience, such as death of loved ones, sexual or physical abuse, or divorce of parents, has negative effects on overall health and well-being (Chatterjee, 1999). A natural way of coping with traumatic experiences is by understanding what happened, and one of the ways individuals seek to understand the major upheavals in their lives is by talking to others about it. However, many traumatic events cannot be easily discussed, especially if the traumas are not socially acceptable. For example, rape victims, victims of family or sexual abuse, or employees who got laid off work, are often reluctant to divulge these experiences because of fear of punishment or shame. In the recent years, research has accumulated that not disclosing extremely personal and upsetting experiences to others over a long period of time may be related to disease processes. Conversely, discussing or disclosing a trauma may have lasting beneficial effects (Pennebaker & Beall, 1985).

On an interpersonal level, discussing a trauma allows for social comparison (e.g. Wortman & Dunkel-Schetter, 1979) and coping information from others (e.g. Lazarus, 1966). From a cognitive perspective, talking about, or in some way confronting a traumatic event, may help the individual to organize (Meichenbaum, 1977), assimilate (Horowitz, 1976), or give meaning (Silver & Wortman, 1980) to the trauma. Alternatively, upheavals that were kept secret were more likely to result in health problems than those openly discussed. For example, individuals who were victims of violence and who had kept this experience silent were significantly more likely to have adverse health effects than
those who openly talked with others (Pennebaker & Susman, 1988). Similarly, a
survey of spouses of suicide and accidental-death victims revealed that those
individuals most likely to become ill in the year following the death were the ones
who had not confided in others about their experiences (Pennebaker & O’Heeron,
1984). Results indicated that the less individuals confided, the more they
ruminated about the death. In short, having any type of traumatic experience is
associated with elevated illness rates; having any trauma and not talking about it
further elevates the risk (Pennebaker & Chung, 2007).

If keeping a powerful secret about an upsetting experience is unhealthy,
can disclosing a secret be beneficial? This is the question Pennebaker and his
colleagues asked over two decades ago, and to this day, they remain the dominant
figures in research related to self-disclosure and health. In their original writing
experiment, people were asked to write about a trauma or about superficial topics
for four days, 15 minutes per day. The results of the initial study were astounding
and have generated a long line of work examining the health and psychological
benefits of writing about traumatic or stressful experiences with a wide array of
intriguing results. Health benefits include drops in physician visits, fewer reports
of aspirin usage, and improvements in immune functioning such as t-helper cell
growth, antibody response to Epstein-Barr virus, and antibody response to
hepatitis B vaccinations. Behaviorally, participants improved their grades, got
new jobs more quickly and were absent from work at lower rates, compared to
controls. Emotionally, writing produced long-term improvements in moods and
well-being, and significant reductions in distress (for review, see Lepore &
Smyth, 2002; Pennebaker & Graybeal, 2001; Sloan & Marx, 2004).
More recently, researchers have been interested in studying the combined effects of writing plus other forms of non-verbal expressive methods, such as drawing and dancing (see Chan & Horneffer, 2006; Pizzaro, 2004; Pantchenko, Lawson & Joyce, 2003; Krantz & Pennebaker, 1995). While the benefits of written disclosure are now well documented, for some people, the use of words may be more of a hinder than a catalyst. One of the major drawbacks of written disclosure is that many participants report higher levels of anxiety and negative mood directly after writing, and non-verbal disclosures may just act to offset this drawback. Art making, for example, has been shown to improve and repair moods (Petrillo & Winner, 2005), generate discussion and sharing of past negative experiences (Yamaguchi, 1997), and reduce stress (Rubin, 1999). Overall, results of studies examining both verbal and non-verbal means of disclosure have indicated that a combined method, engaging both verbal and non-verbal means of disclosure, may be an effective intervention, allowing for more emotional expression, higher participant satisfaction and better memory retrieval than verbal disclosure alone (Chan & Horneffer, 2006; Pantchenko et al., 2003).

2.1. Verbal Self-disclosure – The Writing Paradigm

The assumption that after intense emotion, ‘holding back is bad for your health’ and ‘talking is good and will help’ counts among the most fundamental tenets of naïve psychology. Whether this assumption held true remained empirically untested until Pennebaker and his colleagues proposed the writing paradigm in 1986, which is a general model linking inhibition, disclosure and health. So, what is the writing paradigm? The standard laboratory writing technique has involved randomly assigning participants to one of two or more
groups. All writing groups are asked to write about assigned topics for one to five consecutive days, for 15 to 30 minutes each day. Writing is generally done in the laboratory with no feedback given. Those assigned to the control conditions are typically asked to write about superficial topics, such as how they used their time. The standard instructions for those assigned to the experimental group are a variation of the following:

For the next three days, I would like for you to write about your very deepest thoughts and feelings about the most traumatic experience of your life. In your writing, I’d like you to really let go and explore your very deepest emotions and thoughts. You might tie this trauma to your childhood, your relationships with others, including parents, lovers, friends, or relatives. You may also link this event to your past, your present, or your future, or to who you have been, who you would like to be, or who you are now. You may write about the same general issues or experiences on all days of writing or on different topics each day. Not everyone has had a single trauma but all of us have had major conflicts or stressors – and you can write about these as well. All of your writing will be completely confidential. Don’t worry about spelling, sentence structure, or grammar. The only rule is that once you begin writing, continue to do so until your time is up.

Since the first study, an array of variations has been added. Topics expanded from traumatic experiences to general emotional events or to specific experiences shared by other participants such as diagnosis of cancer (Spiegel et
al., 1989), losing a job (Spera et al., 1994), and coming to college (Cameron & Nicholls, 1998). The amount of time people have been asked to write has also varied tremendously from 10 minutes to 30 minutes for 3, 4, or 5 days – sometimes within the same day to once per week for up to 4 weeks.

The writing paradigm has proven to be exceptionally powerful. Participants, from children to the elderly, from honor students to maximum-security prisoners, disclose a remarkable range and depth of human experiences. Lost loves, deaths, sexual and physical abuse incidents, and tragic failures are common themes in all of their studies. The interest in the expressive writing method has grown over the years. The first study was published in 1986. By 1996, approximately 20 studies had been published. By 2006, well over 150 have been published in English language journals. Although many studies have examined physical health and biological outcomes, others have examined writing’s effects on attitude change, creativity, working memory, motivation, life satisfaction, school performance, and a variety of health-related behaviours.

What are the effect outcomes of expressive writing? Researchers have relied on a variety of physical and mental health measures to evaluate the effect of writing. Across multiple studies in laboratories around the world, writing or talking about emotional experiences relative to writing about superficial control topics has been found to be associated with significant drops in physician visits from before to after writing among relatively healthy samples (Pennebaker & Chung, 2007). Writing about emotional topics has also been found to influence immune function in beneficial ways, including t-helper cell growth, antibody response to Epstein-Barr virus, and antibody response to hepatitis B vaccinations.
Activity of the autonomic nervous system is also influenced by the disclosure paradigm. Among those participants who disclose their thoughts and feelings to a particularly high degree, skin conductance levels are significantly lower during the trauma disclosures than when describing superficial topics. Systolic blood pressure and heart rate drops to levels below baseline following the disclosure of traumatic topics but not superficial ones (Pennebaker, Huges, & O’Heeron, 1987). In short, when individuals talk or write about deeply personal topics, their immediate biological responses are congruent with those seen among people attempting to relax.

Behavioral changes have also been found. Students who write about emotional topics evidence improvements in grade in the months following the study (e.g. Krantz & Pennebaker, 1996; Lumley & Provenzano, 2003). Senior professionals who have been laid off from their jobs get new jobs more quickly after writing (Spera, Buhrfeind & Pennebaker, 1994). Consistent with the direct health measures, university staff members who write about emotional topics are subsequently absent from their work at lower rates than controls.

Self-reports also suggest that writing about upsetting experiences, although painful in the days of writing, produces long-term improvements in mood and indicators of well-being compared to controls. Although some studies have failed to find clear mood or self-reported distress effects, Smyth’s (1998) meta-analysis on written disclosure studies indicated that, in general, writing about emotional topics is associated with significant reductions in distress.
In summary, when individuals write about personally upsetting experiences in the laboratory, consistent and significant health improvements are found. The effects include both subjective and objective markers of health and well-being. The disclosure phenomenon appears to generalize across settings, many individual differences factors, and several Western cultures such as French-speaking Belgians (Rime, 1995), Spanish-speaking residents of Mexico City (Dominguez, et al., 1995), adults and students in Netherlands (Schoutrop, Lange, Brosschot, & Everaerd, 1997), and English-speaking New Zealand medical students (Petrie, et al., 1995). However, a recent study of German students failed to find similar benefits, even though the range and depth of disclosure were comparable to those of the U.S. students (Morris, Linkemann, & Herwig, 2006). It would be most interesting to see if the disclosure phenomenon will generalize outside Western cultures, particularly, in Asia and Hong Kong.

**Theoretical Assumptions**

There are several tenets as to why expressive writing works, but there is no single theory to explain it. The original assumption of the writing paradigm was guided by a general theory of inhibition. The inhibition – confrontation model argues that inhibition of trauma-related thoughts, feelings and behaviours require physiological work, leading to autonomic arousal in the short term and placing cumulative stress on the body in the long term. Such stress has been linked with psychophysical symptoms (Pennebaker & Francis, 1996), as well as to specific physical disorders (Vaillant, 1979), including cancer (Andersen, 1992), rheumatoid arthritis (Young, 1992), and a range of infectious diseases such as herpes (Vander, Plate, Aral, & Magder, 1988). According to Pennebaker (1997), confrontation is seen as the opposite of inhibition. It is the process of actively
facing significant personal experiences, while acknowledging and dealing with the associated feelings and thoughts. Confronting significant experiences makes the physiological work of suppressing associated thoughts and feelings obsolete and can, via reductions in overall stress level, negate the long-term effects of inhibition on physical health and psychological well-being.

Emotional release or catharsis is also a part of the mechanisms at work. The early proponents of psychotherapy, Breuer and Freud (1895/1966), argued for the psychological and psychophysical benefits of reviving and talking about memories of past negative events and their associated emotions. Today, most therapists still explicitly or tacitly believed that the activation of emotion is necessary for therapeutic change. The very first expressive writing study found that if people just wrote about the facts of the trauma, they did not evidence any improvement (Pennebaker & Beall, 1986). Although experiencing emotions while writing is a necessary component of the expressive writing effects, cognitive work is required as well. As an example, Krantz & Pennebaker (1995) conducted a study with students randomly assigned to either express a traumatic experiences using bodily movement, or to express an experience using movement and then write about it, or to exercise in a prescribed manner each day. Whereas the two movement groups reported feeling happier and mentally healthier, only the movement plus write group evidenced significantly improvements in physical health and grade point average. It seems that the mere emotional expression of a trauma is not sufficient and health gains require translating the experience into language.

To this end, Pennebaker et al. (1990) propose an additional model, cognitive assimilation, in which the critical component is the process of creating a
narrative of the traumatic event. In other words, the process of constructing a story is central to the therapeutic value of writing. It is assumed that when emotions or emotional experiences are translated into words, or given a label, the individual can assign meaning, coherence, and structure to the experience, allowing for the event to be assimilated, and ultimately resolved and/or forgotten. This has been supported by findings that link health improvements with an increased use of vocabulary reflecting causality and insight over the course of writing (Klein & Boals, 2001; Petrie et al., 1998).

Perhaps one the most interesting speculations as to why expressive writing is so powerful, is the social dynamics involved with disclosure. When people write about emotional upheavals for three or four days, they report thinking about the topics quite frequently, including dreaming about the topics (Pennebaker & Chung, 2007). Across multiple studies, individuals report that they talk to others about their writing topics. For example, a study was conducted with Holocaust survivors and asked them to disclose their experiences verbally in an interview setting. Prior to the study, approximately 70% reported that they had not talked about their experiences during World War II in any detail to anyone. After the interview, all participants were a given a copy of their videotaped testimony. A month later, the average person reported watching the videotape 2.3 times and showing it to 2.5 other people. As the researchers put it, “disclosure begets disclosure” and expressive writing ultimately sets off a cascade of effects that goes beyond the walls of the laboratories.

Despite the large number of promising studies, expressive writing is not a panacea. The overall effect size of journaling is modest at best. One drawback to these writing strategies is that many participants report higher levels of anxiety
and negative mood directly after writing. Although those individuals experiencing negative affect still derive, equal or even greater health benefits and reported decreased rumination in the long term, the amount of negative emotions experienced during treatment may discourage individuals from continuing with their treatment. This unintended side effect of writing therapy may, in the end, defeat the potential benefits of the treatment (Pizzaro, 2004). In addition, while journaling has the advantage of being a familiar and comfortable activity for many people, given the common use of writing in day-to-day life, for some people, the use of words may be a greater obstacle than catalyst for accessing feelings (Chan & Horneffer, 2006). This has been the case for people with deficits in emotional awareness and understanding (a condition termed alexithymia). Lumley, Tojek, and Macklem’s (2002) overview of several studies in this area suggests that alexithymia interferes with the benefits of emotional expression through journaling.

2.2. Disclosure Patterns – Asian vs. American

There may be another group of people for whom words are more of a barrier than a catalyst. According to the literature on Asian cultures, one of the major characteristics of the Asian communication styles is using less verbal language or using indirect communication methods (Chen, 1993). Generally, in Eastern cultures, the key to communication rests on the receiving end and emphasizes the ability of the receiver to capture the under-the-surface meaning and to discern implicit meanings (Yum (1988) as cited in Chen, 1993). In contrast, for Westerners, willingness to talk in an interaction is the key to establishing personal relationships. Altman and Taylor’s (1973) social penetration model indicates that to build an intimate relationship with others one has to show a high
degree of amount and depth of self-disclosure. Chen’s (1993) findings, however, showed that for Asians, there are no such correlations between amount and depth of self-disclosure and forming of intimate relationships. Given the above cultural differences, the present study sought to incorporate both a verbal and non-verbal means of disclosure in order to better facilitate more in-depth personal expressions for Hong Kong Chinese people.

2.3. Non-Verbal Self-disclosure – Art Therapy

One of the ways to communicate non-verbally is by the way of drawing. Recently, a few researchers have explored art therapy, another form of established expressive therapy, which works with visual images produced by drawing, painting, sculpting, craft making or a combination of other art techniques, as an alternative or complimentary form of expression to expressive writing. Although the purpose of their studies on non-verbal expression was not specific to Asian cultures, given the preference for Asian’s indirect communications style, an indirect and non-verbal means of self-expression may better suit the Hong Kong context. Other advantages of art over writing therapy or talk therapy is that art products (e.g. painting or sculpture) do not require literacy or verbal fluency, yet they can convey emotions, relate a story, and stimulate verbal expression. Johnson (1987) suggested that traumatic memories may be encoded via a ‘photographic’ visual process. Since drawing engages visual processes, drawing a traumatic event may access photographically encoded memories, even when no words are available. Oster & Gould (1987) suggested that such memory activation allows for the objectification of affect and thus recognition of the affect-laden experience, facilitating assimilation of the event and its associated emotions.
In various research studies, art therapy has been shown to be effective in helping individuals recover from traumatic experiences. Yamaguchi (1997) used art therapy with Hiroshima bombing survivors. Using the techniques of painting and sculpture, survivors were able to work through fear, anger, resentment, and isolation. Improvements were measured by the amount of verbal disclosure about the art piece (pictures or sculptures of what they saw during the bombing). Thus, whereas at the beginning of treatment survivors were not willing to discuss their war experience, by the middle and end of the treatment individuals were sharing experiences and engaging in greater group discussion.

Rockwell and Graham-Pole (1997) used art therapy to help patients cope with the diagnosis of terminal illness. Using painting, drawing, sculpture, and craft-making as therapy, their study resulted in patients reporting better mood, less frequent distress, loneliness, and anxiety. Other benefits included improved patient cooperation and morale, and fewer barriers among staff, patients, and family members.

Landgarten (1987) have used art therapy to help families of divorce resolve disputes and custody battles and to help couples communicate. In addition, art therapy has been used in a wide range of situations, from helping immigrants with acculturation to helping workers with stress reduction, because art therapy can be a relaxing and non-threatening activity (Rubin, 1999). For example, art therapy has been used to reduce acute stress symptoms in pediatric patients who have experienced traumatic injuries (Chapman, Morabito, Ladakakos, Schrier, & Knudson, 2001), and has been utilized in the hospital setting to aid Vietnam veterans in their recovery from posttraumatic stress symptoms (Johnson, 1987).
2.4. Combined Disclosure – Expressing through Writing and Art

In 2003, Pantchenko, Lawson and Joyce, conducted a study to investigate the relationship between verbal and non-verbal methods of disclosure of recalled negative events. One hundred undergraduate students were tested in a total of four sessions (fifteen minutes each session), and included three experimental conditions (write, draw and write-and-draw) plus control groups. Intervention was executed during lectures and pens, coloured felt pens and paper were given. Results indicated improved psychological well-being for verbal disclosure, whether by writing alone or by drawing-and-writing. However, an unexpected finding emerged. It was found that non-verbal (drawing) disclosure alone was associated with significantly decreased psychological well-being. This suggests that cognitive processes, as hypothesized by Pennebaker, may provide the critical avenue for articulation and integration of the negative affects associated with trauma.

In 2004, Pizzaro furthered the inquisition and designed a study to compare the efficacy of writing versus drawing traumatic experiences by including a wider variety of art materials (8-fine-point markers, 12 coloured-pencils, 12 chalk pastels, and 8 oil pastels) and longer sessions for each intervention (two one-hour sessions). Participants were randomly assigned to three conditions, write-stress, art-stress and art-control. The write-stress condition was similar to the original writing paradigm; art-stress condition asked participants to draw the most stressful or traumatic events; and art-control asked participants to draw a still life from given photographs. The results indicated that only the writing condition, but not the drawing conditions, showed a decrease in social dysfunction. Again, suggesting that the cognitive process may be the critical avenue for reaping the
benefits of disclosure. However, participants in the drawing conditions reported more enjoyment, were more likely to continue with the study, and were more likely to recommend the study to family and friends (Pizarro, 2004). This finding strongly suggests that by combining an art element to the original experiment, the intervention may be more enjoyable for participants.

Chan & Horneffer conducted the most recent study in 2006. In their study that compared the effectiveness of writing and drawing stressful experiences, participants were randomly assigned to one of the three conditions (write group, art group and control group). Each group was given two fifteen-minutes sessions, and materials included only pencils and paper for all groups. The outcome, again, was strong for writing but less so for drawing in terms of its effects on psychological symptoms. However, the study does highlight several important issues regarding disclosure via non-verbal means. More participants in the study indicated feeling comfortable with journaling their feelings (61%) than with drawing their feelings (17%). Hence, one’s comfort level in using a modality might be an important factor in determining its effectiveness. Chan & Horneffer (2006) suggests that before discounting the effectiveness of drawing as a non-verbal means of disclosure, several factors could be explored in future research studies. First, individuals could be given a choice or preference in choosing either or both modalities to express their thoughts and emotions, whichever they feel more comfortable with. Second, by structuring the drawing task in a more narrative or sequential manner, researchers suggest that it may be possible to derive both the cognitive benefits or working through their experiences and the advantages of a more creative medium of expression.
Chapter 4 – Methodology

4.1. Research Design

This exploratory research borrows from the original writing experiment of Pennebaker and the overall design has been tailored to the specifics of the Hong Kong culture. Participants’ time is precious, so the questionnaires are kept as short as possible. There are two sections to the disclosure exercise – the drawing task and the writing task. Since it was expected that Hong Kong participants would prefer a more indirect form of communication, and may be much less willing to disclose personal issues than Westerners, the less threatening non-verbal drawing task was designed to go first, followed by the writing task. It was anticipated that the drawing would help facilitate the writing, as has been shown in various art therapy research (Carlson, 1997; Keeling & Bermudez, 2006).

Despite extensive research, there is no generally accepted conceptual or operational definition of psychological well-being. At its simplest, psychological well-being is represented operationally by the presence of positive and absence of negative affect (Panchenko et al., 2003). For the present study, psychological well-being is represented by the absence of perceived stress and the presence of positive life satisfaction. It was hypothesized that after disclosing a recalled negative experience, participants would report reduced perceived stress and higher levels of life satisfaction. In addition, it was expected that the scope and depth of participants’ disclosure would be less than that of the American participants.

4.2. Participants

Art therapy is by no means limited to persons with art background, but for this initial attempt in research on this area, it was best to limit any obstacle to self-disclosure via art. Therefore, students with art background (such as drawing,
painting, ceramics) were recruited for this research because they are more likely to be familiar with drawing, compared to students of other majors (such as Science, or Business), which would help limit any hindrance that may arise from using art to self-disclose. In Hong Kong, there are two institutions that offer degree-level programmes in fine arts (majoring in painting, ceramics or photography), and they are The Chinese University of Hong Kong and Hong Kong Art School (a division of Hong Kong Arts Centre) in conjunction with RMIT University in Melbourne Australia. Hong Kong Art School was generous in accepting my research proposal and therefore, a total of fourteen first-year undergraduate students studying in the Bachelor of Arts in Fine Art (Ceramics / Painting / Photography) were recruited for this study. Twelve sets of data were useable for final analysis because of absenteeism. All students have had at least one semester of drawing lesson and since English is the main instruction medium, their command of the English language is at acceptable levels. All students are Chinese and their age range between 21 and 36. In terms of gender, the group is comprised of an even mix of male and female.

4.3. Instruments

All participants completed a pre- and post-questionnaire, The Perceived Stress Scale (Cohen, Kamarck & Mermelstein, 1983) and the Satisfaction with Life Scale (Diener, Emmons, Larsen & Griffin, 1985). Since it was previously defined that psychological well-being can be represented operationally by the presence of positive and absence of negative affect (Panchenko et al., 2003), for the present study, psychological well-being is represented by the absence of perceived stress (as measured by The Perceived Stress Scale) and the presence of positive life satisfaction (as measured by The Satisfaction with Life Scale).
Pre-Questionnaire

The first part of the pre-questionnaire is a self-created survey that contains questions about basic demographic information, including gender and age. Chan and Horneffer (2006) suggested that one’s comfort level in using art or writing might be an important factor in determining its effectiveness. Therefore there are a total of four 5-points Likert scale questions asking participants to indicate their habits of using writing and drawing to express themselves in their personal life, and to indicate their comfort levels in using writing and drawing to express themselves. These information adds to the picture of the respondents’ habits and comfort levels in using each modality, and in the case of lack of disclosure, may give vital information regarding why they drew or wrote so little. These questions are presented in the results section. Every participant was also asked to indicate a four-digit code in order to match pre- and post-questionnaires. The second part contains the Perceived Stress Scale and Satisfaction with Life Scale.
# Table 1: Pre-Questionnaire

**QUESTIONNAIRE**

(Please tick “3” the appropriate boxes)

<table>
<thead>
<tr>
<th>AGE GROUP</th>
<th>below 20</th>
<th>21 – 25</th>
<th>26 – 30</th>
<th>31 – 35</th>
<th>above 36</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEX</td>
<td>Male</td>
<td>Female</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Do you keep a personal journal that you regularly write and/or draw in?
   - [ ] Yes
   - [ ] No

2. If yes, how often do you journal about your personal thoughts and feelings?
   - [ ] Never
   - [ ] Almost never
   - [ ] Sometimes
   - [ ] Fairly often
   - [ ] Very often

3. How comfortable are you in expressing yourself by drawing or other forms of art?
   - [ ] Very Uncomfortable
   - [ ] Slightly Uncomfortable
   - [ ] Neutral
   - [ ] Slightly Comfortable
   - [ ] Very Comfortable

4. How comfortable are you in expressing yourself by writing?
   - [ ] Very Uncomfortable
   - [ ] Slightly Uncomfortable
   - [ ] Neutral
   - [ ] Slightly Comfortable
   - [ ] Very Comfortable

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**The Perceived Stress Scale (PSS)**

The Perceived Stress Scale (Cohen, Kamarck & Mermelstein, 1983) measures how stressful a person considers his or her life situations to be. Pizarro (2004) also used this instrument to measure participants’ stress level before and after intervention. For this study, a truncated 4-item version of the PSS was used.
Participants rate items on a 5-point scale ranging from “never” to “very often”. The scale is easy to understand and short in length, which is quite suitable in the Hong Kong context. There is an untested Chinese translation of the PSS but it was not used due to its untested psychometric properties. The English level of all participants is believed to be adequate to respond to the scale. Cohen, Kamarck, and Mermelstein (1983) have shown that this scale is internally consistent (Cronbach’s $\alpha = .85$), and the test-retest reliability was .85 at 2 weeks.

Table 2: The 4-Item Perceived Stress Scale (Cohen, Kamarck & Mermelstein, 1983)

| The following questions ask you about your feelings and thoughts during the last week. In each case, please indicate how often you felt or thought a certain way. |
|---|---|
| 1. In the last week, how often have you felt that you were unable to control the important things in your life? |
| □ | □ | □ | □ | □ | □ |
| never | almost never | sometimes | fairly often | very often |
| 2. In the last week, how often have you felt confident about your ability to handle your personal problems? |
| □ | □ | □ | □ | □ | □ |
| never | almost never | sometimes | fairly often | very often |
| 3. In the last week, how often have you felt that things were going your way? |
| □ | □ | □ | □ | □ | □ |
| never | almost never | sometimes | fairly often | very often |
| 4. In the last week, how often have you felt difficulties were piling up so high that you could not overcome them? |
| □ | □ | □ | □ | □ | □ |
| never | almost never | sometimes | fairly often | very often |
The Satisfaction with Life Scale (SWLS)

The Satisfaction with Life Scale (Diener, Emmons, Larsen & Griffin, 1985) is a widely used scale that measures global life satisfaction. It consists of 5 items to be answered according to a 7-point Likert scale. The scale does not assess satisfaction with specific life domains such as health or finances but allows subjects to integrate and weight these domains in whatever way they choose. It has high internal consistency (Cronbach’s $\alpha = .87$) and high temporal reliability (test-retest reliability was .82 at 2 months).

Table 3: The Satisfaction with Life Scale (Diener, Emmons, Larsen & Griffin, 1985)

Below are five statements that you may agree or disagree with. Using the 1-7 scale below, indicate your agreement with each item by placing the appropriate number in the box to the right of the statement. Please be open and honest in your responding.

- 7 – Strongly agree
- 6 – Agree
- 5 – Slightly agree
- 4 – Neither agree nor disagree
- 3 – Slighting disagree
- 2 – Disagree
- 1 – Strongly disagree

1. In most ways, my life is close to ideal.  
2. The conditions of my life are excellent.  
3. I am satisfied with my life.  
4. So far, I have gotten the important things I want in life.  
5. If I could live my life over, I would change almost nothing.
Post-Questionnaire

This survey is based, in part, to Pennebaker’s writing experiments (sample questionnaires have been posted on his website for acknowledged use; see www.psy.utexas.edu/Pennebaker) and contains questions asking participants to indicate how much they were willing to reveal, how personal the writing and drawing samples were, how much they have actively held back from disclosing to others, how much they have thought about the experiment and topics of disclosure, and how they felt about the experiment in general. There are two versions of the post-questionnaire, one after test 1 and one after test 2.

Table 4: Post-Questionnaire (test 1)

<table>
<thead>
<tr>
<th>QUESTIONNAIRE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Overall, how much have you told anyone about what you drew and wrote today?</td>
</tr>
<tr>
<td>Not at all somewhat a great deal</td>
</tr>
<tr>
<td>2. Overall, how much have you wanted to tell another person about what you drew and wrote today?</td>
</tr>
<tr>
<td>Not at all somewhat a great deal</td>
</tr>
<tr>
<td>3. How much have you actively held back from telling others about what you wrote today?</td>
</tr>
<tr>
<td>Not at all somewhat a great deal</td>
</tr>
<tr>
<td>4. Briefly below, describe how you feel about what you drew and wrote today?</td>
</tr>
<tr>
<td>5. If this study were offered again, would you recommend it to a friend?</td>
</tr>
</tbody>
</table>

_________
Table 5: Post-Questionnaire (test 2)

**QUESTIONNAIRE**

6. Overall, how personal were the drawings and writings that you created?
   - [ ] Not personal
   - [ ] somewhat
   - [ ] Very personal

7. Overall, how much have you told anyone about what you drew and wrote today?
   - [ ] Not at all
   - [ ] somewhat
   - [ ] a great deal

8. Overall, how much did you reveal your emotions in what you created?
   - [ ] Not at all
   - [ ] somewhat
   - [ ] a great deal

9. Overall, how much have you wanted to tell another person about what you drew and wrote today?
   - [ ] Not at all
   - [ ] somewhat
   - [ ] a great deal

10. How much have you actively held back from telling others about what you wrote today?
    - [ ] Not at all
    - [ ] somewhat
    - [ ] a great deal

11. Overall, how difficult has it been for you to draw and write during the experiment?
    - [ ] Not at all
    - [ ] somewhat
    - [ ] Extremely

12. In general, how sad or depressed have you felt over the last week?
    - [ ] Not at all
    - [ ] somewhat
    - [ ] Extremely

13. In general, how happy have you felt over the last week?
    - [ ] Not at all
    - [ ] somewhat
    - [ ] Extremely
14. During your normal day, to what degree have you thought about this experiment since it started?

Not at all  □ □ □ □ Extreme

15. Since the start of the study, how much have you thought about the topics that you drew and wrote about?

Not at all  □ □ □ □ Extreme

16. In your own words, what do you think this study is trying to prove:

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

17. Any comments that you have about the study would be greatly appreciated. (Use back if necessary)

4.4. Procedures

Participants were recruited from Hong Kong Art School and consent was obtained for their participation (see Appendix A). Two painting classes were available for the exercise, each with six students in it. Two twenty-minute sessions were held one week apart during the middle of their semester, to limit the possible effects caused by stress owing to adjustment to a new course at the beginning of semester, or final project grading at the end of semester. In the first session, the pre-questionnaire, PSS and SWLS were administered, and the first intervention task completed and post-questionnaire (test 1) completed.

Participants were asked to draw and then write about a personally upsetting or stressful experience that they had rarely discussed and still evoke
strong feelings, focusing on both facts and feelings. Each participant were given 10 minutes to draw and write, and how they split up the time was not restricted.

Table 6: Instructions

<table>
<thead>
<tr>
<th>INSTRUCTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>What I would like you to draw and write about for the next two sessions is your most stressful or upsetting experience that you have had. Ideally it is something that you have not discussed in great details with anyone, for whatever reasons. I want you to really let go and explore your deepest thoughts and feelings. You might tie this experience to your childhood, your relationships with others, including parents, lovers, friends or relatives. You may also link this event to your past, present, or your future, or to who you have been, who you would like to be, or who you are now. You may draw and write on the same experience on both sessions or about different experiences each session. All of your drawing and writing will be completely confidential.</td>
</tr>
<tr>
<td>For the drawing part, you may draw in a realistic manner or an abstract manner, which ever you feel more comfortable. You are not being judged on the quality of your artwork, so please, don’t be concerned about what the finished product looks like.</td>
</tr>
<tr>
<td>For the writing part, again, please don’t worry about, spelling, sentence structure, or grammar. The only rule is that once you begin writing, continue to do so until your time is up.</td>
</tr>
<tr>
<td>You will have a total of 10 minutes to draw and write.</td>
</tr>
</tbody>
</table>

The tasks were repeated the following week and participants completed PSS, SWLS and post-questionnaire (test 2) and received a brief overview of the study and given group debriefing. A packet of Maltesers chocolate was given to all students for their kind participation.
Chapter 5 – Results

5.1 Habits and Comfort Levels in Drawing and Writing

More than half of the participants (66%) keep a journal and 25% of them actively write in it. As expected, 83% of all participants feel comfortable in expressing themselves by drawing or other forms of art; however, only 41% are comfortable in expressing themselves by writing. This comfort level is reflected in the drawing and writing samples. Students overall drew more than they wrote, although both are quite minimal at times.

5.2 Psychological Well-Being

For this study, psychological well-being is represented by the absence of perceived stress (as measured by The Perceived Stress Scale) and the presence of positive life satisfaction (as measured by The Satisfaction with Life Scale). It was hypothesized that the PSS score will be lower post-intervention and the SWLS score higher post-intervention. However, the differences in the scores were not statistically significant and the results are summarized below:

Table 7: Results (non-significant p-values)

<table>
<thead>
<tr>
<th></th>
<th>Pre-Intervention</th>
<th>Post-Intervention</th>
<th>P value*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PSS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean (S.D.)</td>
<td>6 (3.22)</td>
<td>6 (2.60)</td>
<td>1.00</td>
</tr>
<tr>
<td>Median (range)</td>
<td>6.5 (0-10)</td>
<td>6.5 (0-8)</td>
<td></td>
</tr>
<tr>
<td><strong>SWLS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean (S.D.)</td>
<td>21.83 (4.84)</td>
<td>20.4 (4.58)</td>
<td>0.46</td>
</tr>
<tr>
<td>Median (range)</td>
<td>21.5 (15-30)</td>
<td>20.5 (15-29)</td>
<td></td>
</tr>
</tbody>
</table>

* Student’s t-test
5.3 Themes and Depth of Disclosure

Participants disclosed on a wide variety of subjects related to death of loved ones, money, friendship, love life, work, and life in general. As expected, participants did not disclose very much at all. Most of what was disclosed is socially acceptable and ‘safe’ issues. In fact, during some sessions, participants mentioned that “there is nothing to be unhappy about”, or “I have no sad memories”.

Overall, the drawing pages were generally more expressive. My impression is that most participants chose to spend more time on drawing than writing. This echoes back to their comfort level in using each modality (83% comfortable with drawing and 16% comfortable with writing). In terms of the content, the drawings sometimes complimented the writing, but sometimes, conflicted with each other. For example, in Figure 1, the drawing is more or less a direct representation of the writing sample, complimenting one another. However, upon closer inspection, you will see there is more emotion in the drawing sample. Unhappiness is more apparent in the drawing (seen by their facial expressions) than the writing, and the closeness and mutual support within her own family is expressed more clearly in the drawing (three in a close-knit group). Contrast this with Figure 2, where the drawing and writing seems to conflict with each other. There is a sense of ‘struggle’ in the drawing (the pose of the figure and the bumpy lines the figure is crawling on) but the writing expresses something very different. Interestingly, upon the second intervention, this same student began to disclose, very subtly, on what could be a very personal issue (see Figure 3). More about increase disclosure on second intervention will be discussed later.
“My big sister and brother-in-law always borrow money from us, even when they are rich. . . .
after the failure of their business, we lost our apartment and they got bankrupted. . . .”
Figure 2: Drawing and writing conflicting with each other

“I am always happy in my work and my life.”
"A person that you hate – When will you forgive him?"
The writing samples were very limited, ranging from a few words to a few sentences only. There was a general lack of story structure, and some writings are more questionings than narratives. Participants wrote in both English and Chinese. However, most avoided writing in first person. Only two participants (16%) wrote in first-person and used “I” in their writings. Other participants either avoided narrative altogether or wrote in third-person terms. My impression is that their choice of writing without “I” reflected their holding back in disclosing themselves in this study. Figure 4 is a good example of writing using “you” instead of “I”. This student did not disclose in writing, but revealed more in her drawing. In the drawing the subject is present – in the middle of the composition and hanging onto a thin line. It is not clear whether she is being pulled up or lowered by the crowd, and it could be neither (she could just be hanging on). Nevertheless it is clear that the student was not certain in wanting to disclose in this study but did find it safer to express in drawing rather than writing.

Another interesting finding is that a number of participants disclosed more on the second intervention, both in terms of length and depth of disclosure. Figure 5 and 6 are examples of higher disclosure at second intervention.

5.4 Other Observations

Generally, it was found that participants felt uneasy about the study. The simple sound of the word ‘questionnaire’ irritated some students already. This is understandable, given the bombardment of so-called research studies and questionnaires that are out there on the streets these days. Visiting the students during class time was a choice out of convenience. I did observe the awkwardness to switch between class attitude and the reflective attitude called for in this study. It did seem a little odd to disturb the class with such an introspective exercise.
"Tomorrow will be another day . . . . .
Why bother to think about the things which upset you.
You will find your way,
You will get to a place where you would like to be.
You will be safe.
Live in the moment."
Figure 5: Example 1 of higher disclosure at second intervention

First Intervention

Second Intervention

(translation)

“Not easy to say!”

“Life is like splashes of waves
Cannot read it – but if you can
Life will not be bitter
The most beautiful Sakura
Is when they are close to dying
Maybe I yearn for it
And that makes me sad.”
First Intervention

“"I feel stressed in disciplined and routine life.""

Second Intervention

“I don’t know what love is. Maybe I am in love with many people. I want to be alone... I separated with my lover half a year ago, and another one year ago, no, may be more than a year."
Chapter 6 – Discussion

Pennebaker & Chung (2007) suggested that ‘if nothing else, the (writing) paradigm demonstrates that when individuals are given the opportunity to disclose deeply personal aspects of their lives, they readily do so’. This was not the case for this group of Hong Kong students, and cultural differences between American and Asian students are clearly evident. In this study, Hong Kong students only disclosed slightly, were careful and safe in their expressions, and generally disclosed more by using the non-verbal means of drawing. In terms of psychological well-being, changes in neither self perceived stress nor levels of life satisfaction resulted with any significance. This study is exploratory in nature and has its strengths and limitations.

The non-significant results from the PSS and SWLS could be affected by the small sample size. Since this is only an exploratory study, future research with a more substantial sample size will be more telling in terms of whether the assumption that self-disclosure will improve health and other psychological measures as demonstrated in the U.S. holds true here in Hong Kong.

Perhaps the most exciting part of this study is the findings implied from the drawing and writing samples. From this study, it is certain that drawing was preferred to writing emotional experiences. Keeping in mind that they were all fine art students and were approached during their painting lesson, the results could be biased. However, it could also be true that, as most literature on Asian cultures have said, Asians prefer indirect ways of communication and words may just be too upfront and too direct to use. Further research is needed to test whether this preference for drawing can be generalized to other non-art students or people without art backgrounds. Findings in this area would be quite exciting as art
therapies have not yet gained popularity in Hong Kong’s therapeutic environment and art may just be a key ingredient to foster deeper self-disclosure for Chinese people in general.

The theoretic assumptions as to why self-disclosure is beneficial are the inhibition-confrontation model, emotional release, cognitive assimilation and the social dynamics of self-disclosure. While the non-verbal means of disclosure is apparently preferred, one vital proponent of the model is missing. Expression via drawing does help lower inhibition, can release emotion and may foster subsequent disclosures. However, the most critical cognitive assimilation process may be absent by drawing alone. Chan & Horneffer (2006) suggested that perhaps a more structured drawing task would help in creating a narrative, which in turn may assist in facilitating the cognitive processes that may be of key therapeutic value to self-disclosure. Future research might consider this area further and design a drawing task that is both structured for narrative function and relevant to Hong Kong Chinese. For example, the drawing page could be split in four rectangles, numbered from one to four, to create a page that is similar to the format of a comic book. This way, it guides the participants to flow with a narrative and it is also something that is familiar to them as Hong Kong people.

Overall, and as expected, the disclosure level was low in comparison to the U.S. studies. One of the reasons as suggested is the cultural difference that exists. Another point to note is the setting of the exercise. Conducting the exercise in a class setting has its convenience but also disadvantages. The setting is non-private as the students are not alone, which may hinder their motivation to ‘let it out’. The lighting in classroom is strong, and the ‘right’ mood and atmosphere is fundamental to introspective disclosure. The original experiment by Pennebaker
and Beal (1986) was conducted in single rooms, which was private and dimly lit. Future research should consider this area more seriously since Hong Kong people are already finding it more difficult to disclose, so the right setting may lessen the resistance.

In terms of research design, it is my impression that more than two sessions would be appropriate in Hong Kong. The results have shown that a number of subjects only begin to disclose on second session, and if the study continued for another session, maybe they would disclose further. Future studies should keep this in mind when determining the number of sessions to administer.

An interesting comment came up in one of the sessions, and the student asked if he could typewrite it instead of handwrite it. Of course, that wasn’t possible in class, but to think that for this generation, handwriting may be an obstacle to many young people is an interesting and valuable point to note. How would this self-disclosure experiment fare if it were offered over the Internet, as something similar to a blog? The younger generation would welcome it, and isn’t this what they are doing anyway? Expressing themselves over the Internet, sometimes anonymously?

In conclusion this exploratory research, the strongest finding is in relation to the ways Hong Kong Chinese prefer to disclose, which is non-verbally. It is my impression that there is much resistance in disclosing stressful or upsetting events. It is unlikely that this group of students have so little to disclose because they are ‘lucky’, so there are other dynamics at work that prevents them from freely disclosing in this study. Culture is probably a main reason, and the research setting may be another, and there might be other unknown reasons that affect them. The use of art in therapy does seem to carry some merit and this empirical
study gives some support to its effectiveness. Art does seem to be a safer medium to express and disclose compared to the verbal means of writing. The applicability of this finding in research and therapy in Hong Kong could go a long way. The recent psychological climate for troubled people are heating up – we read on the news daily about tragedies involving unemployed middle-aged men, single mothers, cheating husbands and wives, pressured students and teachers, who are all just people next to us in our daily lives. If something can be done to ease their struggle, to ease their psychological pain, to help them face themselves, and to help them help themselves, it would only be a blessing. This exploratory study has not accomplished any of the above. But it is my hope that this study will inspire more people to look into simpler ways to help manage problems before they become insurmountable. In this context, a picture is worth a thousand words.
Reference


PARTICIPANT CONSENT

I ______________________________ agree to participate in the research project that Syna Lee is conducting to study creative expression, disclosure and well-being conducted under the supervision of Dr. Betty C. Eng of the City University of Hong Kong. I am willing to participate for two in-class sessions, each time for half an hour.

I understand confidentiality and privacy of my information will be maintained as far as possible within the control of the researcher. I understand that the drawing and writing samples will not be used to reveal my identity but may be included in the final dissertation for discussion purposes.

Transcripts and final dissertation will be available to me upon request. If at any time I wish to withdraw my participation, I may do so without any negative consequences. Should I decide to withdraw, the data will not be used. Should I have any concerns, I can contact Syna Lee or Dr. Betty C. Eng at 83 Tat Chee Avenue, Kowloon Tong, Department of Applied Social Studies of City University of Hong Kong, Tel: (852) 2194-2922 or Fax: (852) 2788-8960.

I have read, understand, and am satisfied with the nature, scope, and terms of the research as stated in the attached letter of March 11, 2007.

______________________________ __________________________
Signature of Participant   Date

______________________________
Name in Block Letters

_____________________________  ___________________________
Signature of Researcher   Date

23 Robinson Road, Hong Kong
T: (852) 9210 5121   e-mail: 50516891@cityu.edu.hk
QUESTIONNAIRE

(Please tick “3” the appropriate boxes)

AGE GROUP

- below 20
- 21 – 25
- 26 – 30
- 31 – 35
- above 36

SEX

- Male
- Female

5. Do you keep a personal journal that you regularly write and/or draw in?

- Yes
- No

6. If yes, how often do you journal about your personal thoughts and feelings?

- Never
- Almost never
- Sometimes
- Fairly often
- Very often

7. How comfortable are you in expressing yourself by drawing or other forms of art?

- Very Uncomfortable
- Slightly Uncomfortable
- Neutral
- Slightly Comfortable
- Very Comfortable

8. How comfortable are you in expressing yourself by writing?

- Very Uncomfortable
- Slightly Uncomfortable
- Neutral
- Slightly Comfortable
- Very Comfortable
The following questions ask you about your feelings and thoughts during the last week. In each case, please indicate how often you felt or thought a certain way.

9. In the last week, how often have you felt that you were unable to control the important things in your life?

☐ never ☐ almost never ☐ sometimes ☐ fairly often ☐ very often

10. In the last week, how often have you felt confident about your ability to handle your personal problems?

☐ never ☐ almost never ☐ sometimes ☐ fairly often ☐ very often

11. In the last week, how often have you felt that things were going your way?

☐ never ☐ almost never ☐ sometimes ☐ fairly often ☐ very often

12. In the last week, how often have you felt difficulties were piling up so high that you could not overcome them?

☐ never ☐ almost never ☐ sometimes ☐ fairly often ☐ very often

Below are five statements that you may agree or disagree with. Using the 1-7 scale below, indicate your agreement with each item by placing the appropriate number in the box to the right of the statement. Please be open and honest in your responding.

7 – Strongly agree
6 – Agree
5 – Slightly agree
4 – Neither agree nor disagree
3 – Slighting disagree
2 – Disagree
1 – Strongly disagree

9. In most ways, my life is close to ideal. ☐

10. The conditions of my life are excellent. ☐

11. I am satisfied with my life. ☐

12. So far, I have gotten the important things I want in life. ☐

13. If I could live my life over, I would change almost nothing. ☐
INSTRUCTIONS

What I would like you to draw and write about for the next two sessions is your most stressful or upsetting experience that you have had. Ideally it is something that you have not discussed in great details with anyone, for whatever reasons. I want you to really let go and explore your deepest thoughts and feelings. You might tie this experience to your childhood, your relationships with others, including parents, lovers, friends or relatives. You may also link this event to your past, present, or your future, or to who you have been, who you would like to be, or who you are now. You may draw and write on the same experience on both sessions or about different experiences each session. All of your drawing and writing will be completely confidential.

For the drawing part, you may draw in a realistic manner or an abstract manner, which ever you feel more comfortable. You are not being judged on the quality of your artwork, so please, don’t be concerned about what the finished product looks like.

For the writing part, again, please don’t worry about, spelling, sentence structure, or grammar. The only rule is that once you begin writing, continue to do so until your time is up.

You will have a total of 10 minutes to draw and write.
QUESTIONNAIRE

14. Overall, how much have you told anyone about what you drew and wrote today?

☐ ☐ ☐
Not at all  somewhat  a great deal

15. Overall, how much have you wanted to tell another person about what you drew and wrote today?

☐ ☐ ☐
Not at all  somewhat  a great deal

16. How much have you actively held back from telling others about what you wrote today?

☐ ☐ ☐
Not at all  somewhat  a great deal

17. Briefly below, describe how you feel about what you drew and wrote today?


18. If this study were offered again, would you recommend it to a friend?

_______

***** THANK YOU *****
Appendix C – Questionnaire Packet (Test 2)

INSTRUCTIONS

What I would like you to draw and write about for the next two sessions is your most stressful or upsetting experience that you have had. Ideally it is something that you have not discussed in great details with anyone, for whatever reasons. I want you to really let go and explore your deepest thoughts and feelings. You might tie this experience to your childhood, your relationships with others, including parents, lovers, friends or relatives. You may also link this event to your past, present, or your future, or to who you have been, who you would like to be, or who you are now. You may draw and write on the same experience on both sessions or about different experiences each session. All of your drawing and writing will be completely confidential.

For the drawing part, you may draw in a realistic manner or an abstract manner, which ever you feel more comfortable. You are not being judged on the quality of your artwork, so please, don’t be concerned about what the finished product looks like.

For the writing part, again, please don’t worry about, spelling, sentence structure, or grammar. The only rule is that once you begin writing, continue to do so until your time is up.

You will have a total of 10 minutes to draw and write.
The following questions ask you about your feelings and thoughts during the last week. In each case, please indicate how often you felt or thought a certain way.

1. In the last week, how often have you felt that you were unable to control the important things in your life?

<table>
<thead>
<tr>
<th>never</th>
<th>almost never</th>
<th>sometimes</th>
<th>fairly often</th>
<th>very often</th>
</tr>
</thead>
</table>

2. In the last week, how often have you felt confident about your ability to handle your personal problems?

<table>
<thead>
<tr>
<th>never</th>
<th>almost never</th>
<th>sometimes</th>
<th>fairly often</th>
<th>very often</th>
</tr>
</thead>
</table>

3. In the last week, how often have you felt that things were going your way?

<table>
<thead>
<tr>
<th>never</th>
<th>almost never</th>
<th>sometimes</th>
<th>fairly often</th>
<th>very often</th>
</tr>
</thead>
</table>

4. In the last week, how often have you felt difficulties were piling up so high that you could not overcome them?

<table>
<thead>
<tr>
<th>never</th>
<th>almost never</th>
<th>sometimes</th>
<th>fairly often</th>
<th>very often</th>
</tr>
</thead>
</table>

Below are five statements that you may agree or disagree with. Using the 1-7 scale below, indicate your agreement with each item by placing the appropriate number in the box to the right of the statement. Please be open and honest in your responding.

5. In most ways, my life is close to ideal.

6. The conditions of my life are excellent.

7. I am satisfied with my life.

8. So far, I have gotten the important things I want in life.

9. If I could live my life over, I would change almost nothing.
QUESTIONNAIRE

10. Overall, how personal were the drawings and writings that you created?
   □ □ □
   Not personal somewhat Very personal

11. Overall, how much have you told anyone about what you drew and wrote today?
   □ □ □
   Not at all somewhat a great deal

12. Overall, how much did you reveal your emotions in what you created?
   □ □ □
   Not at all somewhat a great deal

13. Overall, how much have you wanted to tell another person about what you drew and wrote today?
   □ □ □
   Not at all somewhat a great deal

14. How much have you actively held back from telling others about what you wrote today?
   □ □ □
   Not at all somewhat a great deal

15. Overall, how difficult has it been for you to draw and write during the experiment?
   □ □ □ □ □
   Not at all Extremely

16. In general, how sad or depressed have you felt over the last week?
   □ □ □ □ □
   Not at all Extremely

17. In general, how happy have you felt over the last week?
   □ □ □ □ □
   Not at all Extremely
18. During your normal day, to what degree have you thought about this experiment since it started?

Not at all     Extremely

19. Since the start of the study, how much have you thought about the topics that you drew and wrote about?

Not at all     Extremely

20. In your own words, what do you think this study is trying to prove:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

21. Any comments that you have about the study would be greatly appreciated. (Use back if necessary)

***** THANK YOU *****