# A RANDOMISED CONTROLLED TRIAL ON BRIEF EXPRESSIVE WRITING AS AN INTERVENTION TOOL ON EXPOSURE TO THIN-IDEAL IMAGES

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#### Abstract

The efficacy of expressive writing (EW) has been well established on Western population. However, to date, there are limited studies that examined its efficacy on a different population. This study investigated the efficacy of EW, as a one-off task, in improving the levels of body satisfaction and positive affect among 140 Filipino female university students aged 18–25. They were tested in groups and wrote either about life goals (n = 46), positive experiences (n = 49) or a control topic (n = 46). Results have demonstrated that EW has no significant effect on body satisfaction and positive affect. Future studies may consider other boundary conditions along with other variables for moderating effects.

Key words: body satisfaction, expressive writing, positive affect

# Introduction

Body dissatisfaction is prevalent among women in our society and there are a host of studies that implicate how this leads to eating disorders. Ironically, body dissatisfaction is also markedly common among individuals with normal weight, especially among females (Slevec & Tiggemann, 2011), confirming the crucial role of self-perception. Being fairly ubiquitous among women, body dissatisfaction has been studied, and these studies point out that similar with popular expectation—there are more women than men who are trying to lose weight and do so at lower Body Mass Index (BMI) levels (Bish et al., 2005). Indeed, women are more susceptible to body dissatisfaction compared to men.

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Female adolescents are bombarded with thin-ideal images from the media, with music videos and magazines being the most popular sources of these images. A recent content analysis of ten women's magazines (Wasylkiw, Emms, Meuse, & Poirier, 2009) showed that 95 per cent of the models in fashion magazines were thin; in fitness magazines, 55 per cent were thin and 36 per cent were muscular—only six per cent of the models in both magazine types possess round body type. Furthermore, content analyses of images in women's magazines from 1959 to 1999 (Sypeck, Gray, & Ahrens, 2004) revealed that the models have become increasingly thinner over time. These findings validate the sociocultural perspective that mass media publicise a slender ideal, which in turn elicits body dissatisfaction (Ata, Thompson, & Small, 2013).

Over the past decades, an increasing discrepancy between body shapes portrayed as ideal in the media and actual body shapes found in the general population has been observed. Much of the studies in this area have been done on Western population, nevertheless, the problem also exists in the Philippines. For instance, it has been observed in the Philippines that the prevalence of overweight and obesity combined increased nearly six-fold from around 6 per cent in 1983 to 1984, to 35 per cent in 1998 to 1999 (Adair, 2004). More recently, it has been reported by Sy and colleagues (2008, as cited by Litonjua, 2014) that from 1993-2008, obesity among Filipinos continued to increase at about 3.4 per cent and climbing to 5.2 per cent. Additionally, cases of overweight rose from 15.2 per cent to 21.4 per cent in the same period.

Various intervention programmes are being developed to address the effects of thin-ideal images among adolescents. However, to date, there have only been a handful of studies which explored EW as an intervention programme in reducing the effects of exposure to thin-ideal images. It is worthy to investigate the effectiveness of EW as an intervention programme since it has been found to improve psychological well-being (e.g., Troop, Chilcot, Hutchings, & Varnaite, 2013). Such an intervention could potentially minimise the negative effects brought about by exposure to slim images on body satisfaction and positive affect. However, it may be assumed that some people are just more susceptible to those kinds of images.

In line with the existing literatures, the present study aimed to explore whether a simple, one-off EW technique could reduce the impact of media influence on body dissatisfaction and positive affect. For the purpose of this study, two forms of EW have been employed: 1.) writing about life goals, and 2.) writing about positive experiences, both of which are known to enhance well-being.

## Aims

The present study investigated the effects of EW as a potential intervention tool to address the negative effects on positive affect and body satisfaction following exposure to thin-ideal images. This work have also shed light on which form of EW (i.e. writing about positive experiences or writing about life goals) works better. Another aim is to extend existing studies on EW among Filipino population. This work further explored the boundary conditions of EW (i.e. how it will operate if it is administered in one instance and in groups).

## **Review of Related Studies**

Expressive writing (EW) is a therapy introduced by Pennebaker and Beall in the late 1980's. Their pioneering work (Pennebaker & Beall, 1986) involved requesting participants to write about a 'past trauma', as a way to convey their deepest feelings and thoughts. Control groups were instructed to write on neutral topics (e.g., What are their plans for the day?), without revealing their emotions or opinions. Both groups were requested to do this for 15 minutes per day, for four consecutive days. Participants were further advised that should they run out of things to write, they should go back from the start and simply repeat themselves and try to write a little differently.

Since the introduction of EW, it has been used in a variety of ways to improve psychological well-being, ranging from improving the self-concept of adolescents (Facchin, Margola, Molgora, & Revenson, 2013), to helping people with traumatic brain injury (Wheeler, Nickerson, Long, & Silver, 2013). Although it has been observed that EW may help improve body image perception (Lafont, 2011), there is a dearth of studies that examined its efficacy to address the negative effects of exposure to thin-ideal images.

Images idealising thin bodies are known to increase the likelihood of body dissatisfaction among Asian adolescents (Chang, et al., 2013). It has been observed that both the barrage of thin-ideal images and body dissatisfaction contribute to both restrained eating and unhealthy weight control behaviours. Therefore, it is important to address the impact of body dissatisfaction since it is recognised as the strongest risk factor for eating disturbances (Dakanalis, et al., 2014).

EW is mostly done on more than one occasion and more often than not, it is reported to produce positive outcomes. But still, there is a scarcity of literatures which investigated whether those with lower levels of dietary restraint and higher levels of positive affect could benefit more with this intervention, and how it will operate if it is to be delivered on just one occasion.

# Hypotheses

Drawing from the literatures, this study sought to investigate whether EW can reduce the impact of exposure to thin-ideal images by improving levels of body satisfaction and positive affect. It also examined whether the beneficial effects of EW can be achieved if it was to be delivered on a single instance.

## Method

## Participants

One hundred forty one female university students aged 18–25 years old were recruited as users of magazines with thin-ideal images and were randomised into one of the three experimental conditions: writing about life goals, writing about positive experiences and writing a review of a film they have recently seen. Contrary to the intended age range, one participant was aged 17, and two participants did not indicate their age. These two participants were eventually not included as age is not a variable on which this work focused. Participants were recruited during university lectures. Their participation was voluntary and no credits or tokens were given. The study received ethical approval from the local ethics committee and informed consents have been obtained from all participants.

## Materials

Five magazines were used—*Candy*, *Metro*, *Yes!*, *Cosmopolitan*, and *Total Girl*. These magazines were selected on the basis of portraying thin-ideal images either on their covers or regular sections, and their relative popularity among Filipino female university students was also considered. These magazines were readily available within the vicinity of the university.

## Measures

## Body satisfaction

The Body Image States Scale (BISS; Cash, Fleming, Alindogan, Steadman, & Whitehead, 2002) is designed to gauge the temporary aspects of evaluative or affective body image, for example body dissatisfaction. It is a sensitive measure that can recognise momentary changes, and consists of six questions regarding how satisfied an individual feels with their physical appearance 'right now, at this moment'. Higher total scores indicate greater body satisfaction. In the current study, the internal consistency was high (baseline  $\alpha = .70$ , follow-up  $\alpha = .78$ ) and test–retest consistency ( $\alpha = .81$ )

## Positive affect

The Types of Positive Affect Scale (TPAS; Gilbert et al., 2008) is an 18-item scale in which respondents rate their feelings on a series of 5-point scale to indicate how characteristic those feelings are of them (ranging from 1 = not characteristic of me to 5 = very characteristic of me). The TPAS measures three types of positive affect: activating positive affect (e.g., energetic, excited, active); relaxed positive affect (e.g., relaxed, peaceful, calm); and safeness/contentment positive affect (e.g., safe, secure, warm). Higher total scores indicate greater positive affect. In the current study, the internal consistency was high (baseline  $\alpha = .82$ , follow-up  $\alpha = .86$ ) and test-retest reliability ( $\alpha = .80$ )

#### **Research Variables**

This study had two within-subjects factor: time, whereby each participant completed positive affect questionnaire and a body image questionnaire on two separate occasions (baseline and follow-up scores).

## Procedure

The experiment was conducted in the classrooms of an urban-based university. Permission to conduct the experiment at the University was obtained. The participants attended specific sessions for this and were not part of lectures. They were tested in groups. Upon hearing a brief description of the study and signing consent forms, participants were given 15 minutes to fill out BISS and TPAS (this was the baseline). Participants proceeded with the writing tasks. Envelopes with questionnaires and one of the three writing tasks were randomly distributed. They were tested in groups and wrote either about life goals (n = 46), positive experiences (n = 49), or a control topic, for example a review of a film they have recently seen (n = 46).

Participants in both of the expressive writing groups (i.e., life goals and positive experiences) were requested to write their very deepest thoughts and feelings while those in the control group were advised to write a review of a film they have recently seen (based on Troop et al., 2013).

All participants were requested to proceed with the writing tasks in English. Participants were instructed to explore all five magazines for 30 minutes and, in order to disguise the nature of the study, they were requested to rate it based on creativity of its content (instrumental task). When the timer went off the experimenter asked the participants to put aside the magazines and rate them using a self-made Magazine Rating Scale. Finally, the participants completed the BISS and TPAS again.

#### Data Analysis

The study initially proposed to recruit 150 female participants aged 18–25. However, 141 participated effectively. Of these, one participant was aged 17, and two participants did not indicate their age. It has been decided not to exclude the data from these participants as age was not a main variable in the study. Furthermore, given the sample size of the study, it has been assumed that their data would not have significant influence on data analysis. However, one participant was excluded from the main analyses as she did not fill out the baseline measures for both BISS and TPAS. Hence, a total of 140 participants were considered for the analyses.

In analysing the main variables, the obtained BISS and TPAS scores were grouped into two, whereby BISS scores were categorised as low body satisfaction (15–31) and high body satisfaction (32–48); and TPAS were categorised as low positive affect (28–48) and high positive affect (49–69). One-way repeated ANOVA measures were carried out to determine if time and writing task have a significant effect on body satisfaction and positive affect, respectively.

## Results

Before conducting the main analyses, it has been explored whether there were any differences in baseline and follow-up scores among the experimental conditions of the main study variables (Table 1). This analysis revealed that BISS scores decreased from pre-intervention in life goals (M = 33.02), positive experiences (M = 34.49) and the control group (M = 33.64) to post-intervention in life goals (M = 31.48), positive experiences (M = 32.04) and control group (M = 33.36). Meanwhile, TPAS scores increased from pre-intervention in life goals (M = 50.20), positive experiences (M = 49.90) and control group (M = 53.42) to post-intervention in life goals (M = 52.28), positive experiences (M = 52.33) and control group (M = 53.98). Finally, baseline scores indicate that participants have high levels of body satisfaction and positive affect.

**Table 1.** Descriptive Statistics for Main Study Variables at Baseline and Follow-up

LG			PE				Control					
	В		FU		В		FU		В		FU	
	М	SD	М	SD	М	SD	М	SD	М	SD	М	SD
BISS	33.0 2	8.51	31.4 8	8.12	34.4 9	5.76	32.0 4	6.52	33.6 4	6.93	33.3 6	7.62
TPAS	50.2 0	10.6 5	52.2 8	8.29	49.9 0	8.90	52.3 3	8.45	53.4 2	7.59	53.9 8	7.37

*Note.* BISS, Body Image States Scale; TPAS, Types of Positive Affect Scale; BISS scores of 15–31: low body satisfaction, 32–48: high body satisfaction; TPAS scores of 28–48: low body satisfaction; 49–69 high body satisfaction. LG: life goals; PE: positive experiences; B: baseline, FU: follow-up

TPAS was further explored relative to its three subscales: active positive affect, relaxed positive affect and safe/warmth positive affect (see Table 2). The analysis revealed that active positive affect showed an increase from the baseline scores (M = 2.982), following the writing tasks (M = 3.046).

	Baseline		Follow-up	
	M	SD	М	SD
Active	2.982	0.049	3.046	0.053
Relaxed	2.631	0.063	2.756	0.079
Safe	2.881	0.053	2.943	0.022

**Table 2.** Descriptive Statistics for Subscales of TPAS

*Note.* Active, active positive affect; Relaxed, relaxed positive affect; Safe/warmth positive affect. 0 = not characteristic of me; 4 = very characteristic of me.

Table 3. Analysis of Variance Controlling for Body Satisfaction

	df	F	η	ρ
Time	1	12.57	.084	.001
Time X writing task	2	2.43	.003	.092
Error	137			

One-way repeated ANOVA measures were carried out to determine if time and writing task have a significant effect on body satisfaction. Data analysis reveals that there was a significant main effect based on time, F(1, 137) = 12.57, p = .001; but no significant effect based on time and writing task, F(2, 137) = 2.43, p = .092.

Table 4. Analysis of Variance Controlling for Positive Affect

	$d\!f$	F	η	ρ
Time	1	16.12	.105	.000
Time X writing task	2	1.85	.026	.161
Error	137			

One-way repeated ANOVA measures were carried out to determine if time and writing task have significant effect for TPAS. Data analysis reveals that there was a significant main effect based on time, F(1, 137) = 16.12, p = .000; but no significant effect based on time and writing task, F(2, 137) = 1.85, p = .161.

# Discussion

The present study examined the effect of writing about life goals and positive experiences on body satisfaction and positive affect. In addition, it also investigated whether EW will work as a one-off intervention, in contrast to common practice where it is administered on more than one occasion. Previous findings (e.g., Troop et al., 2013) reveal that EW shows promise as a means by which people may decrease in their self-criticism. The notion is that EW could protect positive affect and body dissatisfaction, as a result of which there will be less impact on the psychological well-being following exposure to thin-ideal images. Previous works also indicate that EW has a wide range of social, emotional, and physical health benefits for individuals coping with stressful events (Lepore, Greenberg, Bruno, & Smyth, 2002). Almost all available literatures show that EW is effective, however, the existing studies all have the same population and most have delivered EW on more than one occasion.

## Findings

This study has investigated the beneficial effects of EW (both on writing about life goals and writing about positive experiences) on positive affect and body satisfaction. This is an important finding as it has explored whether the positive effects of EW may still be achieved even if it has only been administered on a single instance.

Our results are inconsistent with the findings that EW results in significant positive outcomes (e.g., Arigo & Smyth, 2012; Kirk, Schutte, & Hine, 2011; Lafont, 2011; Smyth, Hockmeyer, & Tulloch, 2008), and a number of factors may also be taken into account. Firstly, the participants spent 15 minutes of writing about their designated topic and no other writing tasks follows. Although this is contrary to conventional procedures (e.g., O'Connor et al., 2011) where participants are usually invited again to continue the writing tasks, it has been demonstrated that EW, even though administered as one-off task, has been powerful enough to affect positive changes in the outcome variables. This strengthens previous findings where EW was administered as a one-off task (e.g., Kuiken, Dunn, & LoVerso, 2008) and it has shown positive effects.

Furthermore, given that participants were not selected on the basis of their levels of body satisfaction and positive affect, the absence of a significant effect may then be attributable to the sample being relatively 'healthy'.

# Strengths

The key strength of the study is its large sample size and the naturalistic nature of the experiment—reading magazines is a natural activity that everyone does. Its methodology fits well with the hypotheses. The study also recruited participants who are likely to be reading magazines with thin-ideal images (females with ages 18–25).

Moreover, the present study provides insight into several boundary conditions of expressive writing by examining whether it would be equally effective if applied on a single occasion. It also explored available findings from a non-Western population. This may also serve as a framework for longitudinally-designed studies following the effects on mood and body satisfaction of individuals who are regularly using these magazines.

#### **Limitations and Future Directions**

It is recognised that the current study has a number of shortcomings and limitations that require further comment. Firstly, using a sample of convenience will undoubtedly influence the generalizability of this study, aside from the fact that the experiment was also carried out in groups, which may limit the effectiveness of EW. However, EW has been done in groups in the past (e.g., Klein & Boals, 2001) albeit it has shown positive outcomes.

Furthermore, magazines were selected based on comprehensive content analysis. Therefore, it may not be representative of a typical magazine that Filipino female university students would read. Requesting participants to engage in a magazine that they may not be interested in for a period of time may influence results.

The study also relied on the self-report measure to assess the results of the experiments, but then previous studies also relied on self-report measures. Finally, the investigator is mindful that this is the first study to employ a Filipino sample; therefore, future studies ought to attempt to replicate the current findings.

## Implications

Notwithstanding the limitations described above, the implications on this study are threefold. Firstly, findings from the present study have shed light on the beneficial effects that could be potentially derived from this form of intervention. It further investigated the roles of self-compassion and dietary restraint on positive affect and body satisfaction.

Secondly, the effectiveness of EW has been established on the Western population. There were a few studies that explored it on non-English speakers (e.g., Lu, Zheng, Young, Kagawa-Singer, & Loh, 2012), but with a small sample (N = 19). To date, this was the first study to investigate EW as an intervention tool on a Filipino population. Its findings will lead to comparison on future studies that will examine the effects of EW on Southeast Asian population.

Last but not least, the result of this study will serve as a pilot for future studies that will evaluate the efficacy of EW as an intervention tool relative to forms of expressive writing (i.e. writing about life goals and writing about positive experience), and relative to how it is administered (i.e. individually or in groups, on a single instance or for a consecutive number of times) to better ascertain its effects. Future work that intend to explore the effects of EW relative to positive affect should further consider different kinds of positive emotions such as active positive affect, relaxed positive affect, safe/warmth positive affect as it may yield interesting insights in this area.

## Conclusion

Images portraying idealised slender bodies are here to stay. They are already a staple of magazines and music videos; and existing literatures are rich in evidence which confirm that exposure to these images can impact one's psychological well-being. The field of psychology has already proven its adverse effects—the next goal is to discover new and effective interventions to address those negative impacts.

In light of the results of this study, two strong conclusions can be drawn with regard to the benefit of EW. Firstly, drawing on the literature, EW may result in a host of health benefits. The results of this study offer insights into what factors contribute to ensure the efficacy of EW as an intervention tool. This may be attributable to the fact that EW affects people on a number of aspects—biological, cognitive, emotional and social—making a single explanatory theory unlikely. Secondly, a variety of mechanisms can be posited as to ensure its efficacy. Needless to say, future research should further explore its boundary conditions, including potential moderating variables. In addition to addressing theory-relevant questions, researchers and therapists must now address how, when and with whom this form of therapy is most beneficial and, at the same time, further evaluate how and why this intervention produces positive outcomes.

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