Using Online Retail Therapy to Reduce Lingering Sadness

Chanitnant Ajanant (5637557438)

Chutikan Mahatanavanij (5637563138)

Phiraya Srinarong (5637583738)

Senior Project Submitted in Partial Fulfillment of the Requirements

for the Degree of Bachelor of Science in Psychological Science

Faculty of Psychology

Chulalongkorn University

Academic Year 2016

Title                              Using Online Retail Therapy to Reduce Lingering Sadness

Authors                            1. Chanitnant Ajanant

                                   2. Chutikan Mahatanavanij

                                   3. Phiraya Srinarong

Field of Study                     Psychological Science

Senior Project Advisor             Dr. Yokfah Isaranon

_____

This senior project is accepted by the Faculty of Psychology, Chulalongkorn University in partial fulfillment of the requirements for the Bachelor of Science degree (Psychological science).


.....................................
Dean of the Faculty of Psychology

(Assistant Professor Dr. Kakanang Maneesri)




Senior Project Committee


..................................................... Chairperson
(Dr. Panita Suavansri)


..................................................... Advisor
(Dr. Yokfah Isaranon)


..................................................... Committee
(Aj. Soravis Ratanachatchuchai)

Abstract

Prior research has suggested that 'retail therapy', or shopping to improve one's mood, could

be used to help reduce sadness through the mechanism of control restoration. Nonetheless,

this phenomenon had merely been examined in traditional way of shopping. The aim of the

present study was to investigate whether online shopping would have similar effects in

reducing sadness, specifically in Thai undergraduate students. Hence, we hypothesized that

online retail therapy would reduce sadness as well as there would be a difference between

individuals in purchasing condition and those in browsing condition. We used a novel online

shopping tasks and modified version of PANAS-X scale measuring both positive and

negative affects in the study. The findings showed a significant effect of retail therapy in

reducing sadness; however, there was no significant difference found between the two

conditions. Future directions and implications were discussed.

**Field of Study**: Psychological Science          **Student's Signature**: ...........................

**Academic Year**: 2016                            **Student's Signature**: ...........................

                                                   **Student's Signature**: ...........................

**Advisor's Signature**: ...........................

Acknowledgements

Table of Contents

List of Tables

List of Figures

Chapter 1

Introduction

Sadness is a powerful negative factor affecting how one behaves and regulates

himself or herself in any circumstances. It is often found to be a cause that leads to a variety

of unhealthy behaviors. For example, Parkes (1986) proposed that sadness is linked with

bereavement and avoidance meaning that one tends to avoid thoughts or behaviors that may

evoke grief or sadness. In doing so, one may constantly overwork until late night to keep

themselves busy in order to avoid sad thoughts (Parkes, 1989), whereas long hours of work

affects their overall psychological and physiological well-being such as increased risks of

mental health problems or cardiovascular diseases (Sparks, Cooper, Fried, & Shirom, 1997;

Iwasaki, Takahashi, & Nakata, 2006). Moreover, researches have suggested sadness is related

with increased unnecessary consumption (Garg & Lerner, 2013). For instance, individuals

with sadness are more likely consume tasty food, which contains higher fat and sugar such as

buttered popcorns and chocolate (Garg, Wansink, & Inman, 2007; Garg & Lerner, 2013) or

are more willing to spend more on purchasing some new products (Lerner, Small, &

Loewenstein, 2004). Thus, a large number of researchers have sought ways to reduce levels

of sadness to increase healthy behaviors, performance, and enhance well-being.

Buying a certain product has been found to be associated with the reduced levels of

sadness (Lerner, Small, Loewenstein, 2004). Yet, little is known about the mechanism

underlying such effect.  Given a few studies on retail therapy, a lack of control resulted from

being sad is found to be one of the key factor leading people to seek comfort and have greater

will to buy (Rick, Pereira, & Burson, 2014). Previous research has suggested that this

phenomenon is linked with one's perceived sense of control in regards to its deficiency

(Smith & Ellsworth, 1985; Rick, Pereira, & Burson, 2014). A study carried out by Rick,

Pereira and Burson (2014) revealed that people with sadness tend to think that they lack of

control over a particular situation as they perceive that the outcome is governed by external

or situational forces, rather than internal factors. Furthermore, as individuals involved in the

process of choosing during shopping, making purchasing decisions also contributes to control

restoration, which in turn, alleviates the level of sadness (Inesi, Botti, Dubois, Rucker, &

Galinsky, 2011; Rick, Pereira, & Burson, 2014).

However, no research has ever examined whether such effect would occur through

online retailing. Therefore, this present study is a conceptual replication of an experimental

research regarding the effects of traditional retail therapy on negative emotions by Rick,

Pereira, and Burson (2014) to fill this research gap by investigating the effectiveness of

online retail therapy in reducing sadness among buyers and to explore if any different results

will be found in Thai population.

## Theoretical Background

### Sadness

Sadness is defined as a negative emotional state that often occurs when one is

experiencing difficult, challenging, or disappointing event or situation (Winch, 2015). It can

also be considered as a response to the loss of something in which one personally values.

Unlike other emotions, people with sadness tend to experience difficulty in efficiently

adjusting themselves to the environment. In terms of health, research has found that there is a

correlation between negative emotions and its effects on health. It is believed that negative

emotions such as sadness or anger directly associate with the susceptibility of disease

etiology or progression (Consedine & Moskowitz, 2012). In addition, previous research

suggested that a higher level of negative emotions is consistent with greater risks of heart

disease, arthritis, diabetes, and common cold (Consedine & Moskowitz, 2012). Conversely,

people with positive emotions tend to have less hospital re-admission (Middleton & Byrd,

1996) and lower risk of strokes (Consedine & Moskowitz, 2012). Another health outcome of

negative emotions is that people who are experiencing negative emotional states are prone to engage in unhealthy behaviors. It has been found that people with negative emotions are more likely to consume more fat and sugar, which they perceive as 'comfort food'. Negative emotions are also linked with higher level of drug and alcohol consumption, less exercise, and smoking (Consedine & Moskowtiz, 2012). Negative emotion, especially sadness, has also been found to be a good predictor of depression (Huffman et al., 2006). However, Schwartz and Weinberger (1980) suggested that sadness alone does not necessarily lead to the development of depression, whereas anger and fear could also involve. Nevertheless, sadness usually plays as a dominant factor in most of depressive situations.

Sadness also has impacts on cognition. Early appraisal-based emotion theories believed that appraisals are the cause of emotions; however, some later proposed that emotions and appraisals tend to have a recursive relationship (Scherer, 1988, 2001; Lerner & Keltner, 2007). Alternatively, the relationship of emotion and appraisal mean that if a person experiences an emotion, he or she would also experience the appraisals containing 'that emotional state' as well (Frijda, 1994; Lazarus, 1994).

On the other hand, the absence of adaptive function encourages individuals to withdraw themselves from a particular environment, it also allows them to think about the loss, which often leads to a new alternative solution. For instance, previous studies have shown that participants who were in bad situations would attempt to enhance their negative mood by engaging in behaviors that they thought it would reduce sadness such as helping behaviors, listening to music, or consuming more caffeine (Tahlier, Miron, & Rauscher, 2012). Furthermore, in a study by Gray, Ishii, and Ambady (2011), they also found that the subjects who were induced to feel sad by depicting a loss of their significant other, also have higher willingness to interact with others in different social activities as compared to those

who were in happy or neutral conditions. Hence, this indicates that people's behaviors may be driven by their motivation to reduce negative moods.

In the present study, we mainly emphasize the mechanism that suggests the emotional outcomes derived from appraisals of experienced situations. That is, people may have greater tendency to experience sadness when they perceive a particular situation to be 'beyond their control'. Thus, people's sadness is linked to their appraisal of the situation that involves in the sense of control.

**Cognitive Appraisals, Control, and Sadness**

Control has been well established to be an important factor that contributes to one's psychological health and well-being (Bandura, 1989; Seligman, 1991; Taylor & Brown, 1994). Previous research had found that the perception of having control over something or someone is related to many factors, such as having a lower mortality rate (Langer & Rodin, 1976), greater self-efficacy with academic confidence (Holmquist, Gable, & Billups, 2013), and specifically emotions (both positive and negative; Goetz, Frenzel, Stoeger, & Hall, 2010; Smith & Ellsworth, 1985). However, the perception of control had been described and studied using various constructs, such as self-efficacy (Bandura, 1997; Bandura et al., 2003), locus of control (Rotter, 1966), and autonomy (Ryan & Deci, 2006). In Leotti, Iyengar, and Ochsner's study about choice and control (2010), the researchers described that even if the theories of each construct hold different concepts, the underlying phenomenon is identical. As a result, it is concluded that the belief in one's ability to have control over the environment and to acquire desired consequences is vital for his or her well-being.

As stated above, control is linked to negative emotions. This idea is derived and developed from appraisal theories, which emphasize the particular mechanisms in cognitive appraisals process. Appraisal refers to a psychological phenomenon concerning the way that individuals interpret, evaluate, and explain the situations especially for their well-being

(Ellsworth & Scherer, 2003). This can result in a number of emotions that in turn influence or determine their specific course of action, physiological response, behavior, and feelings (Lazarus, 1991; Frijda, 2007; Roseman, Wiest, & Swartz, 1994; Scherer, 2001). Thus, as explained by Moors (2013), this is the reason behind many theorists argued that appraisal can cause emotions.

Previously, even though many emotion-specific appraisal theories had been proposed, researchers had interpreted appraisals and emotions in different aspects, ranging from dimensions (e.g., Smith & Ellsworth, 1985), to levels (e.g., Scherer, 1988, 2001), to its effect latency (e.g., the Appraisal-Tendency Framework by Lerner & Keltner, 2007; Lerner & Tiedens, 2006). In the next sections, we will illustrate our emotion of interest 'sadness' as studied in those appraisal theories with its relation to control.

Early experimental and theoretical studies by Smith and Ellsworth (1985) revealed that there is a number of dimensions of appraisal that differentiate one's emotional state(s). The dimension examples found to be used differentiating emotions are self- (vs. others-) agency, human (vs. situational) control, certainty, predictability, attention, pleasantness, and anticipated effort. This set of appraisal patterns provides a tool for comparing and contrasting discrete emotions. For example, the similarly valenced emotions like anger and sadness are both negative, yet the differential dimension of the two is perceptions of agency, which was also assumed to be the central importance in Ellsworth and Smith's study (1988). Anger is defined by appraising others as an agency, whereas sadness is characterized by high appraisals that situational forces (e.g., chance, religion, or even fate) control the emotional outcomes. These appraisal patterns had also been supported by numerous studies because it had found similar results (Ortony, Clore, & Collins, 1988; Keltner et al., 1993).

Another theory that found the similar relation between sadness and control is Scherer's stimulus evaluation checks of emotions model (SEC; 1988, 2001); it suggests that

humans appraise their situations in fixed sequential manners. The model consisted of four

consecutive levels of appraisal objectives: a) Relevance (how does it affect me?), b)

Implications (what are the consequences of the events and its effects), c) Coping Potential

(how well can I cope with the consequences?), and d) Normative Significance (what is the

importance of the event to self-concept and social norms and values). Moreover, in each level

it also contains 'sub-checks'. For example, an evaluation of 'Coping Potential' level includes

control, power, and adjustment sub-checks that can all be summarized on the whole level as

the perceived ability to control event, and have power to adjust. In SEC studies, sadness is

tested to be very low in control and power sub-checks of Coping Potential level, and also be

caused by open-agency and by chance or negligence motive of Implication level.

Furthermore, a more recently developed appraisal theory like Appraisal-Tendency

Framework (ATF; Lerner & Keltner, 2001, 2007; Lerner & Tiedens, 2006) suggests that

particular appraisals on specific emotions can persist beyond the 'happening' or immediate

situation, and become the implicit appraisal lens that shape subsequent situations. In other

words, an experience of a particular emotion can be carried over through implicit cognitive

predisposition to perception of future unrelated events in line with the preexisting appraisals

(Achar, So, Agrawal, & Duhacheck, 2016). Its foundation theorizes that incidental emotions

(or unrelated emotion arisen by a previous experience [e.g., listening to a sad story]) could

influence the subsequent unrelated decisions (e.g., going out to shop perhaps due to loss of

control). The framework has been applied to study consumers' judgment and decision-

making behaviors on emotions (see Garg & Lerner, 2013). In this case, Han and colleagues

(2007) elaborated ATF on consumers' judgments and choices. They explained that sadness

does not only co-occur with appraisals of situational control in the immediate situation, but

also activates 'appraisal tendencies' to perceive situational control again in subsequent

situations. Thus, this indicates that 'currently sad' people will normally judge situational

factors as a blame to their loss of personal control, rather than own or other's' actions within the situation.

Taken all together, this may suggest that sadness is caused by appraising that one is losing his or her personal control to situational forces like chance. Furthermore, this negative emotion as elicited from particular cognitive appraisals can have a carry-over effect on those appraisals that in turn affects subsequent and unrelated events, thereby creating 'residual negative emotions'. Hence, this may raise the question which solutions (e.g., increasing one's sense of personal control) can be used to reduce this effect latency or its maintenance on sadness.

**Retail Therapy**

One of the emotion regulation strategies that can effectively reduce the degree of residual negative emotions, especially sadness is to go shopping (Kang & Johnson, 2010; Atalay & Meloy, 2011; Rick et al., 2014). It is an activity that allows consumers to browse (examining products without an intention to purchase) and/or purchase goods and services to satisfy their wants and needs (Bloch & Richins, 1983), which can be in stores or via electronic websites. A number of existing papers emphasizes negative consequences of shopping; for instance, impulsive buying and shopping addiction. However, shopping also has positive sides that contribute many advantages to purchasers regarding social, physical and psychological aspects (Alba et al., 2013). Social interaction with friends or salesperson during shopping helps to strengthen the sense of belonging between buyers and others. Active physical activity in walking and finding the right commodity is a good workout for body and heart. Most importantly, shopping was found to lower stress level and lift up positive moods (Arnold & Reynolds, 2003). According to Breuning (2012), it was found that there were increased brain chemical levels of dopamine and endorphin during purchasing suggesting that shoppers experienced pleasurable moments then having less stress. Moreover,

neuroimaging study using fMRI showed that after shopping there was higher activity in left prefrontal cortex, which is the area associated with positive thinking and happiness (Dagher, 2007). Thus, being able to obtain goods and services assuages negative moods in various ways and people who engage in the activity of buying to boost their emotions are utilizing 'retail therapy'.

Retail therapy is defined as purchasing with a primary purpose to alleviate one's negative emotions (Kacen, 1998; Kang & Kim, 2011). There are two major approaches that researchers have studied on retail therapy: compensatory consumption and mood-alleviative consumption (Kacen & Friese, 1999; Luomala, 2002). Retail therapy usually occurs when one perceives themselves to be deficient of psychosocial factors  (e.g., lacking self-esteem and loss of control) or is experiencing negative emotional states. Hence, they may attempt to compensate and repair negative moods as a way to alter their psychological discomfort (Yurchisin, Yan, Watchravesringkan, & Chen, 2006).

Several qualitative and quantitative researches have explored retail therapy to examine how this technique could effectively assist in lessening sad feeling. A mechanism underlying the success of retail therapy is 'choosing': a method that individuals use to exercise control over the situations by making choices (Leotti, Lyengar, & Ochsner, 2010). This voluntary choosing behavior facilitates an expression of one's preference and reinforces the perception of control. Prior studies suggested that individuals prefer choices more than no choices due to an association of choice with self-determination and control that is important in regulating cognition and emotion (Garg & Lerner, 2013). In retail therapy, shopping provides a number of choices for customers to choose and purchase various products leading to control exertion over the environment. Thus, choosing contributes a sense of personal control over environments to shoppers, which perceived to be lost when an individual feels sorrowful. As sadness is associated with an absence of personal control over situations,

choices available for individuals to choose during shopping may restore a sense of loss

control resulting in sadness alleviation (Leotti, Lyengar, & Ochsner, 2010; Garg & Lerner,

2013) .

The effectiveness of retail therapy on sadness reduction have been investigated in

various contexts. Lee (2015) studied how retail therapy provide psychological support for

clinical populations. The result revealed that single women with mild psychological distress

who practiced retail therapy showed less depressive symptoms (Dahal & Fertig, 2013). This

demonstrates that the effect of retail therapy not only benefits normal people, but also clinical

populations. Recent research (Ko et al., 2015) examined sentiment messages in Twitter

before and after participants engaged in fashion shopping and the finding revealed significant

number of messages about elevated positive moods after shopping suggesting retail that

therapy works and its useful effect is disclosed in social networking. These empirical studies

advocate retail therapy's efficacy in improving moods.

### Rationale

The aim of the current research is to examine whether online retail therapy is effective

in terms of reducing sadness by inducing one's sense of control. According to Rick, Pereira,

and Burson (2014), it was suggested that the process of choosing allows shoppers to gain

sense of control back. However, existing academic papers regarding retail therapy as well as

that of Rick, Pereira, and Burson (2014) were only conducted on traditional way of shopping,

which is purchasing at a physical store setting that involves with motives like social contact

and immediate product possession (Rohm & Swaminathan, 2004). To date, there is no

research that has investigated the effectiveness of retail therapy on online channels in which

consumers access an Internet website and purchase goods electrically with scheduled delivery

time. Moreover, recent research revealed that Thai internet users are increasing continuously

that the number has reached over half of the population in 2016 ("Internet Retailing in

Thailand," 2017). As consumers in Thailand are convenient-oriented, online shopping will fulfill their favorable shopping experiences such as accessible product information, non-restricted shopping hours, and better prices with intensive discount. In addition, a study of consumers in Bangkok revealed that young people are more likely to purchase goods online than other age groups (Cheawkamolpat, 2009). Moreover, in consideration of sadness and control, we will explore whether Thai people will display the similar effect of retail therapy due to the demographic judgment tendency towards external locus of control or situational factors (Morris & Peng, 1994; Kongsompong, Green, & Patterson 2009), which is embedded in collectivistic culture, power others, and religious beliefs in fate, luck and chance (Menon, Morris, Chiu, & Hong 1999).

Therefore, in the current study, we hypothesize that (a) there will be a significant effect of online shopping therapy on reducing sadness and (b) there will be significant difference between choosing and browsing conditions in terms of reducing sadness as people in choosing condition may acquire greater sense of control. As shown in Figure 1, participants will be randomly allocated to either sadness-inducing or neutral-inducing condition. Moreover, two different shopping tasks (i.e., choosing [control] and browsing [no control]) will be assigned to the participants in each condition equally. Additionally, our research will fill the gap and confirm the conceptual replication by investigating whether online retail therapy will have similar effect as traditional shopping in reducing sadness specifically in Thai people.
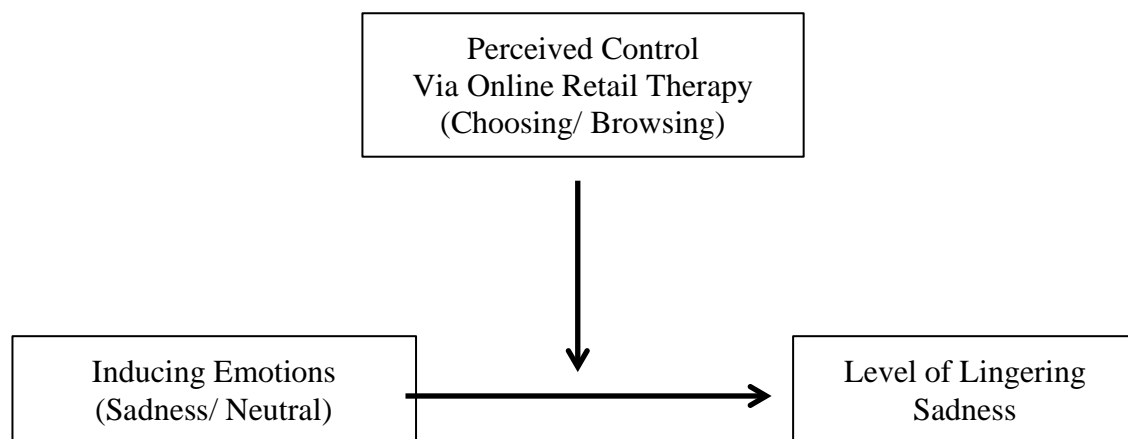
*Figure 1.* Conceptual framework of the current study to illustrate the effects of control via online retail therapy on lingering sadness

Chapter 2

**Method**

**Participants**

The initial responders consisted of 84 people; however, 24 of them were excluded mainly due to incomplete questionnaires, exceeding age limits, submitting irrelevant answers. Hence, after eliminating excursive data, we have obtained a total of 60 participants (26 females; 34 males), ranging from 18 to 25 years old ($M = 20.95$, $SD = 1.42$), from various universities in Thailand. Participants were recruited via two ways: (a) social-media platforms such as Facebook, (b) verbal invitation such as in university lectures. It was also noted that participation (i.e., completing a set of questionnaires and shopping task) was voluntary.

**Materials**

**Demographic Information.** Participants were asked to report their age, gender, university, and online shopping experience prior to completing the main questionnaires and shopping task.

**Emotions.** Participants' levels of positive and negative emotions, including sadness, were measured using the modified version of PANAS-X. An eight-item scale based on an original PANAS-X (Positive and Negative Affect Schedule scale by Watson & Clark, 1994)

consisting of four items on positive emotions: happy, confident, relaxed, and determined, and four items on negative effects: sad, nervous, angry, and guilt. The scale was used to measure the extent to which participants were currently experiencing positive and negative emotions. The response format was a five-point Likert type scale ranging from 1 (*not at all*) to 5 (*very much*) with a scale midpoint of 3 (*moderately*). In addition, our scale has a moderate internal reliability for positive emotions ($\alpha = .69$) and a good internal reliability for negative emotions ($\alpha = .72$).

**Emotion-inducing written task.** A written task was administered in order to increase the emotional level in the participants. This emotion induction task was adapted from the methodology used in a study by Garg, Inman, and Mittal. (2005). Two different sets of questions were allocated to the participants in accordance with their assigned conditions. Participants were required to complete the task, which consist of two questioning items. Participants in sadness-inducing condition were asked to list three-to-five things that make them feel sad, ranging from the least sad to the saddest respectively, and describe an incident that makes them feel saddest in two-to-three sentences. On the other hand, participants in neutral condition were asked to recall three-to-five emotionally neutral life activities such as things that they have done in the day as well as briefly share some details, in two-to-three sentences, of a typical day in their lives. This sadness-inducing technique has been used in a number of previous research as it has been proven to be effective in increasing emotions (George et al., 1995; Lerner & Keltner, 2001; Pelletier et al., 2003).

**Shopping tasks.** A novel shopping task was developed and designed to examine the effect of gaining back a sense of personal control through the shopping experience. In this study, we used *Instagram*, which is one of the most popular social-networking site for sharing photos and videos on mobile and computer (Salomon, 2013). The number of Instagram users in Thailand has been rapidly increasing from 1.9 millions in 2014 to

approximately 11.2 million people in 2017 and most users age between 18 to 24 years old

(39%) ("Instagram users in Thailand," 2017). That is, a number of Thai youths may utilize

the application in a great extent to purchase online. Therefore, Instagram tended to be a

suitable tool to investigate this particular effect in Thai population.

There were 12 pictures of various products shown on an Instagram page resembling

an actual Instagram shopping store. The products were selected from different categories

such as clothing, accessories, or gadgets. Each product was labeled with a certain code,

which was used for participants to fill in in the main questionnaire if they desired to purchase

that specific product.

**Manipulation check.** The questionnaire regarding two shopping task conditions were

developed to evaluate the effectiveness of the manipulation of giving a sense of control; it

contained two statements: (a) the particular task that I just did is considered as the act of

'purchasing', and (b) this act allows me to control the situations, and possibly to achieve

desired needs. Responses were rated from 1 (*strongly disagree*) to 8 (*strongly agre*e) and the

scores were averaged, such that higher score indicating more manipulation effectiveness.

**Data Analysis**

To examine the effects of given sense of control via different shopping tasks on

participants' sadness, we performed a between-group ANOVA on the sadness scores. The

ANOVA was conducted as 2 (shopping tasks: choosing [control] vs. browsing [no control]) x

2 (emotion-inducing groups: sadness vs. neutral) between-groups design. Level of sadness

was a dependent variable (DV). Manipulation check test included two questions with 8-point

Likert scales to assess the effectiveness of the manipulation of control in shopping task

conditions.

**Procedure**

Participants were randomly allocated into four different conditions: (a) sadness-inducing condition with control, (b) sadness-inducing condition without control, (c) neutral condition with control, and (d) neutral condition without control. Before completing the main questionnaires and shopping task, they were asked to provide their personal information. After which, they were required to answer a set of questionnaires aiming to examine negative emotions and sadness as baseline emotional state. They were then to do the written task, where they were asked to recall a few of sad life events or emotionally neutral life activities.

After finishing the emotion-induced written task, participants were given the same questionnaires to measure the current emotional state. Next, participants were to complete their assigned shopping task (choosing or browsing). In choosing conditions, participants were informed that they are given ฿1000-shopping card as a reward to freely choose four items of twelve items as each item costs ฿250, as well as a free delivery. Purchasing could be proceeded by clicking the provided link of an Instagram shopping account and filling product codes on the main questionnaire. Conversely, those in browsing conditions were asked to view the same products and judge which item is the most popular among all products on the online store. Participants then rated their current feelings again on the same scales that were used previously as a post-assessment of the emotion following the shopping task. Moreover, manipulation check of control effectiveness was administered.

At the end, notes were provided for participants to debrief and explain the purpose of the study and all deception. They were also thanked and presented with experimenters' email addresses for further questions.

Chapter 3

**Results**

**Demographic Information**

Total numbers and percentage of two demographic variables are shown in Table 1, including gender and age. There was a total of 60 participants that comprise 26 males and 34 females, which made each gender 56.7% and 43.3% respectively. Moreover, although all participants aged between 18-25 years old, we found that most of them were 21 (38.3%), followed by 22 (21.7%), and 20 (15%) years old.

Table 1

*Demographic information of the participants.*

| Variables | | N | Percentage | *M* | *SD* |
|---|---|---|---|---|---|
| Gender | Female | 34 | 56.7 % | | |
| | Male | 26 | 43.3 % | | |
| Total | | 60 | 100 % | .57 | .50 |
| Age | 18 | 4 | 6.7 % | | |
| | 19 | 5 | 8.3 % | | |
| | 20 | 9 | 15 % | | |
| | 21 | 23 | 38.3 % | | |
| | 22 | 13 | 21.7 % | | |
| | 23 | 4 | 6.7 % | | |
| | 24 | 1 | 1.7 % | | |
| | 25 | 1 | 1.7 % | | |
| Total | | 60 | 100 % | 20.95 | 1.42 |

*Note.* Male = 0, Female = 1

**Manipulation check**

To compare the participants' baseline scores on sadness amongst, a one-way between subjects ANOVA was conducted. No significant difference amongst four condition groups was found, $F(1, 3) = .07$, $p = .977$. Thus, level of sadness in the four conditions including sad-shop ($M = 1.67$, $SD = .98$), sad-browse ($M = 1.80$, $SD = .68$), neutral-shop ($M = 1.73$, $SD = 1.03$), or neutral-browse ($M = 1.80$, $SD = 1.08$) did not differ significantly.

Next, an independent-samples t-test was conducted to examine the effectiveness of emotion induction manipulation check. There was a significant difference in the scores for sadness-induced condition ($M = 3.13$, $SD = 1.43$) and neutral-induced condition ($M = 1.47$, $SD = .682$); t (58) = 5.76, p < .001.

Last, another independent-sample t-test was administered to test the effectiveness of the online-shopping tasks on the perception of gaining sense of control. The results revealed a significant difference; t(58) = 3.55, p < .001, indicating that the average perceived sense of control scores in purchasing condition ($M = 5.67$, $SD = 1.24$) was greater than that of the participants in browsing condition ($M = 4.30$, $SD = 1.70$).

**Hypothesis Testing**

A repeated measures ANOVA showed that there was a significant main effect of retail therapy on reducing participants' levels of sadness $F(1,14) = 13.82$, $p = .002$ (see Table2), such that the average sadness scores measured after the completion of shopping task ($M = 1.87$, $SD = .26$) was significantly lower than the average sadness scores measured prior to shopping task ($M = 3.40$, $SD = .42$) as shown in Table 3.

Table 2

*Statistical Analysis of Sadness after Completing Online Shopping Task*

|  | SS | df | MS | F | p |
|---|---|---|---|---|---|
| Sadness | 17.633 | 1 | 17.633 | 13.817 | .002* |
| Error | 17.867 | 14 | 1.276 | | |

*Note.* *p < .05

Table 3

*Means and Standard Deviations of Sadness in Purchasing Condition Before and After Completing Online Shopping Task*

|  | M | SD | N |
|---|---|---|---|
| Sadness Time 2 | 3.40 | 1.64 | 15 |
| Sadness Time 3 | 1.87 | .99 | 15 |

A 2 (emotion-inducing groups: sad, neutral) x 2 (shopping tasks: purchasing, browsing) between-groups ANOVA was used to test whether the shopping tasks would allow participants to gain sense of control, which in turn, leads to a significant difference in the levels of sadness between the two conditions. However, as shown in Table 4, there was no significant difference between purchasing and browsing conditions on sadness level, $F(1, 59)$ = .34, $p$ = .564. Thus, our second hypothesis was rejected. However, if we consider the slight mean differences in sadness, the direction of average scores of purchasing ($M$ = 1.87, $SD$ = .99) and browsing ($M$ = 2.00, $SD$ = .76 ) conditions in the two emotion-inducing conditions was as expected (see Table 5), which will be discussed later.

Table 4

*Factor Analysis of Variance for Emotion Induction, Purchasing Condition, and Emotion Induction X Purchasing Condition*

|  | SS | df | MS | F | p |
|---|---|---|---|---|---|
| Emotion Induction | 5.595 | 1 | 5.595 | 12.373 | .001* |
| Purchasing Condition | .152 | 1 | .152 | .336 | .564 |
| Emotion Induction X Purchasing Condition | .002 | 1 | .002 | .004 | .950 |
| Error | 24.871 | 55 | .452 |  |  |

*Note*. p < .05

Table 5

*Means and Standard Deviations of Four Different Conditions*

|                    | *M*   | *SD* | *N*  |
|--------------------|-------|------|------|
| Sad - Purchase     | 1.87  | .99  | 15   |
| Sad – Browse       | 2.00  | .76  | 15   |
| Neutral – Purchase | 1.27  | .59  | 15   |
| Neutral – Browse   | 1.40  | .51  | 15   |

**Additional analysis**

Apart from the main analysis, we also consider some other emotions, both positive and negative, to see whether retail therapy would have any effects on them as well. In doing so, one-way ANOVA was performed. The results revealed that there is no significant effect on any positive emotions, which include determined $F(1,55) = 2.83$, $p = .098$, relaxed $F(1,55) = .01$, $p = .937$ happy $F(1,55) = .88$, $p = .351$, and confident $F(1,55) = .25$, $p = .620$. As for negative emotions, the analysis showed that the effect of retail therapy was also not significant in any of these emotions, which consist of nervous $F(1,55) = 3.07$, $p = .085$, guilt $F(1,55) = .04$, $p = .841$, and angry $F(1,55) = .07$, $p = .793$.

Chapter 4

**Discussion**

The aim of this experimental research was to investigate the effectiveness of using online retail therapy to alleviate the levels of lingering sadness. In this study, as the first hypothesis predicted that there will be an effect of online retail therapy in reducing sadness, this was supported because we found a distinct difference in the reduced levels of sadness after participants completing the online shopping task. Thus, online shopping can help alleviate individuals' sadness. This is consistent with a number of previous research, which suggests that shopping may have positive psychological effects on mood (Arnold & Reynolds, 2003; Gardner & Rook, 1988). For instance, a study by Atalay and Meloy (2011) provided a supportive evidence as they found that participants were most likely to report

positive feelings after purchasing that was aimed to fix their mood. Another study by Faber

and Christenson (1996) revealed that participants tended to feel less sad while shopping in

comparison to how they felt immediately before shopping. Thus, it could be implied that

shopping may enhance emotions.

However, our results did not support the second hypothesis as we found no significant

difference in purchasing and browsing conditions in the levels of sadness. This was contrary

to the findings in study by Rick, Pereira, and Burson (2014) that suggested the significant

difference between purchasing and browsing conditions. Several researchers argued that

sadness is strongly associated with perceived deficiencies in personal control over a

particular situation, whereas making choices in shopping process may allow one to restore

perceived sense of control, and thus reduce sadness (Leotti, Lyengar, & Ochsner, 2010; Rick,

Pereira, and Burson, 2014). Nevertheless, despite the absence of distinct difference in the

sadness level between both conditions, our manipulation check revealed that the average

score of perceived sense of control in purchasing condition was higher than that of browsing

condition. Moreover, by looking at a slight difference between the two conditions on sadness

level, there is a possibility to be considered that online retail therapy might help participants

in purchasing condition to restore their perceived control and consequently lessen sadness

greater than those in browsing condition. Therefore, this may explain why sadness level of

participants in purchasing condition was lower than that of individuals in browsing condition.

Hence, although our findings partially contradicted with the ideas suggested in the study of

Rick, Pereira, and Burson (2014), our results were in expected direction. Thus, it could be

implied that there is a positive effect of online retail therapy on sadness; however, further

research is needed in order to draw a warrant conclusion.

**Strengths**

Key strengths of the study include the use of actual Instagram account, homogenous samples, and the successful manipulation checks of emotion-induction tasks and shopping tasks in terms of its ability to gain control. First, the use of an actual Instagram account as an online retail store can create ease of use and familiarity for participants because as stated earlier that 39% of Thai youths (18-25 years old; "Instagram users in Thailand," 2017) has been a normal Instagram users and may have used Instagram as a tool to browse or purchase products. Thus, this might help our shopping task to be more realistic and suitable for Thai population especially in this age range.

Another strength of this study is that the trait of our sample was homogenous in terms of their generation. All participants were between 18 to 25 years old; hence, they were more likely to be shaped and exposed to the same context. Therefore, this allows us to make generalization about our sample more easily as all participants share similar traits. Moreover, the sampling method was time-effective as participants were selected based on our specific characteristic interests.

Last, we also conducted manipulation checks to examine the effectiveness of the tasks (i.e., emotions-induction written and shopping [control restoration] tasks ) in the present study. The results showed that our manipulation methods were successful and effective; therefore, this allowed us to detect the true effects derived from the variables of interest.

**Limitations**

There are several limitations in the current study. First, the amount of given time was utterly limited. We had approximately four months to conduct this particular research; therefore, we were not able to arrange the research to reach its full potential. The next limitation could be our small sample size as this study consisted of only 60 participants due to time constraints. Having a small sample size may lead to low statistical power, which

means that the chance to detect a true effect of the study and the likelihood that the results

reflecting a true effect would be statistically significant could also be reduced (Button et al.,

2013). Noting that in our current study, if we were able to increase the sample size, perhaps

there would be significant differences as predicted because our results showed the expected

trend.

Importantly, our shopping task could be considered as a limitation. To be more

specific, our experimental shopping task was hypothetical as we asked participants to

'imagine' that they were given a 1000฿ gift card to select and purchase four items, which

each item costed 250฿ and therefore has the same price. Thus, this may distort its real value.

Restricting number of items purchased may affect participants' purchasing decisions as

generally people purchase based on their available amount of money not the number of items.

While providing distorted item prices could influence people's perception of the shopping

task as they may be able to guess the actual price of each item as the selected items were

common in the market. Also, it lacked of a payment process as the participants did not have

to proceed any payment. Furthermore, Instagram was used as a shopping site in this study,

whereas there could be other online shopping platforms that are more preferred. Therefore,

with the mentioned issues, the shopping task may not be well-developed enough to lead the

participants to believe and perceive their action as an actual purchase, thereby affecting the

results.

**Implications**

The findings provided useful implications that can be applied to enhance customer's

experiences as well as the retailer's sales. That is, since the control restoration via shopping

was found to be effective to alleviate sadness, retailers may consider increasing this

underlying mechanism. For example, a retailer may create a marketing campaign that provide

choices for customers, especially sad individuals; thus, it may increase the likelihood that

customers would purchase a particular product. As a result, customers may feel less sad when shopping on their online sites and in return the retailers would get higher profits.

**Future Research**

Future research may consider the development of a more advanced experimental online shopping task that can create a more realistic experience for participants, including real consequential shopping decisions, undistorted prices of products, payment process, and trials of other online platforms. Furthermore, online retail therapy could be examined in online games. Individuals may identify themselves with self-created game characters, where they may involve in the virtual acts of purchasing items, thereby allowing them to gain perceived sense of control. Last, the effects of shopping could also be studied in clinical population, such as patients with depression, to see whether it would have positive effects on their behavioral and cognitive impairments and possibly be an alternative treatment. However, this has to be done with careful consideration because people with such mental disability may be more vulnerable to develop other disorders such as addiction or compulsive shopping disorder, which may result from shopping.

References

Alba, J., Lynch, J., Weitz, B., Janiszewski, C., Lutz, R., Sawyer, A., & Wood, S. (1997).
Interactive home shopping: Consumer, retailer, and manufacturer incentives to
participate in electronic marketplaces. *Journal of Marketing, 61*(3), 38.
doi:10.2307/1251788

Achar, C., So, J., Agrawal, N., & Duhachek, A. (2016). What we feel and why we buy: The
influence of emotions on consumer decision-making. *Current Opinion in Psychology,
10*, 166-170

Arnold, M. J., & Reynolds, K. E. (2003). Hedonic shopping motivations. *Journal of
Retailing, 79*, 77-95.

Atalay, A. S., & Meloy, M. G. (2011). Retail therapy: A strategic effort to improve mood.
*Psychology and Marketing*, *28*(6), 638–659.

Bandura, A. (1989). Perceived self-efficacy in the exercise of personal agency. *The
Psychologist: Bulletin of the British Psychological Society, 2*, 411-424.

Bandura, A. (1997). *Self efficacy: The exercise of control*. New York, NY: W. H. Freeman
& Company.

Bandura, A., Caprara, G. V., Barbaranelli, C., Gerbino, M., & Pastorelli, C. (2003). Role of
affective self-regulatory efficacy in diverse spheres of psychosocial functioning.
*Child development, 74*, 769-782.

Button, K. S., Ioannidis, J. P., Mokrysz, C., Nosek, B. A., Flint, J., Robinson, E. S., &
Munafò, M. R. (2013). Power failure: why small sample size undermines the
reliability of neuroscience. *Nature Reviews Neuroscience, 14*, 365-376.
doi:10.1038/nrn3475.

Cheawkamolpat, P. (2009). Online shopping behavior: a study of consumers in Bangkok. *AU
Journal of Management, 7*(2), 1-11.

Consedine, N, S. & Moskowitz, J. T. (2007). The role of discrete emotions in health

    outcomes: a critical review. *Applied and Preventive Psychology, 12*, 59-75.

Ellsworth, P. C., & Scherer, K. R. (2003). Appraisal processes in emotion. In R. J.

    Davidson, K. R. Scherer, & H. Goldsmith (Eds.), *Handbook of the Affective Sciences*

    (pp. 572-595). New York: Oxford University Press.

Ellsworth, P. C., & Smith, C. A. (1988). From appraisal to emotion: Differences among

    negative feelings. *Motivation and Emotion, 12*, 271-308.

Faber, R. J., & Christenson, G. A. (1996). In the mood to buy: Differences in the mood states

    experienced by compulsive buyers and other consumers. *Psychology and Marketing,*

    *13*(8), 803–819.

Frijda, N. H. (1994). Emotions require cognitions, even if simple ones. In P. Ekman & R. J.

    Davidson (Eds.), *The Nature of Emotion: Fundamental Questions* (pp. 197-202). New

    York: Oxford University Press.

Frijda, N. H. (2007). *The laws of emotion*. Mahwah, NJ: Erlbaum.

Gardner, M. P., & Rook, D. W. (1988). Effects of impulse purchases on consumers' affective

    states. In M. J. Houston (Ed.), *Advances in Consumer Research*. (pp. 127–130) Provo,

    UT: Association for Consumer Research.

Garg, N. & Lerner, J. S. (2013). Sadness and consumption. *Journal of Consumer Psychology,*

    *23*(1), 106-113

Garg, N., Inman, J. J., & Mittal, V. (2005). Incidental and task-related affect: A re-inquiry

    and extension of the influence of affect on choice. *Journal of Consumer Research, 32*,

    154-159.

Garg, N., Wansink, B., & Inman, J. J. (2007). The influence of incidental affect on

    consumers' food intake. *Journal of Marketing, 71*, 194–206.

George, M. S., Ketter, T. A., Parekh, P. I., Horwitz, B., Herscovitch, P., & Post, R. M.

(1995). Brain activity during transient sadness and happiness in healthy women. *The American Journal of Psychiatry, 152*(3), 341-351.

Goetz, T., Frenzel, A. C., Stoeger, H., & Hall, N. C. (2010). Antecedents of everyday

positive emotions: An experience sampling analysis. *Motivation and Emotion,*

*34*, 49-62.

Gray, H. M., Ishii, K., & Ambady, N. (2011). Misery loves company: When

sadness increases the desire for social connectedness. *Personality and Social*

*Psychology Bulletin*, *37*(11), 1438-1448.

Han, S., Lerner, J. S., & Keltner, D. (2007). Feelings and consumer decision making: The

appraisal-tendency framework. *Journal of Consumer Psychology, 17*(3), 158–168.

Holmquist, C., Gable, R., & Billups, F. (2013). The relationship between self-

efficacy and persistence in adult remedial education. Paper presented at the

annual meeting of the Northeastern Educational Research Association, Rock

Hill, CT.

Huffman, J. C., Smith, F. A., Blais, M. A., Beiser, M. E., Januzzi, J. L., & Fricchione, G. L.

(2006). Rapid screening for major depression in post- myocardial infarction patients:

an investigation using Beck Depression Inventory II items. *Heart, 92*(11), 1656–1660.

Inesi, M. E., Botti, S., Dubois, D., Rucker, D. D., & Galinsky, A. D. (2011).

Power and choice: Their dynamic interplay in quenching the thirst for

personal control. *Psychological Science, 22*(8), 1042–1048.

Instagram users in Thailand. (2017, February 18). Retrieved from

https://napoleoncat.com/blog/en/instagram-users-in-thailand-february-2017/

Internet Retailing in Thailand. (2017, January). Retrieved from

http://www.euromonitor.com/internet-retailing-in-thailand/report

Iwasaki, K., Takahashi, M., & Nakata, A. (2006). Health problems due to long working hours in Japan: working hours, workers' compensation (Karoshi), and preventive measures. *Industrial health, 44*(4), 537-540.

Kang, M. & Johnson, K. K. P. (2010). Let's shop! Exploring the experiences of therapy shoppers. *Journal of Global Fashion Marketing*, *1*(2), 71-79.

Keltner, D., Ellsworth, P. C., & Edwards, K. (1993). Beyond simple pessimism: Effects of sadness and anger on social perception. *Journal of Personality & Social Psychology, 64*, 740-752.

Kongsompong, K., Green, R. T., & Patterson, P. G. (2009). Collectivism and social influence in the buying decision: A four-country study of inter- and intra- national differences. *Australasian Marketing Journal, 17*, 142 – 149.

Langer, E., & Rodin, J. (1976). The effects of choice and enhanced personal responsibility for the aged: A field experiment in an institutional setting. *Journal of Personality and Social Psychology, 34*(2), 191-198.

Lazarus, R. S. (1991). *Emotion and adaptation*. New York, NY: Oxford University Press.

Lazarus, R. S. (1994). Appraisal: The long and short of it. In P. Ekman & R. J. Davidson (Eds.), *The Nature of Emotion: Fundamental Questions* (pp. 208-215). New York: Oxford University Press.

Leotti, L. A., Iyengar, S. S., & Ochsner, K. N. (2010). Born to choose: the origins and value of the need for control. *Trends in Cognitive Sciences*, *14*(10), 457-463. doi:10.1016/j.tics.2010.08.001

Lerner, J. S., & Keltner, D. (2001). Fear, anger, and risk. *Journal of Personality and Social Psychology, 81*(1), 146-159.

Lerner, J. S., Small, D. A., & Loewenstein, G. (2004). Heart strings and purse strings: Carry-over effects of emotions on economic transactions. *Psychological Science, 15*, 337–341.

Lerner, J. S., & Tiedens, L. Z. (2006). Portrait of the angry decision maker: How appraisal tendencies shape anger's influence on cognition. *Journal of Behavioral Decision Making, 19*, 115–137.

Menon, T., Morris, M. W., Chiu, C. Y., & Hong, Y. Y. (1999). Culture and the construal of agency: attribution to individual versus group dispositions. *Journal of Personality and Social Psychology, 76*, 701–717.

Middleton, R. A., & Byrd, E. K. (1996). Psychosocial factors and hospital readmission status of older persons with cardiovascular disease. *Journal of Applied Rehabilitation Counseling, 27*, 3–10.

Moors, A. (2013). On the causal role of appraisal in emotion. *Emotion Review, 5*, 132–140.

Morris, M., & Peng, K. (1994). Culture and cause: American and Chinese attributions for social and physical events. *Journal of Personality and Social Psychology, 67*, 949-971.

Ortony, A., Clore, G. L., & Collins, A. (1988). *The cognitive structure of emotions*. New York: Cambridge University Press.

Parkes, C. M. (1986). *Bereavement* (2nd ed.). London: Tavistock.

Pelletier, M., Bouthillier, A., Lévesque, J., Carrier, S., Breault, C., Paquette, V., ... & Beauregard, M. (2003). Separate neural circuits for primary emotions? Brain activity during self-induced sadness and happiness in professional actors. *Neuroreport, 14*(8), 1111-1116.

Rick, S. I., Pereira, B., & Burson, K. A. (2014). The benefits of retail therapy: making

purchase decisions reduces residual sadness. *Journal of Consumer Psychology, 24*(3),

373-380

Rohm, & Swaminathan. (2004). A typology of online shoppers based on shopping

motivations. *Journal of Business Research, 57*(7), 748-757.

Roseman, I. J., Wiest, C., & Swartz, T. S. (1994). Phenomenology, behaviors, and goals

differentiate discrete emotions. *Journal of Personality and Social Psychology, 67*,

206-221. doi:10.1037/0022-3514.67.2.206

Rotter, J. B. (1966). Generalized expectancies of internal versus external control of

reinforcements. *Psychological Monographs*, 80.

Ryan, R. M., & Deci, E. L. (2006). Self-regulation and the problem of human autonomy:

Does psychology need choice, self-determination, and will? *Journal of personality,*

*74*, 1557–1585.

Salomon, D. (2013). Moving on from Facebook using Instagram to connect with

undergraduates and engage in teaching and learning. *College & Research Libraries*

*News, 74*(8), 408-412.

Scherer, K. R. (1988). *Facets of emotion: Recent research*. Hillsdale, NJ: Erlbaum.

Scherer, K. R. (2001). Appraisal considered as a process of multilevel sequential checking.

In K. R. Scherer, A. Schorr, & T. Johnstone (Eds.), *Appraisal processes in emotion:*

*Theory, Methods, Research* (pp. 92–120). New York, NY: Oxford University Press.

Schwartz, G. E., & Weinberger, D. A. (1980). Patterns of emotional responses to affective

situations: Relations among happiness, sadness, anger, fear, depression, and anxiety.

*Motivation and Emotion, 4(*2), 175-191.

Seligman, M. E. P. (1991). Learned optimism. New York: A.A. Knopf.

Smith, C. A., & Ellsworth, P. C. (1985). Patterns of cognitive appraisal in

emotion. *Journal of Personality and Social Psychology, 48*(4), 813–838.

Sparks, K., Faragher, B., & Cooper, C. L. (2001). Well-being and occupational health in the

21st century workplace. *Journal of occupational and organizational psychology,

74*(4), 489-509.

Tahlier, M., Miron, A. M., & Rauscher, F. H. (2013). Music choice as a sadness regulation

strategy for resolved versus unresolved sad events. *Psychology of Music, 41*(6), 729-

748.

Taylor, S. E., & Brown, J. D. (1994). Positive illusions and well-being revisited:

Separating fact from fiction. *Psychological Bulletin, 116*, 21-27.

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief

measures of positive and negative affect: The PANAS scales. *Journal of Personality

and Social Psychology*, *54*(6), 1063-1070

Winch, G. (2015). The important differences between sadness and depression and why so

many get it wrong. Retrieved from https://www.psychologytoday.com/blog/the-

squeaky-wheel/201510/the-important-difference-between-sadness-and-depression

Appendix A

Informed Consent

Hello and thank you for clicking the link to take part in our research - We really do appreciate it!

As you may already know this experiment contributes to our research project for Bachelor's Degree in Psychology at Chulalongkorn University. The research aims to investigate the effect of online shopping experience in improving various emotions.

There is just a few more things you need to know before you take part:

1) All items are based on rating scores and participants will be asked their current emotions three times in which each scale will take approximately 5 minutes to complete. You will also be asked to complete your personal information including gender, age, university and online shopping experience.

2) You will be asked to briefly write down your personal story and to take a look at an online shop on the famous social site Instagram. All participation is voluntary then participants are allowed to withdraw from the questionnaire or experiment at any time without penalty. If there are any questions you do not wish to provide, please feel free to omit those questions. 3) This questionnaire is a part of a student research project, independent from any organizations except Faculty of Psychology, Chulalongkorn University.

4) This questionnaire is completely anonymous. No individual responses of the survey will be shared with the Faculty of Psychology - only general, overall findings.

Thank you again,

Chanitnant Ajanant

Chutikan Mahatanavanij

Phiraya Srinarong

(Our email contact: chanitnant.ajanant@gmail.com)

I have read the above information and would like to fill in the questionnaire. I understand the objectives and procedures of the research.

□ I agree

Appendix B

Demographics

Gender:          □Male          □Female

Age: _____

University: _____

Online shopping experience:
□ Never
□ Rarely
□ Sometimes
□ Often

Appendix C

Assessment of Emotional State

Please rate the following items that describe the extent of your current emotions.

Response Scale:

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | Slightly | Moderately | Quite a bit | Very much |

___ Relaxed

___ Determined

___ Angry

___ Sad

___ Confident

___ Nervous

___ Happy

___ Guilty

Appendix D

Emotion-induced Written Task

Please briefly provide the answers to the following questions,

For sadness-inducing condition
1. What are the three to five things that make you feel sad? And arrange them from least sad to saddest.

Examples of things you might list: being treated unfairly by someone, being insulted or offended, etc.

_____
_____


2. Please write 2-3 sentences in more detail about the one thing that makes you feel saddest.

Examples might describe: losing a loved one—a parent, a friend, or a pet, breaking up with a person whom you love, witnessing a person suffering, etc.

_____
_____


For neutral-inducing condition
1. What are the 3-5 activities that you did today? And arrange them from earliest to latest incidents.

Examples of things you might list: walking to school, eating lunch, going to the gym, etc.

_____
_____

2. Please write 2-3 sentences in more detail how you spend your typical day by writing down a description of activities and then figure out how much time you devoted to each activity.

Examples of things you might describe: waking up at 8 am, studying for a particular exam, hanging out with friends, watching TV, etc.

_____
_____

Appendix E

Perceived Sense of Control Manipulation

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Strongly disagree                                                     Strongly agree

_____ (a) The particular task that I just did is considered as the act of 'purchasing'

_____ (b) This act allows me to control the situations, and possibly to achieve desired needs

Appendix F

Additional Comments

Comments (optional): Please write down any information that may affect the findings of the

survey (e.g., you have taken a lot of sick leave lately, you rushed through responses, you gave

out inaccurate responses, etc.)
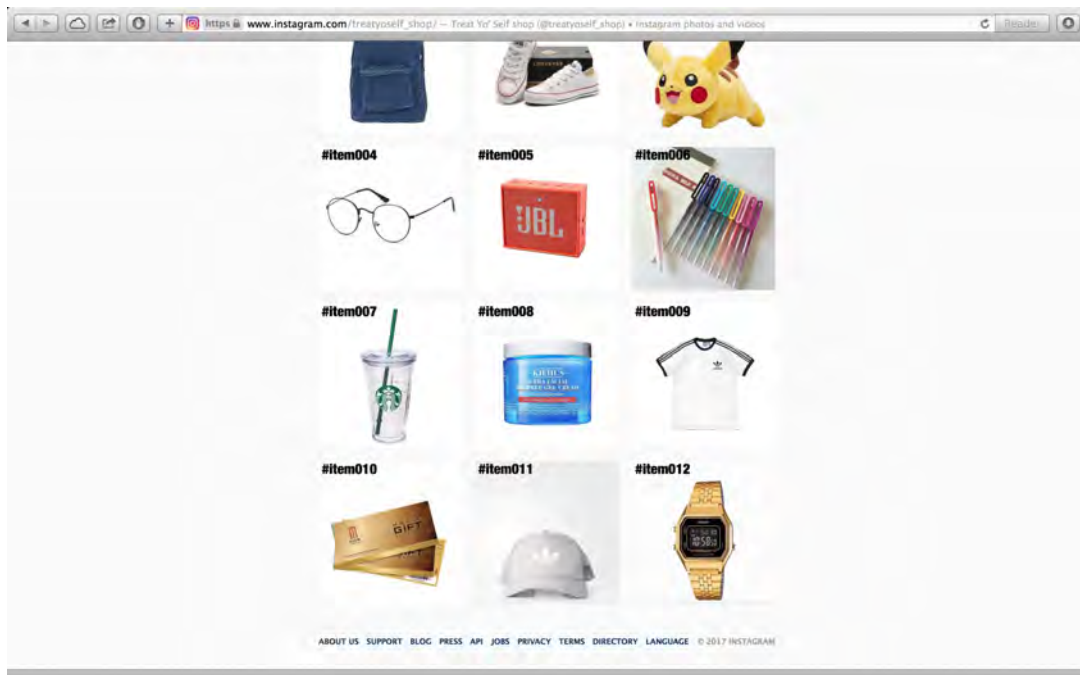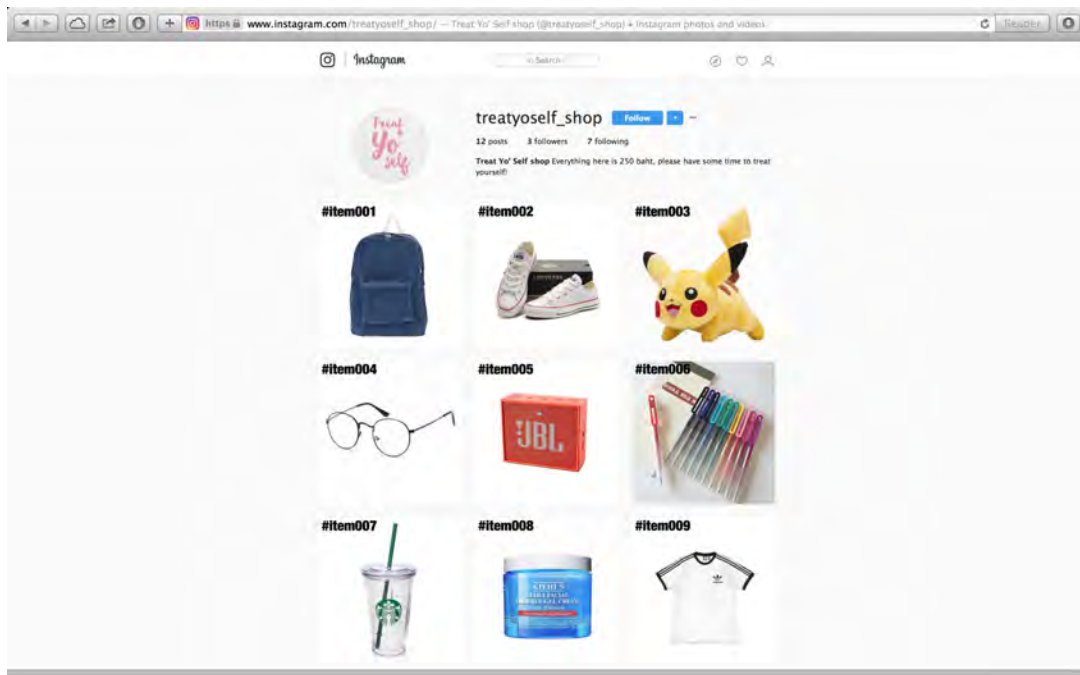
Appendix G

Debrief

We sincerely thank you for completing this survey. As mentioned at the beginning, it is intended to examine the effects of online shopping in reducing negative emotions. It is also to provide further support to previous research regarding retail therapy, specifically in relation to purchasing through online platforms.

Your responses will not be shared to public as it will be kept confidentially. Also note that, all responses are anonymous.

The present research is being conducted by a group of Bachelor's students at Chulalongkorn University and supervised by Ajarn Yokfah Issaranon. If you are seeking for more information or have any questions and concerns, please feel free to email us at Chanitnant.ajanant@gmail.com

Appendix H

Examples of Online Shopping Task