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關愛目標對情緒表達壓抑與心理適應性之影響

The Benefits of Compassion: Examining the Influence of
Compassionate Goals on Expressive Suppression
and Psychological Adjustment

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致謝



感謝我所遇到的每一個人、每一件事。

因為有你們，讓我好像對這個世界又多認識了一點、多感動了一點。

謝謝你們存在，並且讓我看到這個世界的美好。

摘要



過去有許多研究指出情緒表達壓抑會導致負向的心理適應結果。然而，壓抑所帶來的影響可能會隨著個體採取壓抑的動機而有所不同。本研究基於關愛目標對自我控制及心理適應所帶來的益處，假設人際目標可以緩衝壓抑對心理適應所帶來的負向影響。本研究的結果發現，在研究一，雖然壓抑本身預測負向的心理適應，但是當個體有高關愛目標傾向時，此負向的效果會被減輕。在研究二，在人際衝突的情境中，當個體被促發自我形象目標時，壓抑負向情緒比表達負向情緒導致較高程度的憤怒相關情緒、較低的愉悅程度、自尊以及覺知到的關係品質。然而，當個體被促發關愛目標時，壓抑負向情緒與表達負向情緒的結果則沒有差異。本研究的結果突顯出關愛目標對於減輕情緒表達壓抑為心理適應所帶來的負向影響之重要性。而不同研究方法(問卷與實驗)也為此尚未被先前研究檢驗的效果提供匯聚的證據。研究結果對於人際目標與情緒調節之意涵也在本研究中討論。

關鍵詞：關愛目標、人際目標、情緒表達壓抑、情緒調節

The Benefits of Compassion: Examining the Influence of Compassionate Goals on Expressive Suppression and Psychological Adjustment



Chien-Han Kao

Abstract

A preponderance of findings from past research indicates that expressive suppression is associated with negative psychological outcomes. However, the impact of suppression may vary according to the type of goals and motives individuals adopt. Given the benefits of compassionate goals for self-regulation and psychological adjustment, we hypothesized that this interpersonal goal orientation would help buffer against the negative effects of suppression on psychological adjustment. The present studies found that 1) although suppression predicted psychological maladjustment, the costs were attenuated among individuals with a high compassionate-goal orientation, and 2) among individuals primed with self-image goals, suppression of negative emotions in an interpersonal conflict situation led to higher levels of anger-related emotions and lower levels of pleasant emotions, self-esteem, and perceived relational quality compared to expression of negative emotions; however, among individuals primed with compassionate goals, the outcome of suppression and expression did not differ. These results highlight the important role compassionate goals may play in attenuating the negative effects of expressive suppression on psychological functioning. The use of multiple research designs (i.e., survey and laboratory experiment)

provided converging evidence for these effects, which have not been previously documented in the literature. Implications of these findings for theory and research on interpersonal goals and emotion regulation were discussed.

Keywords: compassionate goals, interpersonal goals, expressive suppression, emotion regulation

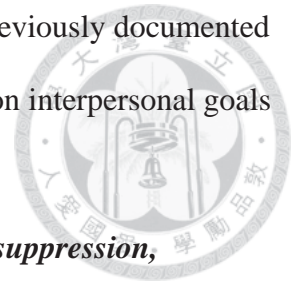
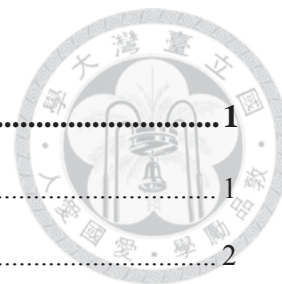
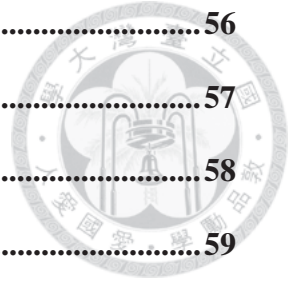


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1. Introduction

As social animals, humans have a fundamental need to belong and to relate to others (Baumeister & Leary, 1995; Bowlby, 1969; Deci & Ryan, 2000). When negative emotions arise during interpersonal conflicts, some people choose to vent these emotions in front of others, whereas others try to keep these emotions to themselves for the sake of interpersonal harmony. A common approach to regulating one's emotions is *expressive suppression*, which refers to “the conscious inhibition of one's own emotional expressive behavior while emotionally aroused” (Gross & Levenson, 1993). The central thesis of this article is that the psychological and social consequences of suppression depend on the type of interpersonal goals people hold. Some goals may counteract the negative outcomes associated with suppression. In the present research, we examined two types of interpersonal goals — compassionate goals and interpersonal goals (Crocker & Canevello, 2008) — and their influences on the suppression-outcome link.

1.1 Expressive Suppression

According to Gross (1998a, 1999), emotional regulation refers to “all extrinsic and intrinsic processes responsible for monitoring, evaluating, and modifying emotional reactions” (Thompson, 1994, p. 27). One of the most commonly studied emotion regulation strategy is expressive suppression (hereafter referred to as suppression). According to the process model of emotion regulation (Gross, 1998), suppression is considered a relatively ineffective strategy because it occurs after emotional responses have become fully activated. Moreover, inhibition of emotional expression appears to violate responses that are “natural” and evolutionarily adaptive. As Polivy (1998) and others have suggested, emotions possess innate expressive qualities and serve to motivate adaptive behaviors. Attempts at suppressing emotions

and their expression are assumed to be counterproductive. Indeed, previous research has generally found that suppression is associated with negative psychological (e.g., inauthenticity, negative affect, low self-esteem; Gross & John, 2003), social (e.g., low levels of social support and relationship closeness; Srivastava, Tamir, McGonigal, John, & Gross, 2009), and physiological outcomes (e.g., high blood pressure; Butler et al., 2003).

Although there are numerous costs associated with suppression, the suppression-outcome link may be influenced by moderators such as characteristics of individuals, types of emotion-eliciting situations, and cultural or social variables has been proposed (Consedine, Magai, & Bonanno, 2002; Matsumoto, 2006; Vitaliano, DeWolfe, Maiuro, Russo, & Katon, 1990). One important moderator that has been overlooked in the literature is individuals' goal or motivational orientation. An emotion regulation strategy may be functional to the extent that it serves goals that are important to the individual. For example, Butler, Lee, and Gross (2007) discussed two types of goals that are commonly associated with suppression: goals aimed at protecting the self from potential social threats and goals aimed at promoting positive social interactions. Nonetheless, relatively little is known about the joint influence of goals and strategy on social and psychological outcomes. To address this gap, the present research examined the role interpersonal goals play in emotion regulation. We focused on interpersonal goals specifically, because suppression is often enacted in the context of interpersonal relationships (e.g., Butler et al., 2003; Gross & John, 2003).

1.2 Interpersonal Goals

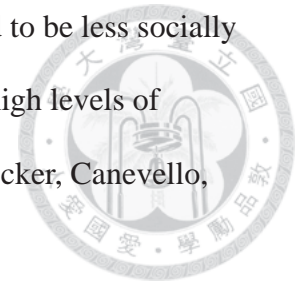
Crocker and colleagues (2008) proposed two common interpersonal goals humans adopt in daily social activities: goals related to constructing a positive

self-image and goals related to being compassionate. These two goals are assumed to be closely related to the pursuit of basic psychological needs which have been discussed over half of a century (e.g., Allport, 1937; Murray, 1938). Like other organisms, humans are naturally inclined to pursue personal needs in order to ensure their own survival. However, as social animals, humans also have the fundamental need to belong, to gain inclusion, as well as to care and support one another. It has been posited that what differentiates humans from animals is that humans have interpersonal goals that help strengthen social connections that are crucial to the survival of the human species (Cohen, Gottlieb, & Underwood, 2000; Leary & Baumeister, 2000; Uchino, 2006).

Self-image goals and the egosystem perspective. Crocker and Park (2004) proposed that people have the tendency to invest their self-worth in specific domains. Performance in those domains can greatly influence how people feel about themselves. To maintain their self-worth, some people try to acquire an ideal self-image (e.g., Schlenker & Leary, 1982). However, because good personal qualities are often determined via social comparison, people with high self-image goals develop the tendency to focus on personal gains and losses, even in the context of social relationships. “Zooming in” on the self and prioritizing their own needs over the needs of others, people with high self-image goals operate from an “egosystem perspective” (Crocker, Olivier, & Nuer, 2009) that regards social relationships as competitive and zero-sum.

Findings from past research have linked self-image goals to a number of negative outcomes, including high levels of negative emotions, anxiety, depression, low self-esteem, poor self-regulation, and low relational quality (Crocker, 2011; Crocker et al., 2009). Another downside to holding self-image goals is that they can create

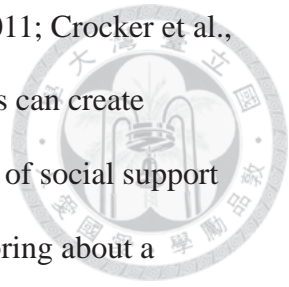
vicious cycles. For instance, people with high self-image goals tend to be less socially responsive and less socially supportive, which may in turn lead to high levels of distress and low regard for both self and others (Crocker, 2011; Crocker, Canevello, Breines, & Flynn, 2010).



Compassionate goals and the ecosystem perspective. Whereas self-image goals are related to creating positive social impressions and avoiding negative ones, compassionate goals are concerned with promoting the welfare of others and protecting them from harm's way (Crocker & Canevello, 2012). In daily social activities, people with compassionate goals will attempt to create supportive interpersonal relationships through authentically caring for self and others. Because people with compassionate goals will try to satisfy both their own needs and the needs of others met without causing any harm, they tend to choose cooperation over competition. People with high compassionate goals are inclined to view everyone, including themselves, as part of a larger system. This so-called "ecosystem perspectives" involves a non-zero-sum view of interpersonal relationships. Treating others' needs as priorities do not feel like self-sacrifice to people with high compassionate goals, because others' well-being is inextricably connected to the well-being of the larger ecosystem of which they are a part. Thus, through caring for others' needs, people with compassionate goals may end up meeting their own needs, even though that was not their ultimate goal (Crocker et al., 2009). In certain interpersonal situations, people with compassionate goals may even choose behaviors that incur short-term costs but bring forth long-term benefits (Crocker & Canevello, 2012).

Unlike self-image goals, compassionate goals are generally associated with desirable outcomes, including positive emotions and well-being, high self-esteem,

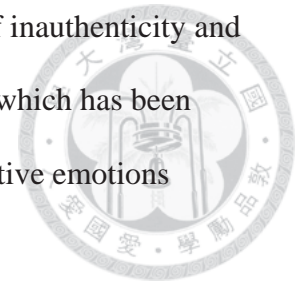
good self-regulation, and positive relationship qualities (Crocker, 2011; Crocker et al., 2009). Findings from past research suggest that compassionate goals can create *virtuous* cycles, whereby responsiveness to others and the provision of social support lead to an increase in regard for self and others, which in turn may bring about a decrease in personal distress (Crocker, 2011; Crocker et al., 2010).



1.3 Suppression under Compassionate and Self-Image Goals

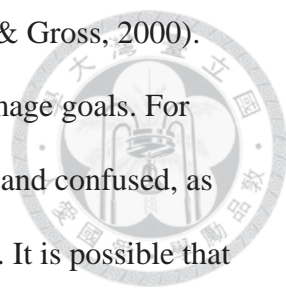
A number of scholars have suggested that the consequences of suppression depend on the purpose behind its use (e.g., Consedine et al., 2002; Kennedy-Moore & Watson, 1999). Although interpersonal goals may influence the fulfillment of our fundamental needs (e.g., relatedness and self-esteem) and the quality of our daily social interactions (Ryan & Deci, 2000; Sedikides, Gaertner, & Toguchi, 2003), there is a miniscule amount of empirical data on how interpersonal goals affect the consequences associated with emotion regulation strategies such as suppression. According to Gross and John (2003), a desire to protect the self from social rejection or ridicule is one of the most common the reasons people suppress their emotions. This motivation is aligned with the egosystem perspective and the self-image goal orientation specifically. When people are in a self-focused state, the self-evaluation cycle is instigated. This self-evaluation process forces individuals to repetitively compare their current states to their standards of the most salient self-relevant dimension at the present (e.g., threatened aspect of the self-worth). If one exceeds the standards, the self-evaluate process would wind down. However, if there is still discrepancy between ones' current state and goals, the persistent re-focusing on the personal failures would intensify negative affective states, such as anger, frustrated and anxiety (Carver & Scheier, 1981; Duval & Wicklund, 1972, 1973; Pyszczynski & Greenberg, 1987; Scheier & Carver, 1977). Furthermore, the act of hiding one's

emotions in the face of social threats can generate the experience of inauthenticity and incongruence between one's inner experiences and outer behavior, which has been found to mediate the link between expressive suppression and negative emotions (Gross & John, 2003).



However, as Butler et al. (2007) suggested, people do not always suppress their emotions for self-protective reasons. Some people suppress the expression of emotions to avoid harming others and their long-term relationships (e.g., Friedman & Miller-Herringer, 1991; Tavris, 1984). This motivation is aligned with the ecosystem perspectives and the compassionate goal orientation in particular, because the focus is extended beyond the self to include concern for others. Based on the findings of past research, the transcending of one's self may promote non-defensive processing of threatening information, lower emotional reactivity, and facilitate the tolerance of unpleasantness (Baer, 2003; Brown, Ryan, Creswell, & Niemiec, 2008). Besides, research has found that prosocial behaviors, such as giving support to others, actually account more for the generation of positive emotions than receiving social support (e.g., Crocker et al., 2010; Dunn, Aknin, & Norton, 2008). Nonetheless, focusing on others does not necessarily mean disregarding one's own; having a genuine concern for both self and others is more beneficial than looking out only for one's own interests (Crocker & Park, 2004). Additionally, unlike suppressing emotions for self-protective reasons, suppressing emotions as a means to reaching compassionate goals may reduce feelings of inauthenticity, because not inflicting negative emotions on others is consistent with having genuine concerns for others (Kernis, 2003).

In terms of emotion regulation outcomes, previous studies have linked suppression to compromised emotional and cognitive functioning, including poor emotional evaluation and clarity (Gross & John, 2003) and impaired memory for



social information (e.g., Richards, Butler, & Gross, 2003; Richards & Gross, 2000). Similar effects have been found among individuals with high self-image goals. For example, self-image goals have been found to predict feeling afraid and confused, as well as being cognitively preoccupied (Crocker & Canevello, 2008). It is possible that the negative consequences of suppression stem from holding self-image goals. Compassionate goals, by contrast, have been shown to predict feeling clear, engaged, peaceful and connected, resulting in a sharp focus on goals and the ability to resist distractions. These positive emotional and cognitive effects have been found to benefit self-regulation and goal achievement (Crocker & Canevello, 2008; Crocker et al., 2010; Crocker et al., 2009). For these reasons, compassionate goals may counteract the negative effects of suppression.

Finally, the negative physiological responses associated with expressive suppression are more likely to be activated by self-image goals rather than by compassionate goals. For example, Butler et al. (2003) found that blood pressure tends to increase when individuals engage in suppression. The rise in blood pressure and other stress-related physiological responses of stress is typically observed when individuals are involved in fight-to-flight, which has been shown to be activated by self-image goals. Compassionate goals, by contrast, involve the tend-and-befriend system, which is concerned with the welfare of others (Crocker & Canevello, 2012). When individuals adopt compassionate goals, the detrimental effects typically found in association with suppression may be counteracted by the positive physiological effects that are activated under the tend-and-befriend system.

In short, previous research on interpersonal goals suggests that the deleterious effects of suppression may be moderated by compassionate goals. Contrary to self-image goals, compassionate goals represent a relatively more authentic, clear and

less self-focused motivation. Empirical findings suggest that individuals with compassionate goals also enjoy greater cognitive resources and greater self-regulatory strength. Accordingly, compassionate goals may help buffer individuals against the negative impact of suppression on social and psychological functioning.



1.4 The Present Studies

The assumption that suppression is always related to negative outcomes has come under empirical scrutiny in recent years. Consistent with the notion that suppression may be functional in certain contexts (Consedine et al., 2002), previous research has identified several important moderators of the link between suppression and psychological functioning. However, one set of critical moderators—that is, interpersonal goals—has not been fully explored. To fill in this gap in the literature, we conducted a survey and an experiment to examine whether the consequences of suppression are moderated by interpersonal goals. Understanding the effects of interpersonal goals is important because emotion regulation frequently occurs in an interpersonal context. Using multiple research designs, we set out to test the general hypothesis that compassionate goals would buffer the relation between expressive suppression and psychological well-being, whereas self-image goals would not.

2. Study 1

A survey study focusing on interpersonal goals, expressive suppression, and psychological well-being was conducted. Based on existing theories and research on emotion regulation and interpersonal goals, we predicted that compassionate goals would moderate the relation between suppression and psychological well-being such that under low levels of compassionate goals, suppression would be related to lower well-being but this relation would be attenuated when the level of compassionate goals is high. By contrast, self-image goals would not moderate the link between suppression and well-being—that is, suppression would be associated with lower well-being regardless of whether the level of self-image goals is low or high. In other words, compassionate goals, not self-image goals, would help buffer against the negative association between suppression and well-being typically observed in the literature.

2.1 Method

Participants and procedure. A total of 101 students (52 male and 49 female; age: 18~25, $M = 19.78$, $SD = 1.32$) enrolled in introductory psychology courses at National Taiwan University participated in this experiment for course credit. All of the participants completed the questionnaire packet in a group setting. The questionnaire packet included measures of compassionate and self-image goals, expressive suppression, and psychological well-being. All participants completed the above measures in Chinese¹.

Materials.

Interpersonal goals. The Compassionate and Self-image Goals Scale (Crocker & Canevello, 2008) was used to measure interpersonal goals. Seven items assessed compassionate goals and six items assessed self-image goals. All items were rated on

a Likert scale ranging from 1 (*not at all*) to 5 (*always*). The items were presented after the following instructional prompt: “In the past week, when getting along with friends/classmates, I will...” A sample compassionate goals item is “support and encourage others”. A sample self-image goals item is “get others to recognize or acknowledge my positive qualities.” Higher scores indicated greater endorsement of the interpersonal goal being assessed. In this study, the scale score for compassionate and self-image goals had an internal reliability (Cronbach’s α) of .67 and .75, respectively.

Expressive suppression. Participants’ tendency to use expressive suppression was assessed via the 4-item suppression subscale from the Emotion Regulation Questionnaire (ERQ; Gross & John, 2003). Each item was rated on a Likert scale ranging from 1 (*completely disagree*) to 7 (*completely agree*). A sample item is “I control my emotions by not expressing them.” Higher scores on this scale indicated greater use of expressive suppression. In this study, the suppression subscale score had an internal reliability (Cronbach’s α) of .71.

Psychological well-being. The 36-item Scale of Psychological Well-Being (SPWB; Liao, 2009; Ryff & Keyes, 1995) was used to examine participants’ level of psychological adjustment. The SPWB measures 6 dimensions of psychological well-being: Self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth. Each item was rated on a Likert scale ranging from 1 (*very disagree*) to 6 (*very agree*). We computed an index of psychological well-being by taking the average of scores across all 6 dimensions. Higher scores indicated greater level of psychological well-being. In this study, the SPWB scale score had an internal reliability (Cronbach’s α) of .94.

2.2 Results

Table 1 presents correlations among the key variables in this study. Suppression was related to lower psychological well-being ($r = -.39, p < .001$). Compassionate goal orientation was related to higher psychological well-being ($r = .34, p = .001$), whereas self-image goal orientation was unrelated to psychological well-being ($r = -.11, p = .26$). Suppression was related to higher self-image goal orientation ($r = .38, p < .001$) but unrelated to compassionate goal orientation ($r = .05, p = .63$). There was a positive correlation between compassionate and self-image goal orientations ($r = .49, p < .001$).

Moderation analysis. Two separate hierarchical regressions were conducted to examine whether the relation between expressive suppression and psychological well-being was moderated by interpersonal goals. Before testing this moderation effect, the means of the independent variable (expressive suppression) and the moderator (compassionate goals or self-image goals) were standardized (Aiken & West, 1991). Because the two interpersonal goal orientations were positively correlated, we controlled for self-image goals in the analysis focusing on compassionate goals as the moderator, and compassionate goals in the analysis focusing on self-image goals as the moderator² (see Table 2 and 3). The covariate (either compassionate or self-image goals) was entered in Step 1 of the regression. The predictor (suppression) and moderator (either compassionate or self-image goals) were entered in Step 2. In Step 3, the two-way interaction (suppression x compassionate goals or suppression x self-image goals) was entered.

The regression results indicated significant main effects of suppression ($b = -.20, p < .001$), compassionate goals ($b = .21, p < .001$) and self-image goals ($b = -.11, p = .048$) on psychological well-being. The interaction between suppression and

compassionate goals was significant, $F(1, 96) = 6.18, p = .015, \Delta R^2 = .042$. Simple slope analysis (Aiken & West, 1991) indicated that among individuals low on compassionate goals ($Z_{com} = -1$), the more they engaged in suppression, the worse their psychological well-being ($b = -.32, se = -.08, t(96) = -4.13, p < .001$). However, among those high on compassionate goals ($Z_{com} = 1$) ($b = -.08, se = -.04, t(96) = -1.79, p = .08$), suppression was unrelated to psychological well-being. The interaction between suppression and compassionate goals on psychological well-being is depicted in Figure 1. The interaction between suppression and self-image goals was not significant ($b = .04, p = .36$).

2.3 Discussion

Consistent with our hypotheses, the results of Study 1 indicated that compassionate goals moderated the relation between suppression and psychological well-being. Specifically, high level of compassionate goals attenuated the negative link between expressive suppression and psychological well-being, whereas low level of compassionate goals did not. Moreover, self-image goals did not moderate the relation between expressive suppression and psychological well-being.

Due to the correlational nature of Study 1, we could not infer the causal link of interpersonal goals and expressive suppression to psychological functioning. Although Study 1 provided preliminary support for the moderating effect of compassionate goals on the link between suppression and psychological well-being, we could not examine directly the causal effects of interpersonal goals and suppression on individual outcomes. Also, self-reports may be biased for many reasons, such as being influenced by the content and format of questionnaires and by false recall of past behaviors (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Moreover, surveys cannot fully capture the dynamic process of suppression. For these

reasons, we decided to conduct an experiment to verify the results of Study 1.

Another limitation of Study 1 is that it only focused on psychological functioning as the outcome of interest. It is unknown whether the effects of interpersonal goals on expressive suppression would extend to social functioning. Thus, in Study 2, we focused not only on indices of psychological functioning (i.e., emotions and self-esteem), but also on social functioning (i.e., interpersonal rapport/affiliation).

Third, social context is important to consider in studies examining the consequences of suppression, because rules pertaining to emotionally expressive behaviors tend to be context-specific (Consedine et al., 2002). Even though emotion regulation often occurs in the context of social interactions, very few studies have examined actual behavioral responses in such a context. To address this shortcoming, we designed an experiment (Study 2) in which participants are asked to regulate their emotions during a face-to-face interaction with someone who tried to provoke them earlier.

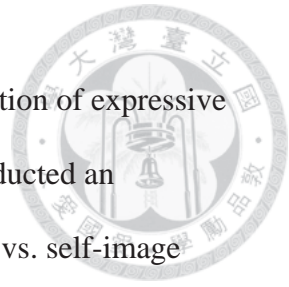
3. Study2

To examine the causal effects of interpersonal goals on the relation of expressive suppression to psychological and interpersonal functioning, we conducted an experiment in which we primed interpersonal goals (compassionate vs. self-image goals) and manipulated the use of emotional regulation strategy (expressive suppression vs. emotional expression) in a laboratory setting. Furthermore, we examined how these effects operated in an interpersonal context requiring participants to either suppress or express emotions toward the person who instigated these emotions. Like Study 1, Study 2 examined whether the outcome of emotion regulation would depend on individuals' interpersonal goal orientation, with compassionate goals (but not self-image goals) serving as a buffer against the negative effects of suppression. Specifically, we predicted that for participants primed with compassionate goals, the outcome of suppression would not differ from the outcome of expression. For participants primed with self-image goals, suppression would lead to greater negative outcomes than expression.

3.1 Method

Participants. A total of 84 students (36 male and 48 female; age: 18 to 27, $M = 19.96$, $SD = 1.73$) from introductory psychology courses at National Taiwan University participated in this experiment for course credit.

Procedure. Upon arrival, the experimenter led participants to a comfortable room where they completed a pretest survey for 8 minutes. Participants were told that they will be interacting with another participant (a confederate) later on. To help facilitate the social interaction, each party will write a short essay describing his/her own personality and important personal experiences that have influenced who he/she is today. Next, the partners exchanged essays and evaluated each other's personality



based on the essays.

Prior to the social interaction, half of the participants were randomly assigned to the *compassionate goals condition* and the other half to the *self-image goals condition*. The interpersonal goals manipulation was modeled after the value-affirmation paradigm used in previous research (e.g., Burson, Crocker, & Mischkowski, 2012; Crocker & Canevello, 2008; Schmeichel & Martens, 2005). We selected five values representing compassionate and self-image goals respectively among the values used by value-affirmation study (Burson et al., 2012) to increase the accessibility of different interpersonal goals. Specifically, participants in the compassionate goals condition were presented with a list of five compassion-oriented values (empathy/compassion; being responsive and supportive to the needs of others as well as one's own needs; creating or contributing to something larger than oneself; trust/openness; being in mutually supportive and caring relationships) and participants in the self-image condition were presented with a list of five self-image-oriented values (power/status; wealth/money; appearing confident/independent/competent; physical attractiveness; popularity/admiration/prestige). Participants in both conditions ranked each value from 1 to 5 based on how important it is to them personally. They also wrote an essay about the value they chose as the most important and why.

Next, to evoke negative emotions, the confederate gave participants negative feedback about their personality. Half of the participants in each goals condition were asked to suppress their emotions during the social interaction, and the other half were asked to express their emotions during the social interaction. Specifically, participants in the *expressive suppression* condition received the following instruction: "To prevent confounding by extraneous factors, it is very important that you try your best to behave in such a way that your partner does not know any of your feelings during



the social interaction. Please try not to show any emotions that you may feel through your face or your voice.” Participants in the *emotional expression* condition received the following instructions: “To prevent the confounding effects of extraneous factors, it is very important that you try your best to behave in such a way that your partner knows all of your feelings during the social interaction. Please try to show all emotions that you may feel through your face and your voice.”

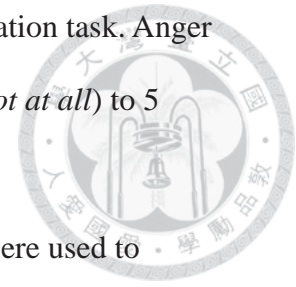
Upon completion of the essays, participants discussed with the confederate what they had written for 6 minutes. Afterwards, a questionnaire containing measures of pleasantness/unpleasantness, anger, hostility, state self-esteem, and rapport/affiliation was administered. At the end of the experiment, measures serving as manipulation checks were given to the participants. These measures asked participants to recall which value they choose as the most important and the emotion regulation instruction they received. To ensure the provocation of negative emotions worked and to hidden the purpose of evoking emotions, all participants completed the measure of pleasantness/unpleasantness and arousal/sleepiness after they arrived the experimental setting, finished the essay describing themselves, completed goals priming, received the negative feedback, and read the instruction of emotion regulation.

Materials.

Pleasantness/unpleasantness. We measured pleasantness/unpleasantness using the Affect Grid, a single item scale (see Russell, Weiss, & Mendelsohn, 1989) that assesses an individual’s emotional state in the present moment. The pleasantness/unpleasantness score was based on which column along the horizontal dimension of a 9 x 9 matrix the participant checked. The columns connote varying degrees of the emotional valence, ranging from 1 (*unpleasant*) to 9 (*pleasant*).

Anger-related emotions³. We created a scale assessing the extent to which

participants experienced anger and hostility after the emotion regulation task. Anger and hostility were rated on a 5-point Likert scale ranging from 1 (*not at all*) to 5 (*extremely*).



Self-esteem. Two items developed by Heppner et al. (2008) were used to measure participants' level of self-esteem. The items—“I have many positive qualities” and “I am quite satisfied with who I am”—were rated on a 9-point Likert scale ranging from 1 (*completely disagree*) to 9 (*completely agree*). In the present study, the scale score has an internal reliability (Cronbach's α) of .73.

Rapport/affiliation. We measured the extent to which participants liked the confederate and would be interested in developing a friendship with him/her using a scale previously used by Butler et al. (2007). The scale contained 10 items rated on a 7-point Likert scale ranging from 1 (*completely disagree*) to 7 (*completely agree*). Sample items include “I like my partner” and “I would be interested in talking to my partner again”. In the present study, the scale score has an internal reliability (Cronbach's α) of .87.

3.2 Result

Manipulation check. Among 84 participants, 67 (80%) can completely recall the value they chose as most important in the interpersonal goals priming task, 76 (90%) can completely recall the instructions they received for the emotional regulation priming task, 73 (87%) did not suspect the use of a confederate in the study, and none accurately guessed the real purpose of the experiment. Results from separate t-tests revealed no significant differences between participants who passed and participants who did not pass these checks on any of the outcomes; thus, data from all 84 participants were used in the main analyses. Results from paired t-test confirmed the effect of negative emotion provocation. That is, after receiving negative feedback

from the confederate, participants showed significantly more negative and more aroused emotional states than the state before the manipulation of negative emotion provocation ($t(83) = -10.03, p < .001$ for pleasantness/unpleasantness; $t(83) = 5.33, p < .001$ for arousal/sleepiness).

Moderation effects. Several two-way ANOVAs (2 interpersonal goals x 2 emotion regulation strategies) were performed to examine whether the relation between expressive suppression and different outcomes (i.e., pleasantness/unpleasantness, anger-related emotions⁴, self-esteem, and rapport/affiliation) were moderated by interpersonal goals (see Table 5-8). Two-way ANOVA analyses revealed significant moderation effect of interpersonal goals on all of the outcomes measures ($F(1, 80) = 4.44, p = .04$ for pleasantness/unpleasantness; $F(1, 80) = 4.66, p = .034$ for anger-related emotions; $F(1, 80) = 11.78, p = .001$ for self-esteem; and $F(1, 80) = 6.90, p = .010$ for rapport/affiliation).

To understand the nature of each significant interaction, we conducted a series of simple main effect analyses (one for each of the four outcome variables). Results showed that when participants were primed with compassionate goals, the outcome of suppression did not differ from the outcome of expression ($F(1, 80) = .52, p = .47$ for pleasantness/unpleasantness; $F(1, 80) = .95, p = .33$ for anger-related emotions; $F(1, 80) = 1.48, p = .23$ for self-esteem; and $F(1, 80) = 2.44, p = .12$ for rapport/affiliation). However, when participants were primed with self-image goals, the outcome of suppression was significantly worse than the outcome of expression ($F(1, 80) = 5.01, p = .028$ for pleasantness/unpleasantness; $F(1, 80) = 4.27, p = .042$ for anger-related emotions; $F(1, 80) = 13.03, p = .001$ for self-esteem; $F(1, 80) = 4.61, p = .035$ for rapport/affiliation). Specifically, after receiving the self-image goals prime, suppression lead to lower levels of pleasantness (see Figure 2), self-esteem (see


Figure 3), and rapport (see Figure 4), and to higher levels of anger-related emotions (see Figure 5) relative to expression.



3.3 Discussion

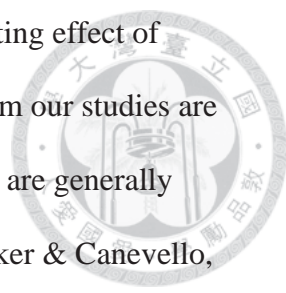
Results from Study 2 showed that neither interpersonal goals nor suppression had a main effect on psychological and social functioning (i.e., pleasantness/unpleasantness, anger-related emotions, self-esteem, and interpersonal rapport/affiliation) following suppression. Consistent with our hypothesis and the findings of Study 1, compassionate goals attenuated the negative consequences of suppression but self-image goals did not. Specifically, compassion-oriented participants who suppressed their emotions reported the same level of psychological and social functioning as those who expressed their emotions. By contrast, self-image oriented participants who suppressed their emotions reported lower psychological (e.g., pleasant emotional state and self-esteem) and social functioning (e.g., interpersonal rapport/affiliation) compared to those who allowed their emotions to be expressed.

4. General Discussion



Can individuals' interpersonal goal orientation affect the consequences of suppression? According to our research, the answer appears to be “yes”. Even though suppression is typically linked to negative outcomes, high levels of compassionate goal orientation weakened this association. The results of Study 1 showed that high compassionate goal orientation attenuated the negative relation between suppression and psychological well-being observed among individuals with a low compassionate goal orientation. Study 2 showed that when primed with compassionate goals, individuals who suppressed their emotions during a negative interpersonal encounter did not show lower levels of pleasant mood, self-esteem, and relational quality, or higher levels of anger-related emotions compared to those who expressed their emotions. When primed with self-image goals, individuals who suppressed their emotions showed poorer outcomes (i.e., lower levels of pleasant mood, self-esteem, and relational quality; higher levels of anger-related emotions) compared to those who expressed their emotions.

Consistent with past research findings, the present set of studies found that the dispositional tendency to suppress may not necessarily be associated with negative psychological and social functioning (Gross & John, 2003). In other words, the suppression-outcome link can be moderated by a host of factors (e.g., Consedine et al., 2002). As Consedine et al. (2002) posited suppression is not maladaptive per se; it may be adaptive under certain situations. For instance, when engaging in social interactions with unfamiliar people, expressing strong negative emotions is usually not a socially adaptive strategy. Furthermore, holding back one's emotions may provide the opportunity to truly understand others' needs and experiences, which are critical to cultivating empathy and positive social relationships.

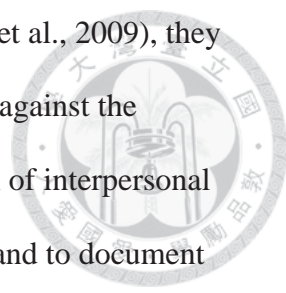


The present research is also the first to directly test the moderating effect of interpersonal goals on the suppression-outcome link. The results from our studies are consistent with previous research showing that compassionate goals are generally beneficial and self-image goals are generally deleterious (e.g., Crocker & Canevello, 2012). Specifically, our data revealed that compassionate goals can serve as a buffer against the negative outcomes associated with suppression. However, different from holding collectivistic values and complying with social norms and values, compassionate goals involve having genuine concerns for others and regarding others with a similar level of importance as the self. The positive effects of holding compassionate goals on self-regulation, in turn, can bring forth benefits to different aspects of individuals' psychological and social functioning.

4.1 Implications and Contributions

Even though it has been theorized that the negative social outcomes associated with suppression may be attenuated when people suppress for prosocial reasons (Butler et al., 2007), in previous research prosocial motivation is usually inferred via proxies such as cultural group or values rather than directly assessed. To address this issue, we conducted a set of studies examining the influence of interpersonal goals on the social and psychological outcomes following suppression. Using multiple research methodologies, we compared the effects of having goals that concern the well-being of others (i.e., compassionate goals) with goals that focus on maintaining positive images of the self (i.e., self-image goals). The present research identified compassionate goals as one type of interpersonal goals that may mitigate the maladaptive consequences of suppression. It may be worthwhile in the future to explore the benefits and costs of adopting other goals for emotion regulation.

Our research not only replicated the relative benefits of compassionate goals



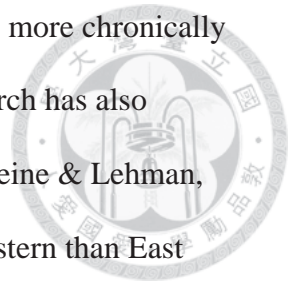
over self-image goals as demonstrated in previous studies (Crocker et al., 2009), they also indicated the possibility of the former goals serving as a buffer against the negative effects of suppression. Through experimental manipulation of interpersonal goals, we were able to verify the correlational results from Study 1 and to document the causal influences of interpersonal goals on psychological and social outcomes. In Study 2, participants regulated their negative emotions in the presence of a confederate who provided them with negative personal feedback. Because in everyday interpersonal conflicts, people often must control their emotions in front of the person who provoked them, the experimental situation created in Study 2 better captures emotion regulation processes than past experimental paradigms, including anger provocation by the experimenter, interaction with other participants after watching emotional eliciting films, and discussion about conflicts with a relationship partner (Butler et al., 2007; Mauss, Cook, & Gross, 2007; Roberts, Tsai, & Coan, 2007). Therefore, the present research adds to the literature by directly examining the consequences of hiding one's emotions from the provocateur.

4.2 Limitations and Future Directions

Although the current set of studies is the first attempt at examining the effects of interpersonal goals on the outcomes associated with expressive suppression, our findings still need to be interpreted with the following methodological and theoretical limitations in mind. The most obvious limitation concerns the generalizability of our research samples, which were comprised of undergraduate students from an elite public university in Taiwan. However, the effects of interpersonal goals on the consequences of expressive suppression may not generalize to individuals from other age, socioeconomic, and cultural backgrounds.

Furthermore, having grown up in a collectivistic cultural context,

relationally-oriented concepts, such as compassionate goals, may be more chronically accessible to the Taiwanese (Markus & Kitayama, 1991). Past research has also indicated that self-enhancement tendencies differ across cultures (Heine & Lehman, 1997). Given that the need for positive self-regard is stronger in Western than East Asian cultural contexts (Heine, Lehman, Markus, & Kitayama, 1999), threats to self-image goals may have greater effects on individual functioning in the former than in the latter cultural context. Another set of study limitations stems from the nature of the experimental research design. Participants may not behave naturally in a laboratory setting, either due to nervousness or social desirability. To explore this possibility, we conducted post-hoc analyses and found differences in nervousness and social desirability based on interpersonal goal orientation or emotion regulation strategy. To deepen our understanding of how the observed effects operate in everyday life, future studies can incorporate other research methods, including experience sampling and field study. Other deficiencies, such as not having a control group and not including more objective measures of interpersonal functioning, should also be addressed in future studies.



5. Conclusion

Almost everyone has at some point experienced interpersonal conflicts that necessitated the use of some emotion regulation strategy. Although past research findings suggested that some emotion regulation strategies are generally adaptive (e.g., cognitive reappraisal) and some are generally maladaptive (e.g., suppression), we found that no single strategy is suitable in every situation. Our research identified one set of factors that can moderate the effectiveness of suppression, namely interpersonal goals. Although chronic use of suppression may exact significant costs, its negative consequences may be conditioned on having self-image goals. When suppression is used under the compassionate goals orientation, it is less likely to be counterproductive.



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Footnotes

¹The Chinese version of the Compassionate and Self-image Goals Scale was translated and revised by Chang, Lin, Lin, and Huang (2011), and demonstrated good internal reliability (Cronbach's α) of .88 for compassionate goals and .82 for self-image goals. The Chinese version of the ERQ was downloaded from the Stanford Psychophysiological Laboratory website (<http://spl.stanford.edu/>). The Chinese version of the Scale of Psychological Well-Being was also translated and revised by previous study and showed good internal reliability (Cronbach's α) of .94 with Taiwanese sample (Liao, 2009).

²Because when we added age and gender in the regression analyses, the results remained the same, we did not control them in the main analyses.

³Although most discrete emotions could be characterized by a few broad dimensions (e.g., pleasure-displeasure and arousal-sleepiness; Russell et al., 1989), each is endowed with unique meanings and is associated with distinct constructs (Watson & Clark, 1992). Thus, examining emotions at different levels (e.g., pleasantness/unpleasantness and discrete emotions related to anger) can help us construct a more integrated view of suppression.

⁴Because the experiences of anger and hostility were positively correlated ($r = .72, p < .001$) in this study, we computed an index of *anger-related emotions* by taking the average of scores across these two items.



Tables and Figures



Table 1

Means, Standard Deviations, and Correlations among the Variables

<i>N = 101</i>	<i>Mean</i>	<i>SD</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
1. Psychological Well-Being	4.12	.50	--	--	--	--
2. Suppression	3.70	1.16	-.39**	--	--	--
3. Compassionate Goals	3.82	.45	.34**	.05	--	--
4. Self-Image Goals	3.50	.60	-.11	.38**	.49**	--

Note. $N = 101$.

** $p < .01$.



Table 2

The Moderation Effect of Compassionate Goals on the Relation between Expressive Suppression and Psychological Well-Being

<i>Model</i>	<i>1</i>	<i>2</i>	<i>3</i>
<i>Covariate</i>			
Self-image goals	-.06	-.11*	-.11*
<i>Predictors</i>			
Compassionate goals		.23***	.21***
Suppression		-.17***	-.20***
Interaction			.12*
R^2	.01	.31	.35
Adj R^2	.00	.29	.32
F	1.28	20.80	6.18

Note. Unstandardized beta coefficients are shown for the independent variables; $N = 101$.

* $p < .05$, ** $p < .01$, *** $p < .001$.



Table 3

The Moderation Effect of Self-Image Goals on the Relation between Expressive Suppression and Psychological Well-Being

<i>Model</i>	<i>1</i>	<i>2</i>	<i>3</i>
<i>Covariate</i>			
Compassionate goals	.17***	.23***	.21***
<i>Predictors</i>			
Self-image goals		-.11*	-.09
Suppression		-.17***	-.18***
Interaction			.04
<i>R</i> ²	.11	.31	.32
Adj <i>R</i> ²	.10	.29	.29
<i>F</i>	12.65	13.74	.85

Note. Unstandardized beta coefficients are shown for the independent variables; *N* = 101.

* *p* < .05, ** *p* < .01, *** *p* < .001.



Table 4

Two-Way ANOVA's Means and Standard Deviations for All Dependent Variables

<i>Variables</i>	<i>Compassionate goals</i>		<i>Self-image goals</i>	
	<i>Expression</i>	<i>Suppression</i>	<i>Expression</i>	<i>Suppression</i>
Pleasantness/unpleasantness	4.76(1.76)	5.14(1.46)	6.00(1.78)	4.81(1.81)
Anger-related emotions	4.81(1.40)	4.27(1.96)	3.50(1.73)	4.67(2.06)
Self-esteem	5.79(1.34)	6.27(1.35)	7.13(0.84)	5.64(1.59)
Rapport/affiliation	2.35(0.94)	2.85(1.04)	3.24(1.23)	2.53(0.96)

Note. Means are shown for all dependent variables; standard deviations are shown in parentheses.

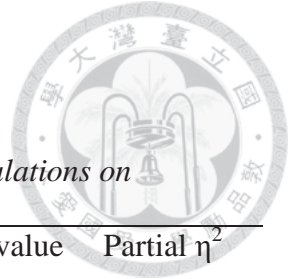


Table 5

Two-Way ANOVA between Interpersonal Goals and Emotional Regulations on Pleasantness/unpleasantness

<i>Sources of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>Partial η^2</i>
Goals	4.36	1	4.36	1.50	.22	.02
Regulations	3.49	1	3.49	1.21	.28	.02
Interaction	12.84	1	12.84	4.44	.04	.05
Error	231.64	80	2.90			
Total	251.67	83				

Note. $R^2 = .08$; Adjusted $R^2 = .05$.

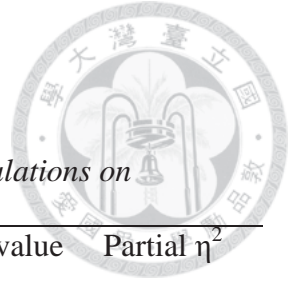


Table 6

Two-Way ANOVA between Interpersonal Goals and Emotional Regulations on Anger-Related Emotions

<i>Sources of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>Partial η^2</i>
Goals	4.40	1	4.40	1.35	.25	.02
Regulations	2.08	1	2.08	0.64	.43	.01
Interaction	15.22	1	15.22	4.66	.03	.06
Error	261.27	80	3.27			
Total	282.32	83				

Note. $R^2 = .08$; Adjusted $R^2 = .04$.

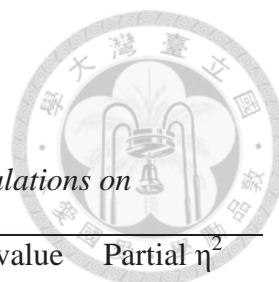


Table 7

Two-Way ANOVA between Interpersonal Goals and Emotional Regulations on Self-Esteem

<i>Sources of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>Partial η^2</i>
Goals	2.64	1	2.64	1.53	.22	.02
Regulations	5.19	1	5.19	3.01	.09	.04
Interaction	20.33	1	20.33	11.77	< .001	.13
Error	138.16	80	1.73			
Total	165.51	83				

Note. $R^2 = .17$; Adjusted $R^2 = .13$.

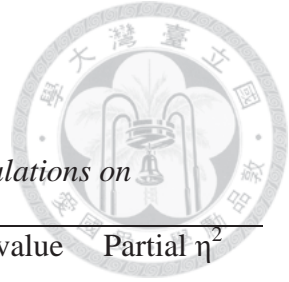


Table 8

Two-Way ANOVA between Interpersonal Goals and Emotional Regulations on Rapport/affiliation

<i>Sources of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>Partial η^2</i>
Goals	1.74	1	1.74	1.59	.21	.02
Regulations	0.22	1	0.22	0.20	.66	< .001
Interaction	7.55	1	7.55	6.90	.01	.08
Error	87.44	80	1.09			
Total	96.71	83				

Note. $R^2 = .10$; Adjusted $R^2 = .06$.

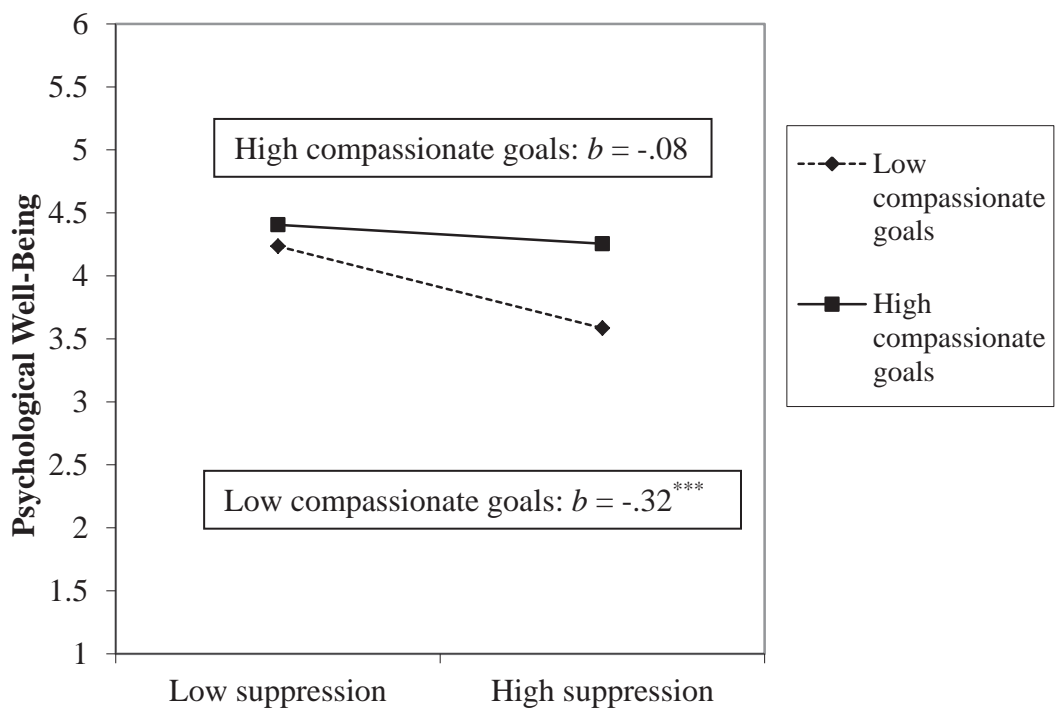


Figure 1. Interaction between expressive suppression and compassionate goals in predicting psychological well-being. High and low levels of compassionate goals are one standard deviation above and below the sample mean.

*** $p < .001$.

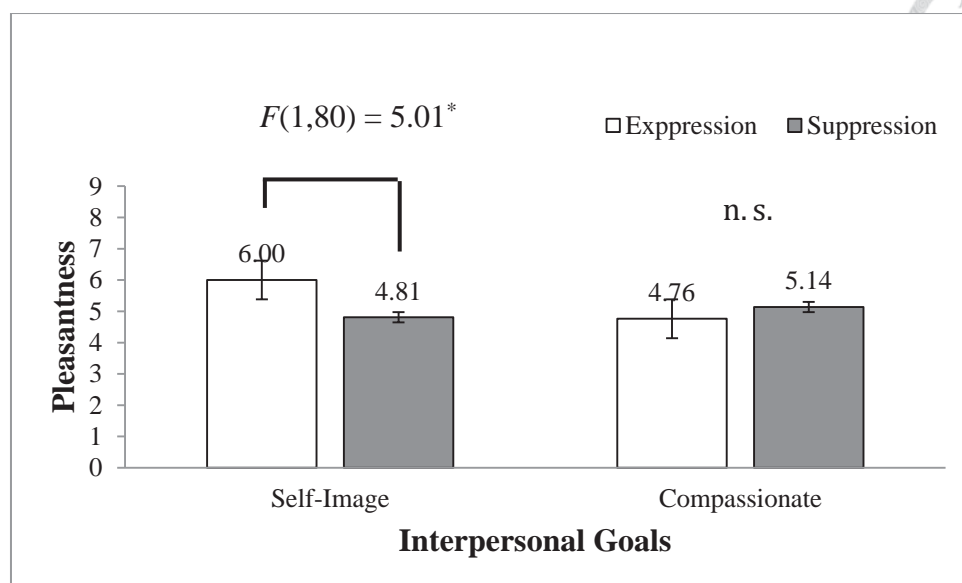


Figure 2. Pleasantness as a function of interpersonal goals (self-image goals vs. compassionate goals) and emotional regulation (expression vs. suppression) (error bars represent ± 1 standard error).

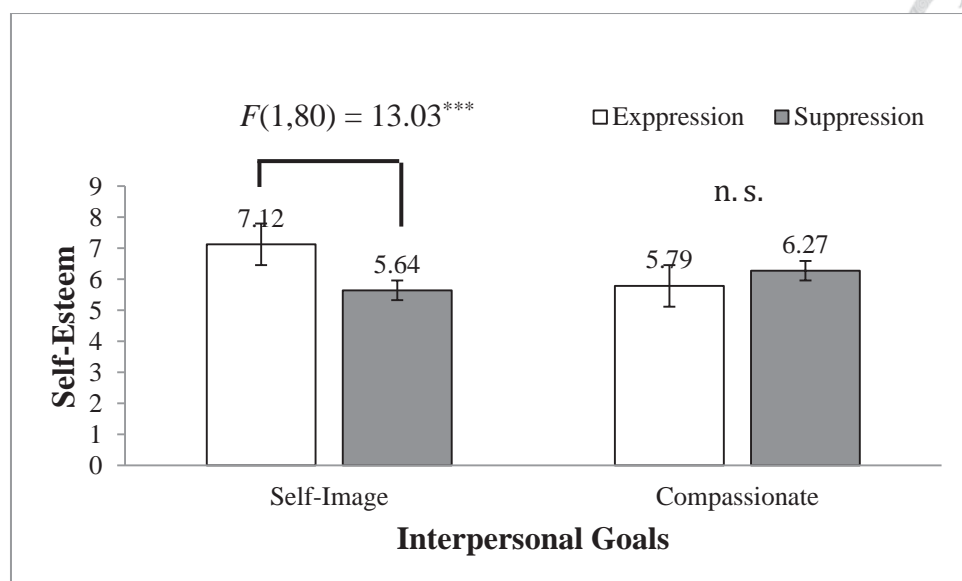


Figure 3. Self-esteem as a function of interpersonal goals (self-image goals vs. compassionate goals) and emotional regulation (expression vs. suppression) (error bars represent ± 1 standard error).

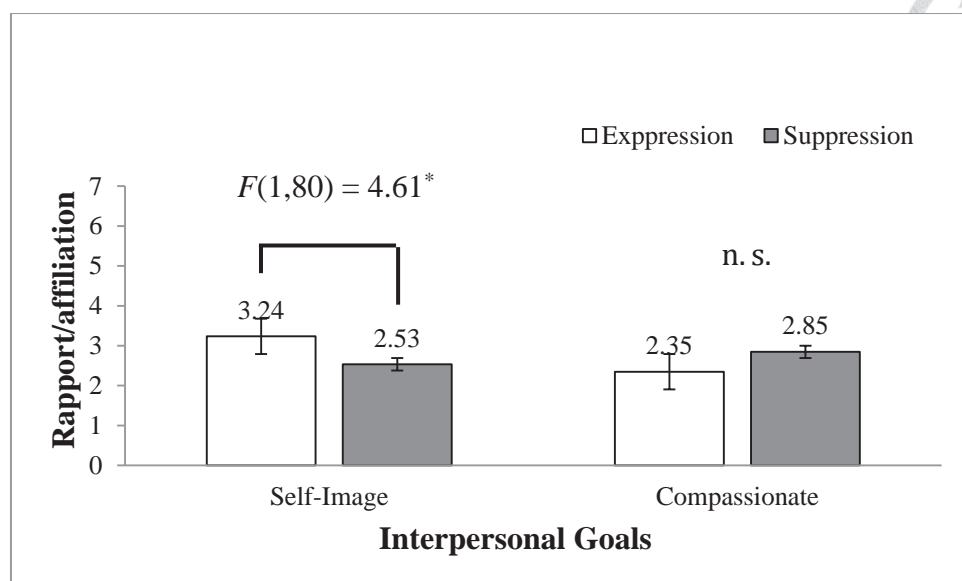


Figure 4. Rapport/affiliation as a function of interpersonal goals (self-image goals vs. compassionate goals) and emotional regulation (expression vs. suppression) (error bars represent ± 1 standard error).

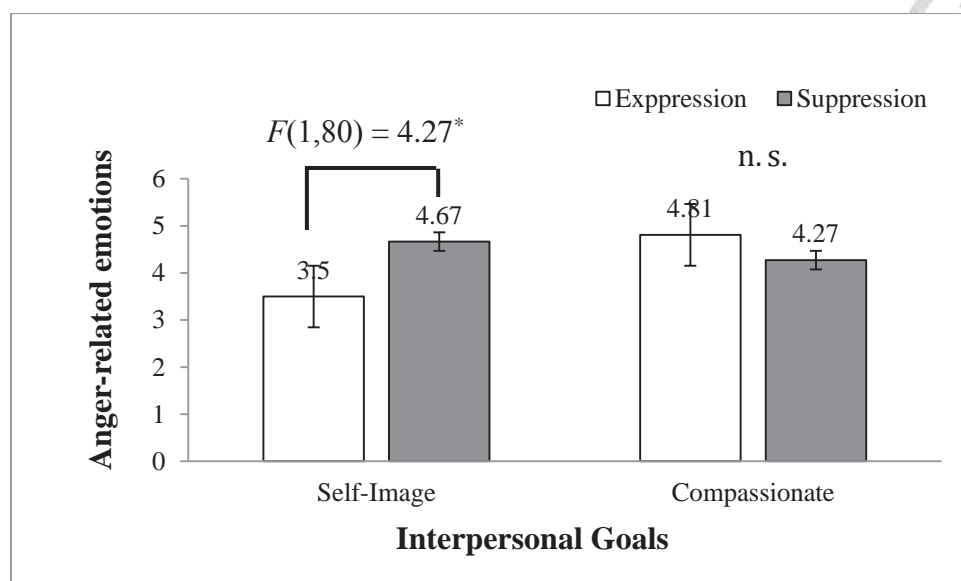


Figure 5. Anger-related emotions as a function of interpersonal goals (self-image goals vs. compassionate goals) and emotional regulation (expression vs. suppression) (error bars represent ± 1 standard error).

Appendix A : The Compassionate and Self-image Goals Scale

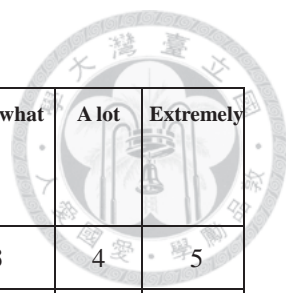
The Chinese version.

◎過去一週內，與朋友/同學相處時，我會：		從未如此	偶爾如此	有時如此	經常如此	總是如此
1.	避免做出無益於自己或他人的事情。	1	2	3	4	5
2.	避免讓自己有做錯事的機會。	1	2	3	4	5
3.	讓他們對我留下好印象。	1	2	3	4	5
4.	避免自私或自我中心。	1	2	3	4	5
5.	同理當他們遭遇困難或挫折時的痛苦。	1	2	3	4	5
6.	避免被別人拒絕。	1	2	3	4	5
7.	避免冒險或犯錯。	1	2	3	4	5
8.	提出對別人有建設性的建議。	1	2	3	4	5
9.	避免讓他人看到我的缺點。	1	2	3	4	5
10.	避免做出傷害到別人的事情。	1	2	3	4	5
11.	支持與鼓勵對方。	1	2	3	4	5
12.	設法讓他們的生活更美好。	1	2	3	4	5
13.	說服別人認可我的意見。	1	2	3	4	5

關愛目標 (compassionate goals) : 1, 4, 5, 8, 10, 11, 12

自我形象目標 (self-image goals) : 2, 3, 6, 7, 9, 13

The original version.



In the past week, in the area of friendships, how much did you want or try to:		Not at All	A little	Somewhat	A lot	Extremely
1.	avoid doing things that aren't helpful to me or others	1	2	3	4	5
2.	avoid the possibility of being wrong	1	2	3	4	5
3.	get others to recognize or acknowledge your positive qualities	1	2	3	4	5
4.	avoid being selfish or self-centered	1	2	3	4	5
5.	have compassion for others' mistakes and weaknesses	1	2	3	4	5
6.	avoid being rejected by others	1	2	3	4	5
7.	avoid taking risks or making mistakes	1	2	3	4	5
8.	be constructive in your comments to others	1	2	3	4	5
9.	avoid showing your weaknesses	1	2	3	4	5
10.	avoid doing anything that would be harmful to others	1	2	3	4	5
11.	be supportive of others	1	2	3	4	5
12.	make a positive difference in someone else's life	1	2	3	4	5
13.	convince others that you are right	1	2	3	4	5

Note. From "Creating and undermining social support in communal relationships: the role of compassionate and self-image goals," by J. Crocker and A. Canevell, 2008, *Journal of Personality and Social Psychology*, 95, 555-575.

Appendix B : Expressive Suppression (a subscale from ERQ)

The Chinese version.



◎請使用下列量尺(1~7)來表示你同意下列敘述的程度。	非常不同意			中立			非常同意
1 我不會表達出自己的情緒。	1	2	3	4	5	6	7
2 當感受到正向情緒時，我會很小心地不讓它們表達出來。	1	2	3	4	5	6	7
3 我控制自己情緒的方式是不表達它們。	1	2	3	4	5	6	7
4 當感受到負向的情緒時，我確定不會把它們表達出來。	1	2	3	4	5	6	7

The original version.

1	2	3	4	5	6	7
Strongly Disagree	-----	-----	Neutral	-----	-----	Strongly Agree

1	I keep my emotions to myself.	1	2	3	4	5	6	7
2	When I am feeling <i>positive</i> emotions, I am careful not to express them.	1	2	3	4	5	6	7
3	I control my emotions by <i>not expressing them</i> .	1	2	3	4	5	6	7
4	When I am feeling <i>negative</i> emotions, I make sure not to express them.	1	2	3	4	5	6	7

Note. From “Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being,” by J.J. Gross and O. P. John, 2003, *Journal of Personality and Social Psychology*, 85, 348-362.

Appendix C : The 36-item Scale of Psychological Well-Being

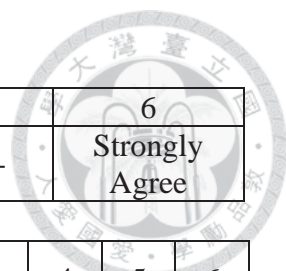
The Chinese version.

◎生活經驗的感受。請使用下列量尺(1~6)來表示你同意下列敘述的程度。	非常不同意	不同意	有點不同意	有點同意	同意	非常同意
1. 我對能拓展自己視野的活動不感興趣。	1	2	3	4	5	6
2. 一路走來,我對自己的發展結果感到滿意。	1	2	3	4	5	6
3. 我不害怕表達出與大多數人不同的意見。	1	2	3	4	5	6
4. 隨著年齡增長,我越來越瞭解我自己。	1	2	3	4	5	6
5. 對我而言,維持親密的人際關係是充滿困難與挫折的。	1	2	3	4	5	6
6. 我總是過一天算一天,沒有認真地思考過未來。	1	2	3	4	5	6
7. 大致上,我肯定自己且充滿自信。	1	2	3	4	5	6
8. 其他人的作為通常不會影響我的決定。	1	2	3	4	5	6
9. 我經常因為缺少親近的朋友分享心事而感到孤單。	1	2	3	4	5	6
10. 我覺得多數人的生活都過得比我還充實。	1	2	3	4	5	6
11. 我會擔心別人對我的看法。	1	2	3	4	5	6
12. 我能夠處理自己生活中的諸多責任。	1	2	3	4	5	6
13. 我喜歡自己大部分的個性。	1	2	3	4	5	6
14. 我會採取有效的行動去改變自己不滿意的生活狀況。	1	2	3	4	5	6
15. 我並未隨著年紀增長而有所長進。	1	2	3	4	5	6
16. 很少人願意在我需要的時候聽我說話。	1	2	3	4	5	6
17. 我不知道什麼是我人生要追求的目標。	1	2	3	4	5	6
18. 我對自己生活中很多方面的成就感到失望。	1	2	3	4	5	6
19. 隨著年紀增長,我得到許多人生領悟,這讓我成為更堅強也更有能力的人。	1	2	3	4	5	6
20. 我樂於計畫未來並且努力實現它。	1	2	3	4	5	6
21. 大致上,我對自己的為人與目前所過的生活感到滿意。	1	2	3	4	5	6
22. 我對自己的意見有信心,即使我的意見與一般的共識不一樣。	1	2	3	4	5	6
23. 隨著時間增長,我覺得自己也成熟不少。	1	2	3	4	5	6
24. 我是一個積極實現自己計畫的人。	1	2	3	4	5	6
25. 對我來說,在具爭議性的問題上表達自己的意見是困難的。	1	2	3	4	5	6
26. 我能在忙碌生活中安排好所有事情,並從中獲得滿足感。	1	2	3	4	5	6

27. 我很少有過溫暖且互相信任的人際關係。	1	2	3	4	5	6
28. 我是一個有生活目標的人。	1	2	3	4	5	6
29. 我在計畫日常活動時會感到挫折，因為我從未照預定進度完成工作。	1	2	3	4	5	6
30. 對我而言，生活是一個持續學習、改變與成長的歷程。	1	2	3	4	5	6
31. 我常覺得我不擅長於友誼關係。	1	2	3	4	5	6
32. 我很難安排讓自己滿意的生活。	1	2	3	4	5	6
33. 我覺得很難坦開心胸和他人交談。	1	2	3	4	5	6
34. 我會根據我所認為重要的標準來評價我自己，而不是其他人所認定的價值。	1	2	3	4	5	6
35. 我一直都能夠建立自己喜愛的居家風格和生活型態。	1	2	3	4	5	6
36. 總括而言，我不確定我的生活有很多意義。	1	2	3	4	5	6

Note. From “Identity Status, Self-Defining Memory, and Psychological Well-Being in Emerging Adulthood,” by H. W. Liao & C. L. Cheng, 2011, *Research in Applied Psychology*, 51, 79-110.

The English version.



1	2	3	4	5	6
Strongly Disagree	-----	-----	-----	-----	Strongly Agree

1. I am not interested in activities that will expand my horizons.	1	2	3	4	5	6
2. When I look at the story of my life, I am pleased with how things have turned out.	1	2	3	4	5	6
3. I am not afraid to voice my opinions, even when they are in opposition to the opinions of most people.	1	2	3	4	5	6
4. In general, I feel that I continue to learn more about myself as time goes by.	1	2	3	4	5	6
5. Maintaining close relationships has been difficult and frustrating for me	1	2	3	4	5	6
6. I live life one day at a time and don't really think about the future.	1	2	3	4	5	6
7. In general, I feel confident and positive about myself.	1	2	3	4	5	6
8. My decisions are not usually influenced by what everyone else is doing.	1	2	3	4	5	6
9. I often feel lonely because I have few close friends with whom to share my concerns.	1	2	3	4	5	6
10. I feel like many of the people I know have gotten more out of life than I have.	1	2	3	4	5	6
11. I tend to worry about what other people think of me.	1	2	3	4	5	6
12. I am quite good at managing the many responsibilities of my daily life.	1	2	3	4	5	6
13. I like most aspects of my personality.	1	2	3	4	5	6
14. If I were unhappy with my living situation, I would take effective steps to change it.	1	2	3	4	5	6
15. When I think about it, I haven't really improved much as a person over the years.	1	2	3	4	5	6
16. I don't have many people who want to listen when I need to talk.	1	2	3	4	5	6
17. I don't have a good sense of what it is I'm trying to accomplish in life.	1	2	3	4	5	6
18. In many ways, I feel disappointed about my achievements in life.	1	2	3	4	5	6
19. With time, I have gained a lot of insight about life that has made me a stronger, more capable person.	1	2	3	4	5	6
20. I enjoy making plans for the future and working to make them a reality.	1	2	3	4	5	6
21. For the most part, I am proud of who I am and the life I lead.	1	2	3	4	5	6

22. I have confidence in my opinions, even if they are contrary to the general consensus.	1	2	3	4	5	6
23. I have the sense that I have developed a lot as a person over time.	1	2	3	4	5	6
24. I am an active person in carrying out the plans I set for myself.	1	2	3	4	5	6
25. It's difficult for me to voice my own opinions on controversial matters.	1	2	3	4	5	6
26. My daily life is busy, but I derive a sense of satisfaction from keeping up with everything.	1	2	3	4	5	6
27. I have not experienced many warm and trusting relationships with others.	1	2	3	4	5	6
28. Some people wander aimlessly through life, but I am not one of them.	1	2	3	4	5	6
29. I get frustrated when trying to plan my daily activities because I never accomplish the things I set out to do.	1	2	3	4	5	6
30. For me, life has been a continuous process of learning, changing, and growth.	1	2	3	4	5	6
31. I often feel like I'm on the outside looking in when it comes to friendships.	1	2	3	4	5	6
32. I have difficulty arranging my life in a way that is satisfying to me.	1	2	3	4	5	6
33. I find it difficult to really open up when I talk with others.	1	2	3	4	5	6
34. I judge myself by what I think is important, not by the values of what others think is important.	1	2	3	4	5	6
35. I have been able to build a home and a lifestyle for myself that is much to my liking.	1	2	3	4	5	6
36. In the final analysis, I'm not so sure that my life adds up to much.	1	2	3	4	5	6

Note. Items from “The structure of psychological well-being revisited,” by C. D. Ryff and C. L. M. Keyes, 1995, *Journal of Personality and Social Psychology*, 69, 719-727.

Appendix D : Compassionate Goals Priming



◎請將下列價值觀對您的重要程度排序，最重要的價值觀排第一個，依此類推。
(此份問卷的目的是為了瞭解這些普遍的價值觀在一般民眾心中的排序，答案並沒有對、錯或好、壞之分，只要按照真實的狀況填答即可。)

- A. 同理/關懷
- B. 支持和回應他人以及自己的需求
- C. 創造或獻身於比自我還要大的事物
- D. 信任/開放
- E. 處於一段相互關心、支持的關係

價值觀排序

1. _____

2. _____

3. _____

4. _____

5. _____

Appendix E : Self-image Goals Priming



◎請將下列價值觀對您的重要程度排序，最重要的價值觀排第一個，依此類推。

(此份問卷的目的是為了瞭解這些普遍的價值觀在一般民眾心中的排序，答案並沒有對、錯或好、壞之分，只要按照真實的狀況填答即可。)

- A. 權力/地位
- B. 財富/金錢
- C. 看起來有自信/獨立/有能力
- D. 長得好看
- E. 受歡迎/受欽佩/聲望

價值觀排序

1. _____

2. _____

3. _____

4. _____

5. _____

Appendix F : Goals Priming Essay



◎請寫下被您**排序第一**的價值觀對你來說**重要的理由**，
以及它對你來說的**意義為何**？（約 200-300 字）

50

100

150

200

250

300

Appendix G : Negative Feedback



威斯康辛覺知性格量表

以下量表測量您對他人的性格評估，請圈選您感受到的程度
(沒有標準答案，請盡量以實際感受作答)。

	極度不符合										極度符合
1. 開放性											
他/她是一個接受他人意見的人	1	②	3	4	5	6	7	8	9	10	
他/她是一個樂於接受改變的人	1	②	3	4	5	6	7	8	9	10	
他/她是一個喜於自我說服的人	1	2	3	4	5	6	7	⑧	9	10	
他/她是一個執著己見的人	1	2	3	4	5	6	⑦	8	9	10	
2. 嚴謹性											
他/她的思慮縝密	1	2	3	4	⑤	6	7	8	9	10	
他/她願為自己的行為負責	1	2	③	4	5	6	7	8	9	10	
他/她有良好的自律感	1	2	3	④	5	6	7	8	9	10	
他/她有良好的勝任感	1	2	3	④	5	6	7	8	9	10	
3. 友善性											
他/她是一個容易相信他人的人	1	②	3	4	5	6	7	8	9	10	
他/她是一個直率的人	①	2	3	4	5	6	7	8	9	10	
他/她是一個謙虛的人	1	2	3	④	5	6	7	8	9	10	
他/她樂於幫助別人	1	2	3	④	5	6	7	8	9	10	
4. 神經質											
他/她很有安全感	1	②	3	4	5	6	7	8	9	10	
他/她對自己感到很滿意	1	2	3	4	5	6	⑦	8	9	10	
他/她是一個脆弱的人	1	2	3	4	5	6	⑦	8	9	10	
他/她很重視自我意識	1	2	3	4	5	6	⑦	8	9	10	
5. 外向性											
他/她善於交際	1	2	③	4	5	6	7	8	9	10	
他/她是一個果斷的人	1	2	③	4	5	6	7	8	9	10	
他/她是一個活躍的人	1	2	③	4	5	6	7	8	9	10	
他/她是一個含蓄的人	1	2	③	4	5	6	7	8	9	10	

整體印象：前後矛盾吧！感覺有點做作。

Appendix H : Emotional Regulation Instructions

Expression.

互動前的注意事項

在接下來的互動中，因避免實驗受到其他因素干擾，請盡你最大的努力讓你的夥伴知道你所有的感受是非常重要的。請試著用表情及聲音來展現你所有感受到的情緒。

Suppression.

互動前的注意事項

在接下來的互動中，因避免實驗受到其他因素干擾，請盡你最大的努力不要讓你的夥伴知道你任何的感受是非常重要的。請試著不要讓你的表情以及聲音展現出任何你感受到的情緒。

Appendix I : Pleasantness/unpleasantness



◎請指出您此刻的情緒狀態：

緊張的										興奮的
不愉悅 的感覺										愉悅 的感覺
憂鬱的										放鬆的

激動的

想睡的

Note. From "Affect Grid: A single-item scale of pleasure and arousal," by J. A. Russell, A. Weiss and G. A. Mendelsohn, 1989, *Journal of Personality and Social Psychology*, 57, 493-502.


Appendix J : Anger-related emotions

◎下列量表是測量您的情緒相關狀態。
請問您現在感受到下列情緒的程度為？

		完全 不				非常
1.	憤怒的	1	2	3	4	5
2.	有敵意的	1	2	3	4	5



Appendix K : Self-esteem



◎以下的量表測量您對於生活不同層面的感受。 請圈選最符合你 <u>此刻</u> 感受到的狀況之程度。		非常 不同意								非常 同意
1.	我有很多正向特質。	1	2	3	4	5	6	7	8	9
2.	我對於我是怎樣的人感到很滿意。	1	2	3	4	5	6	7	8	9

Note. Items from “Within-person relationships among daily self-esteem, need satisfaction, and authenticity,” by W. L. Heppner, M. H. Kernis, J. B. Nezlek, J. Foster, C. E. Lakey and B. M. Goldman, 2008, *Psychological Science*, 19, 1140-1145.

Appendix L : Rapport/Affiliation

The Chinese version.

您對夥伴的感覺



➤ 以下的句子描述您對互動夥伴的想法以及感受。
請利用以下量表，如實地回答您對下列陳述同意的程度。

1	2	3	4	5	6	7
非常不同意	---	---	中等	---	---	非常同意

基於您對互動夥伴的第一印象…

1. _____ 我認為我和我的夥伴非常相似。
2. _____ 我喜歡我的夥伴。
3. _____ 我的夥伴像是那種幾乎每個人都會喜歡的人。
4. _____ 我的夥伴像是那種讓人會享受花時間和他/她相處的人。
5. _____ 我認為我會和我的夥伴相處融洽。
6. _____ 我認為我的夥伴喜歡我。
7. _____ 如果我在找新朋友，我會考慮和我的夥伴發展友誼。
8. _____ 我認為我和我的夥伴有很多共同點。
9. _____ 和我的夥伴談話讓我覺得有趣。
10. _____ 我的夥伴是那種可以和我變成好朋友的人。

The original version.



1	2	3	4	5
very much disagree	somewhat disagree	neutral	somewhat agree	very much agree

Based on your first impressions of your partner:

1. ___ I think I am very similar to my partner.
2. ___ I like my partner.
3. ___ My partner seems like the kind of person that almost everyone likes.
4. ___ My partner seems like someone that people really enjoy spending time with.
5. ___ I think I would get along quite well with my partner.
6. ___ I think my partner likes me.
7. ___ If I were looking for new friends, I would consider developing a friendship with my partner.
8. ___ I think I have a lot in common with my partner.
9. ___ I am interested in talking to my partner.
10. ___ My partner is the type of person I could become close friends with.

Note. Items from “Emotion regulation and culture: are the social consequences of emotion suppression culture-specific?” by E. A. Butler, T. L. Lee and J. J. Gross, 2007, *Emotion*, 7, 30-48.

Appendix M : Manipulation Check Items and Demographics



實驗後問卷

► 請利用圈選或簡答的方式，回答下列問題。

1. 請問被您選為最重要的價值觀為何？請盡可能地描述。

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2. 請寫下實驗者在讓你和夥伴進行互動前所給予你的注意事項。請盡可能詳細地描述。

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3. 您覺得本實驗的主要目的為何？

4. 整個實驗的過程有任何讓您覺得不尋常或不舒服的地方嗎？

基本資料：

年齡 _____ 性別 _____ 系級 _____ 出生地 _____
(1=男，2=女)