

# Emotional Labor and Stress Resilience: Construal Level Theory Approach

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*The effectiveness of stress coping methods through various learning and training programs is reported to be weak or none. This research proposes a new method for coping with stress at work. Founded on construal level theory, a visual stimulus promoting abstract thinking was designed, and its effectiveness was tested in both lab and field. The visual stimulus was installed in forty-five (45) individual cubicles of a tourism company's call center in Korea to observe its effectiveness. The results showed that the visual stimulus promotes abstract thinking, reducing stress levels. Furthermore, the bootstrapping analysis confirms that the positive emotion fully mediates the influence of construal level on the perceived stress level.*

*Keywords: construal level theory, emotion, emotional labor, stress, stress resilience*

## INTRODUCTION

Workers in the service industry use their emotions to produce service, and they are trained and instructed to suppress negative feelings for customer satisfaction. Hochschild (1983) coined such conscious efforts of controlling emotions to make facial expressions and bodily movements that have exchange value: "emotional labor." A plethora of studies on emotional labor shows that it is the cause of stress (Mann and Cowburn 2005; Pugliesi 1999), emotional dissonance (Wegge, Van Dick, and von Bernstorff 2010), emotional exhaustion (Peng, Wong, and Che 2010), work-family conflict and low self-efficacy (Glaser and Hecht 2013), low psychological well-being (Zapf 2002), and negative job attitudes (Gillespie et al. 2011). Studies on the adverse effects of work-related stress suggest that raising emotional intelligence (Peng et al. 2010) or emotion regulation knowledge (Grant 2013) can diminish the harmful effects of stress. However, previous studies focus on revealing psychological mechanisms, and they fall short of providing practical methods for coping with work-related stress.

Drawing on construal level theory (CLT) (Trope and Liberman 2010), this study proposes a practical methodology to mitigate perceived stress levels. CLT literature shows that construal level manipulation is possible in various ways, such as performing why (vs. how) focused mental imagery tasks (e.g., Eyal, Liberman and Trope, 2008) and reading why (vs. how) frame essays (e.g., Gong and Medin, 2012). Although these procedural and conceptual priming methods are widely used for academic research purposes, applying the same procedures in a real business environment is not practical in that it requires conscious efforts to follow a particular procedure from those who are already exhausted whenever they face

stressful situations. A recent study that investigated the influence of ambient light on information process styles suggests that a visual stimulus can be used to adjust construal level (Steidle, Werth, and Hanke 2011). Specifically, the study adopted Implicit Association Test (IAT) (Greenwald, McGhee, and Schwartz 1998) and demonstrated that the darkness (vs. brightness) perception is implicitly associated with high-level (vs. low-level) construal. The results suggest that environmental stimuli can be used as construal level priming agents and that activation of construal level is automatic, without asking for conscious efforts. Furthermore, a recent CLT literature showed that high-level construal makes the evaluation of negative experiences less negative by shifting emotional valence (Williams, Stein, and Galguera 2014). Combining these research results, we posit that an environmental stimulus designed to promote high-level construal attenuates perceived stress level, and that shift of emotional valence mediates this effect.

## **THEORETICAL BACKGROUNDS**

### **Emotional Labor and Stress**

An extensive set of literature has shown that emotional labor is a major cause of work-related stress (Hülshager, Lang, and Maier 2010; Mann 1999; Morris and Feldman 1996). Emotional labor is caused as the result of the cognitive effort of the individual to express an emotion different from the one they actually feel so as to meet occupational or social needs (Hochschild 1983; Morris and Feldman 1996). Specifically, those who work in service industries requiring constant customer interaction are exposed to a forced environment where experiencing emotional dissonance resulting in emotional labor is inevitable. Mann (1999) performed a study to examine the relationship between the frequency of interaction, the intensity of emotional labor, and the perceived stress level. The results revealed that the perceived stress level increases as the intensity of emotional labor rises. In the same vein, Pugliesi (1999) showed that the emotional labor caused by suppressing one's emotions to satisfy colleagues or customers is correlated positively with perceived stress level. A high level of stress is known to have detrimental effects on health, causing cardiac diseases (Johnson and Hall 1988; Schnall 1994), diabetes and obesity (Brindley and Rolland 1989), high blood pressure, and coronary artery disease (Pickering 2001). The suppression of the expression of internal feelings causes psychological pains, especially in negative emotions, and the cognitive efforts to regulate emotion in a certain way lead to emotional exhaustion (Panagopoulou, Kersbergen, and Maes 2002). Emotional exhaustion can spill over to other areas unrelated to the source of the emotional exhaustion. Studies show that job-related stresses have a profound negative effect on daily life, decreasing the quality of life, causing insomnia, tiredness, and hypersensitivity (Wharton and Erickson 1993, 1995). Furthermore, emotional exhaustion lowers job satisfaction, and the self-control to stay positive on the surface, regardless of internal emotions, lowers motivation, and depletes cognitive resources, which in turn results in low job performance (Baumeister et al. 1998; Hülshager et al. 2010; Hülshager and Schewe 2011; Wegge et al. 2010). Considering the broad effects of stress caused by emotional labor, whose influence is not limited to emotional, cognitive, and physical well-being in our daily lives, it is evident that proper stress management is essential. Companies are well aware of the adverse effects of stress and provide various stress management training to their employees. However, the practicality or effectiveness of those programs was, reportedly, insignificant or trivial at best (Van Der Klink et al. 2001).

### **Positive Emotion**

A plethora of research shows the wide range of effects of positive emotion, from employee job performance to perceived service satisfaction level. Recent research of call center employees on the effect of their mood on their performance revealed that there is a positive correlation between the mood at the start of a workday and the evaluation of subsequent events for the rest of that day (Rothbard and Wilk 2011). Rothbard and Wilk (2011) measured the emotional valence just before starting work and then measured perceived positivity-negativity about customers. The result revealed that those who felt positive (vs. negative) also evaluated the subsequent event positively, suggesting that the current emotional state is transferred to the evaluation of the subsequent event. Studies on emotion consistently reveal that positive emotion improves job performances (Judge, Erez, and Bono 1998), increases job satisfaction (Judge et al.

1998), and promotes creativity (Rego et al. 2012). Employees with higher optimism scores also earn higher ratings for their overall job performance and their contribution to customer satisfaction (Luthans, Lebsack, and Lebsack 2008). Research on emotion suggests that positive emotion facilitates stress management (Monfort, Stroup, and Waugh 2015). Monfort et al. (2015) demonstrated the power of positive emotion by showing that envisioning a positive event is enough to mitigate a stress level. In the same vein, Demery et al. (2002) showed that positive emotion is negatively correlated with emotional exhaustion.

### **Construal Level and Positive Emotion**

Construal level is the cognitive outcome of the influence of psychological distance on the individual's mindset. Psychological distance contains four dimensions: social distance, temporal distance, spatial distance, and hypotheticality. People construe objects, events, or the world in terms of high-level or low-level representation of them depending on the perceived psychological distance of an event (Trope & Liberman, 2010). By manipulating spatial distance, Williams and Burgh (2008) studied the effect of high-level construal on evaluating negative stimuli (Experiment 2). Specifically, participants were asked to assess the perceived negativity of articles describing disgusting events. The results revealed that participants under psychologically far (vs. near) condition perceived the articles as less (vs. more) negative. Bar-Anan et al. (2007) studied the relationship between construal level and psychological distance using Implicit Association Test (IAT) (Greenwald et al., 1998) by comparing the response times of construal level compatible conditions and construal level incompatible conditions. The results evinced that response times under the construal level compatible conditions were faster in all four dimensions, indicating that low-level construal is tied to psychologically near conditions while high-level construal is tied to psychologically far conditions. More importantly, the research demonstrated that construal level shift is triggered and activated implicitly and automatically.

CLT literature consistently shows that the activation of high-level construal promotes information processing centered on desirability (Irmak, Wakslak, and Trope 2013; Liberman and Trope 1998), enhances creativity (Jia, Hirt, and Karpen 2009; Mueller, Wakslak, and Krishnan 2014), shows higher tolerance of negative evaluation (Williams and Bargh 2008), performed better on self-control tasks (Fujita et al. 2006), shrinks time perception (Kyung, Menon, and Trope 2010, 2014), and reduces the intensity of negative emotion (Hong and Lee 2010; Thomas and Tsai 2012). Specifically for the role of high-level construal in shaping subjective emotional experience, a recent study demonstrated that high-level construal results in a less negative evaluation of negative experiences by dampening the intensity of negative feelings (Williams et al. 2014).

This study aims to propose a practical methodology to reduce perceived stress levels. Emotion literature suggests that positive emotion facilitates stress management, and CLT literature shows that high-level construal promotes a positive shift of valence. If a high-level construal triggered by psychologically distal perception decreases the salience of negative aspects of an event, it is anticipated to decrease the perceived intensity of negative experiences, in turn lowering perceived stress levels. To test this possibility, we designed a visual stimulus evoking high-level construal. The designed stimulus was installed in the cubicle of an individual employee, and the effectiveness of the stimulus ("target image") was verified by both a laboratory test (Experiment 1) and a field test (Experiment 2).

## **EXPERIMENTS**

### **Experiment 1. The Effect of the Designed Stimulus: Laboratory Test**

#### *Stimulus Design*

Non-verbal components such as voice, tone, and gestures play critical roles in the communication process, estimated at 7%, 38%, and 55%, respectively. (Mehrabian and Ferris 1967). Call center employees work in an environment that permits only voice and tone in communication; gesture, the major component, is omitted. Workers must constantly focus their efforts on maintaining positivity; hence, a call center is an ideal environment for this study. Several types of stimuli were reviewed in consideration of the feasibility of installation and removal convenience in the actual work environment, and it was decided to design a

visual stimulus (target image) using the spatial distance dimension of psychological distance. An interview was conducted with both call center managers and employees to identify objects or places associated with distal perception. Examples of such objects and places identified are foreign cities, travel, road signs, exotic gardens, sky, and clouds. These objects were translated into abstract design elements to function as cues for recalling unspecified places in the distance. The designed stimulus, the target image, was installed on three sides of a cubicle, as shown in Figure 1 (a).

A change of working environment can be accomplished with any random artwork, including the installation of the target image in a cubicle. It is necessary to isolate the effect of the target image to remove alternative accounts. Literature shows that conscious (Harmon-Jones and Allen 2001) or unconscious (Monahan, Murphy, and Zajonc 2000) exposures to familiar stimuli are enough to trigger positive emotion (Monfort et al. 2015). Even undiagnostic familiarity formed due to the frequent exposure to stimuli can signal positivity of the stimuli without any valid conscious judgment (Zajonc 1968). Specifically, Hagtvedt & Patrick (2008) showed that a famous painting activates positive feelings like uniqueness and preciousness and affects subsequent information processing and behavior. Therefore, it is necessary to isolate the positivity triggered by high-level construal from the positivity originating from familiarity. To compare the effect of positivity induced by familiarity and by the target image, the art image *Starry Night* by Vincent van Gogh, which is widely used in art infusion research and many practices, was adopted. By doing so, the effectiveness of the positivity induced by the target image relative to the one by the familiarity originating from the famous painting can be investigated.

**FIGURE 1**  
**IMAGE INSTALLED IN A BOOTH**



#### *Experiment Design and Procedures*

Thirty-five undergraduate students participated in the experiment. The participants were randomly assigned to one of three groups: target image group-12 people, art image group-11 people, and control group-12 people. The experiment comprised nine sessions, and four people participated in a session. Upon arrival, for participants to be exposed to the stimulus naturally, they were given a bogus purpose of the experiment; they were told it was about “the effect of visual and motor coordination on evaluation and judgment.” A research assistant demonstrated how the visual and motor coordination exercise is done, and participants had an opportunity to practice before starting the experiment. They were also told that the image installed on the booth was to provide a reference line for the movement of hands for visual and motor coordination exercises. To control the duration of the exposure, a facilitator used a timer and directed participants to do visual and motor coordination exercises for four minutes by informing them when to start and end the exercise. Immediately after the exercise, participants were told to start answering the questionnaire. Four booths in a laboratory were independent with separate walls to minimize the influence of possible extraneous variables.

The participants were asked to complete the visual and motor coordination exercise two times: at the beginning of the experiment and again in the middle. For the first exercise, participants were asked to complete it with their right hand. After the exercise, desirability (vs. feasibility) and Behavioral Identification Form (BIF) (Vallacher and Wegner 1989) were measured. Then, for the second exercise,

participants used the left hand, and donation intention, donation amount, and affective valence using Positive and Negative Affect Schedule (PANAS) (Watson et al., 1988) were measured. Finally, the experiment ended by identifying gender and age. After the experiment, all participants were debriefed on the experiment's real purpose and given a \$2.5 gift voucher that could be redeemed on campus. For the control group, all the test procedures were identical to the treatment group, except nothing was installed on the partition walls.

#### *Key Measurements*

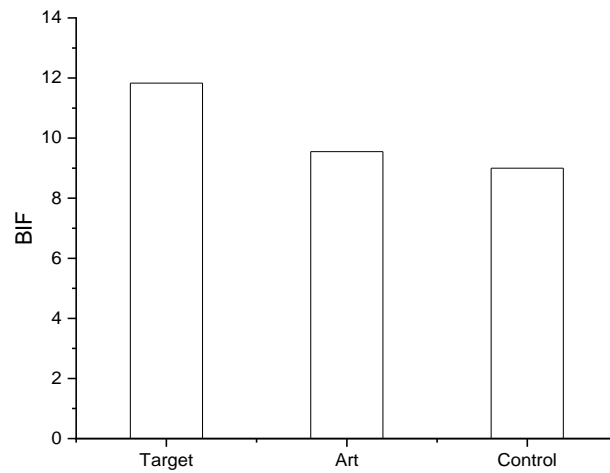
BIF (Vallacher and Wegner 1989) was used to measure construal level. BIF consists of 25 items and measures participants' construal level by examining how they describe target behaviors. An action can be described as why- or how-focused. A why-focused description is the goal-oriented abstract thinking, and it represents high-level construal (scored 0). A how-focused description is a method or feasibility-oriented concrete thinking, and it is low-level construal (scored 1). For example, "making a list" can be described as either "getting organized" or "writing things down." "Getting organized" is high-level construal, and "writing things down" is low-level construal. Desirability and feasibility were measured to gauge whether the participants did desirability- or feasibility-focused information processing (Liberman & Trope, 1998, Experiment 2). In addition, to check the influence of high-level construal on emotion, PANAS (Watson et al. 1988) was measured. Finally, to verify the effect of the target image on consumer behaviors, donation intention and donation amount were measured and analyzed.

#### *Results*

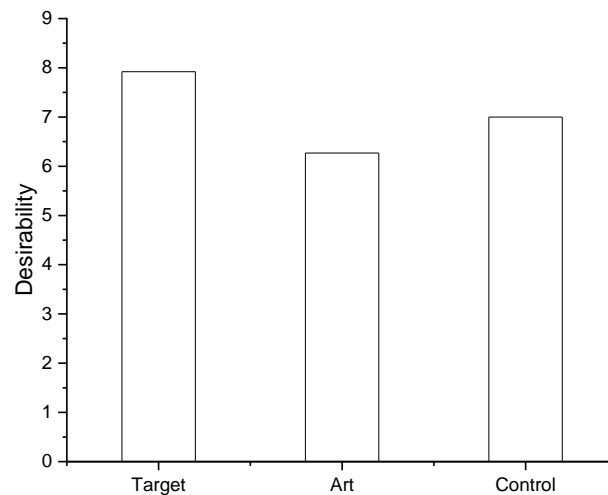
**Construal Level (BIF).** ANOVA results showed no main effects by treatments ( $F(2, 32) = 2.214, p > .1$ ). To examine between-group differences in detail, planned contrast was performed. Planned contrast results showed that the target image group showed higher BIF than the control group ( $M_{\text{Target}} = 11.83, M_{\text{control}} = 9.00, t = 2.074, p < .05$ ). There was no significant difference between the target image group and the art image group ( $M_{\text{Target}} = 11.83, M_{\text{Art}} = 9.55, t = 1.638, p > .1$ ) and between the art image group and the control group ( $M_{\text{Art}} = 9.55, M_{\text{control}} = 9.00, t = .390, p > .1$ )

**Desirability vs. Feasibility.** If the target image activated high-level construal, then desirability (vs. feasibility) should be higher than other groups. ANOVA was used to examine the difference in desirability response between groups. Results showed significant differences between groups ( $F(2, 32) = 5.340, p < .05$ ). Planned contrast was performed to examine between-group differences in detail. The results showed that the target image group engaged in higher desirability focused thinking than the art image group ( $M_{\text{Target}} = 7.92, M_{\text{Art}} = 6.27, t = 3.254, p < .05$ ), and the difference was marginally significant between the target image group and the control group ( $M_{\text{Target}} = 7.92, M_{\text{Control}} = 7.00, t = 1.855, p = .073$ ). There was no significant difference between the art image group and the control group ( $p > .1$ ).

**FIGURE 2**  
**BIF RESULT**

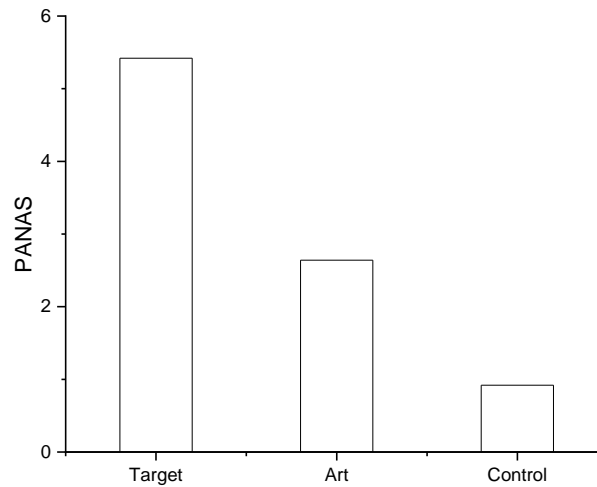


**FIGURE 3**  
**DESIRABILITY RESULT**



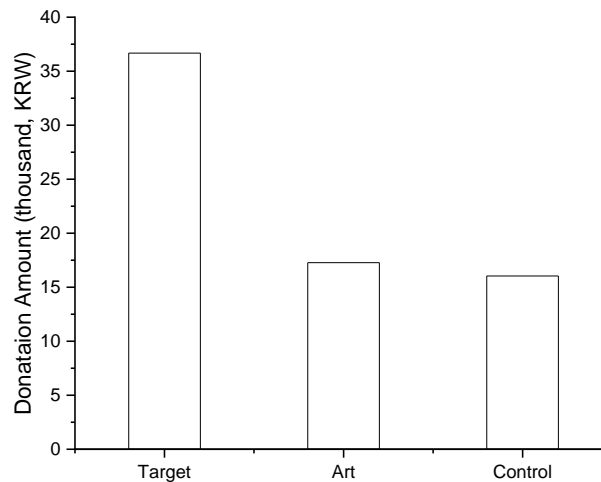
**PANAS.** Literature on the construal level shows that the activation of abstract thinking promotes goal-oriented thinking, making desirability and positivity of the goal more salient, leading to a shift in valence to a positive direction resulting in the current experience feeling more positive and less negative. ANOVA results show significant difference among groups ( $F(2, 32) = 4.018, p < .05$ ). Planned contrast was performed to examine between-group differences in detail. The results showed that the target image group showed significantly higher positive emotion than the control group ( $M_{\text{Target}} = 5.42, M_{\text{Control}} = .92, t = 2.875, p < .01$ ). The target image group also showed higher positive emotion than the art image group ( $M_{\text{Target}} = 5.42, M_{\text{Art}} = 2.64, t = 1.737, p = .092$ ), but it was marginally significant. There was no significant difference between the art image group and the control group ( $p > .1$ ).

**FIGURE 4**  
**PANAS RESULT**



**Donation Intention, Donation Amount.** To investigate the influence of high-level construal induced positive emotion on actual behavior intention, donation intention and donation amount were measured. ANOVA results showed that no differences were found in terms of donation intention between groups ( $F < 1$ ). However, more importantly, there were significant differences in donation amount ( $F(2,32) = 3.952$ ,  $p < .05$ ). To analyze statistical significance of the difference between groups in donation amount ( $M_{\text{Target}} = 36.67$ ,  $M_{\text{Art}} = 17.27$ ,  $M_{\text{Control}} = 16.04$ ), planned contrast was performed. Results showed that the target image group was willing to pay 19,000 KRW and 20,000 KRW more than the art image group ( $t = 2.318$ ,  $p < .05$ ) and the control group ( $t = 2.521$ ,  $p < .05$ ), respectively. There was no difference between the art image group and the control group ( $p > .1$ ).

**FIGURE 5**  
**DONATION AMOUNT**



### *Discussion*

Experiment 1 showed no significant difference in BIFs activated by the target image and art image. However, the quality of the BIF triggered by the target image and the one activated by the art image was different. The target image was higher for desirability than the art image, and the difference was significant.

PANAS of the target image group was marginally higher than the art image group. Considering these results, it seems the art image promotes high-level construal as the target image does, but the nature of BIF appears to be different. Moreover, the effect on BIF of the art image is much weaker than the target image. Besides, when it comes to the actual behavior indicator, donation amount, participants exposed to the target image expressed a higher amount of donation, 19,000 KRW more than those in the art image group. Although it was not significant, the art image group showed higher positivity than the control group. To sum up, Experiment 1 verifies that the target image activates high-level construal, and its nature of the effect on consumer behavior is different from that of art image.

## Experiment 2. Field Test – Effect of the field images

### Experiment Design and Procedures

To examine the effectiveness of the target image in a natural office environment, the target image was installed in the call center of a leading tourism service company in Korea. Fifty-seven (57) female operators responsible for inbound and outbound call operations participated in the experiment. To disguise the real purpose of the experiment, a manager introduced the project as an improvement to the working environment with the installation of graphic panels in each cubicle, two months before the actual installation. In addition to BIF and PANAS measured in Experiment 1, Perceived Stress Scale (Cohen, Kamarck, and Mermelstein 1983) was measured to investigate the influence of the target image on stress levels. Baseline measurements of these three scales were taken two weeks prior to the installation of the target image to minimize testing effects (Murre and Dros 2015), T1, and another measurements were taken one week after the target image installation, T2. The collected data was then analyzed by paired sample t-test. Twelve (12) participants who failed to respond at T2 were removed from the samples, and the remaining forty-five (45) samples were used for analysis.

#### 4.1.2 Results

**Construal Level (BIF).** To check whether the target image activated high-level construal, a paired sample t-test was performed. The result showed that BIF at T2 ( $M_{BIF\_T2} = 8.33$ ,  $SD = 2.76$ ) is higher than BIF at T1 ( $M_{BIF\_T1} = 7.24$ ,  $SD = 2.52$ ), and the difference is significant (Table 1).

**PANAS:** To check whether there is a difference in emotional valence before and after the target image installation, a paired sample t-test was performed. The result showed no difference in affective valence both before ( $M_{PANAS\_T1} = .75$ ,  $SD = .63$ ) and after ( $M_{PANAS\_T2} = .59$ ,  $SD = .54$ ) the target image installation (Table 1).

**Perceived Stress Level.** To check whether the installation of the target decreased the perceived stress level, a paired sample t-test was performed. The result showed a significant decrease in perceived stress level after the target image installation ( $M_{PSS\_T1} = 1.78$ ,  $SD = .43$ ,  $M_{PSS\_T2} = 1.42$ ,  $SD = .61$ ) (Table 1).

**TABLE 1  
PAIRED SAMPLE T-TEST SUMMARY**

	Mean (SD)		T1-T2	t(44)	CI	
	T1	T2			Lower	Upper
BIF	7.24 (2.52)	8.33 (2.76)	-1.09 (3.52)	-2.07*	-2.15	-0.03
PANAS	0.75 (0.63)	0.59 (0.54)	0.16 (0.86)	1.23	-0.10	0.42
PSS	1.78 (0.43)	1.42 (0.61)	0.36 (0.70)	3.53**	0.15	0.57

Note: \* $p < .05$ , \*\* $p < .001$



**Mediation Analysis by PANAS.** If the target image facilitated high-level construal, which in turn triggered a positive shift of emotion followed by a higher tolerance for stress, then the emotional valence shift should mediate the effect of construal level on the strength of the perceived stress. To explore this possibility, mediation analysis was performed by the bootstrapping method proposed by Preacher and Hayes (2008). Process Macro V.2.16 (www.afhayes.com) was used for the mediation analysis. Bootstrapping analysis using 5,000 resamples showed that PANAS indeed mediates the effect of construal level on perceived stress. The size of the indirect effect of construal level (BIF) via PANAS was -.0222, and CI of 95% does not include zero (LLCI -.0695, ULCI -.0030), indicating a complete mediation (Table 2). Additional mediation analysis was performed on the data gathered before the installation of the target image to examine if the same mediation pattern appears. The results showed no valid mediation (CI 95%, LLCI -.0330, ULCI .0219) by positive emotion for T1 condition (Table 3). By comparing the mediation analysis results for T1 and T2, it is clear that high-level construal induced by the target image made a positive shift of emotion, which in turn decreased perceived stress. Although the mediation model itself was insignificant for T1, the analysis results showed the same pattern, that positive emotion decreases the perceived stress level.

**TABLE 2  
MEDIATION ANALYSIS FOR T2**

	PANAS		Perceived Stress	
	$\beta$	SE	$\beta$	SE
BIF	0.0645*	0.0285	-0.0481	0.0325
PANAS	-	-	-0.3450*	0.1643
Constant	0.0539	0.2497	2.0216**	0.2692
	R <sup>2</sup> =.1065 F(1,43)=5.1249*		R <sup>2</sup> =.1871 F(2,42)=4.8320*	

Note: \*p<.05, \*\*p<.001

**TABLE 3  
MEDIATION ANALYSIS FOR T1**

	PANAS		Perceived Stress	
	$\beta$	SE	$\beta$	SE
BIF	0.0150	0.0382	-0.0069	0.0229
PANAS	-	-	-0.3476**	0.0913
Constant	0.6405*	0.2925	2.0906**	0.1845
	R <sup>2</sup> =.0036 F(1,43)=.1534		R <sup>2</sup> =.2605 F(2,42)=7.3960**	

Note: \*p<.05, \*\*p<.005

## GENERAL DISCUSSION

An extensive body of research on CLT robustly showed that high-level construal promoted positivity and desirability-centered information processing primed by various experimental methods. However,

research attempting to design and verify the effectiveness of a high-level construal inducing visual stimulus in a natural business environment is scarce. This study aimed to offer an alternative methodology based on CLT that can lower the perceived stress level of emotional laborers and verified its effectiveness by a laboratory experiment followed by the field experiment by installing the designed visual stimulus in individual booths of call operators in an actual call center.

In Experiment 1, the results show that the target image group is significantly higher in construal level (BIF), positive emotion (PANAS), and donation amount (WTP) compared to the control group. The desirability perception was also higher but marginally significant. The art image adopted to investigate the positivity activated by familiarity has the same influence as the one induced by the target image. Although the BIF of the target image was larger, the difference was insignificant. Desirability and PANAS of the target image were larger than those of the art image, and they were significant and marginally significant, respectively. Interestingly, for the art image, when compared with the control group, all effects were insignificant except BIF, whereas the target image consistently showed varying degrees of differences throughout all measurements. Unlike the art image, the target image was specifically designed to appeal to the spatial dimension of psychological distance, whereas the art image is a widely known work. Art infusion research suggests that the level of abstractness of artworks is a domain of subjective interpretation, and the perceived subjective abstractness has an influence on the resulting construal level (Durkin et al. 2020). The image adopted for this study is well-known, familiar *Starry Night* by Vincent van Gogh. The current results suggest that the art image, despite its familiarity, is perceived as more abstract than the control group. Although the perceived subjective abstractness of the art image is enough to move the construal level higher, it was not strong enough to initiate the activation of desirability-centered information processing and positive shift of valence. Unlike the familiar art image, the target image results in high-level construal strong enough to promote desirability-focused thinking and positive-shift of valence. It is premature to make a conclusive comment on the existence of boundary condition of the differential threshold of BIF between previous and new BIF levels that activates desirability and positive-shift of valence. However, the current research implies an interesting research venue of construal level theory research.

In Experiment 2, the effectiveness of the target image was examined through field application. The target image was installed in individual booths for call center employees at an actual call center in Korea. The results showed that both the construal level and positive emotions measured after the target image installation were significantly higher than those measured prior to the target image installation. Most importantly, the perceived stress level measured after the target image installation becomes significantly lower. In addition, the mediation analysis showed that the positive emotion indeed mediated the effect of construal level on perceived stress level. Overall results demonstrate that the high-level construal evoked by the target image results in a positive shift in emotion, which in turn lowers the perceived stress level, proving the effectiveness of the target image strengthening the stress resilience in the actual field application of the target image. One might prompt the potential confounding of the testing effect of using the same BIF questionnaires to examine construal level changes before and after the target image installation. There could be three possible conditions for the testing effect to occur: (1) participants may remember all questions and mark the same answers, (2) participants may remember all questions and mark the answers exactly opposite to T1, (3) participants may remember all questions and answer some of them differently. Because the BIFs of T1 and T2 are significantly different, we can eliminate the concerns of (1) and (3). Furthermore, since BIF measured at T2 is larger than T1, case (2) is not a feasible explanation. Therefore, the concern of the confounding of the testing effect can be eliminated.

The detrimental effects of emotional labor causing low work performance and various illnesses are well documented. Many companies provide multiple learning and training programs as a part of employee assistance programs. Concerned individuals make personal efforts to cope with work-related stress through psychological consulting and meditation so that their depleted emotions can be refilled. Still, the effectiveness of such efforts is reported to be none or weak at best (Van Der Klink et al. 2001). Besides, these a posteriori measures require the conscious attention of those already stressed out, and such deliberate efforts to restore and maintain positive emotion act as unintended causes of an additional stress-causing agent. This study adopted and proposed a cognitive behavioral approach based on construal level theory to

help service employees. The results of the study suggest that a visual stimulus designed to trigger psychologically distal perception can improve stress resilience by promoting a positive shift in valence. It is worth paying attention to the process of designing the visual stimulus. The design elements of the target image related to specific environments were identified by conducting employee interviews. Literature on embodied cognition shows that the interaction with the surrounding environments is the foundation of cognition, which is shaped and changed by the constant interaction with the environment (Adam and Galinsky 2012; Fay and Maner 2012; Meyers-Levy, Zhu, and Jiang 2010). Stress research also addressed the importance of a workspace environment to reduce stress and increase satisfaction at work (Thayer et al. 2010; Vischer 2007). These studies imply that employees in a different working environment may have different schemas associated with distal perception. Although the identified design elements seem general enough to be applicable to other workplaces, the effectiveness of the current target image in other workplaces requires further investigation. Despite this constraint, the current study sheds new light on a new stress management methodology. The benefit of this new approach is the automatic and immediate activation of positive emotion by providing implicit environmental cues that do not require the intervention of consciousness.

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