

이타적 성향과 긍·부정 프레이밍이 국제기아 돕기 캠페인의 효과에 미치는 영향: 친밀감의 매개 역할 검증과 함께

Impacts of Altruistic Disposition and Framing on Persuasion to Help Distant Others in Need: Including the Mediating Role of Perceived Relationship Closeness

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요약

본 연구는 개인의 이타적 성향과 메시지 프레이밍의 상호작용이 국제기아 돕기 캠페인의 효과에 미치는 영향에 대하여 조사하였다. 이타적 성향은 고통 받는 타인에게 연민을 느끼고, 관심을 갖는 정도를 나타내는 공감적 관심을 선정하였고, 프레이밍은 도움을 주었을 때의 긍정적 결과 혹은 도움을 주지 않았을 때의 부정적 결과를 강조하는 대비 방식을 이용하였다. 실험은 175명을 대상으로 실행되었으며, 2단계로 나누어서 실행되었다. 1단계에서는 참여자들의 이타적 성향과 관여도에 관한 설문을 진행하였고, 2단계에서는 긍정적 혹은 부정적으로 유형화된 메시지를 제시한 후 나타나는 반응을 측정하였다. 연구 결과, 긍정적 프레이밍에서 공감적 관심이 높은 사람들이 낮은 사람들에 비하여 더 높은 행위 의도와 친밀감을 보여주었고, 부정적 프레이밍은 차별적 반응을 이끌어 내지 않은 것으로 나타났다. 그리고 인지된 친밀감은 행위 의도에 대한 상호작용을 매개하는 것으로 나타났다.

■ **중심어** : | 공감적 관심 성향 | 긍·부정 프레이밍 | 인지된 친밀감 | 행위 의도 | 돕기 |

Abstract

This study examined the impact of interaction between dispositional empathic concern (DEC) and message framing on effects of the international aid campaign. DEC refers to a trait with which people tend to sympathize with and be concerned about others in need. Message framing is differentiated by positive or negative type. The results supported the prediction that the interaction between DEC and framing would have an effect on responses to messages advocating international relief activities. The overall findings show that the interaction was mainly the result of positive framing eliciting more favorable responses (behavioral intention and perceived relationship closeness) from higher DEC individuals than lower ones. The interaction effect on behavioral interaction was mediated by perceived relationship closeness

■ **keyword** : | Dispositional Empathic Concern | Message Framing | Relationship Closeness | Behavioral Intention | Helping |

I. Introduction

People have the tendency to select situations that match their dispositions and prefer to engage in behaviors and seek outcomes that satisfy their preferences[1]. Then, public service messages would better aim the target audience in ways that are consistent with the disposition for reducing unintended effects and preventing “boomerang” effects in which counter-arguments against the intervention increase[2]. To this end, the present study seeks to examine the interaction of dispositional empathic concern (DEC) and message framing when designing an international relief campaign.

DEC refers to the emotional tendency to feel sympathy when witnessing others in pain and to be motivated to relieve their plights[3]. Empathic concern is regarded as a core factor that activates altruistic motivation, which in turn triggers concerns for others’ difficulties regardless of one’s own interests[4]. Higher DEC individuals have stronger motivation to enter helping situation and practice altruistic activities more frequently compared to lower DEC ones[5]. Thus, the DEC level is a critical factor that should be considered in the context of persuading people to help others.

Framing refers to distinctions of form, for example, differences in image selection, word constitution, and sentence structure while messages convey equivalent information to influence the recipient’s decision making[6]. A persuasive message can either emphasize the benefits and pleasant outcomes of performing an advocated behavior (positive framing) or emphasize punishment and unpleasant outputs from forgoing the behavior (negative framing). Messages that seek aid can also be differentiated by highlighting lives saved with one’s contribution versus lives lost without it[7]. The relative

effectiveness of each framing type is often dependent on situational factors and personal disposition has been described as a significant element for moderating outcomes of positive/negative framing[1]. By investigating the interplay of personal disposition and framing, it may be possible to predict an optimal point for persuasion in a specific context[2].

In addition, a cognitive factor, perceived relationship closeness, is included as a potential mediator of the interaction. Helping others sometimes comes at a considerable cost to oneself, and thus cognition may intervene to exert caution when people are inadvertently motivated for or engaged in helping activities. Most people are more eager to help needy others who are closely related to them (e.g., family, relatives, and in-group members) than those who are distantly related[8]. Identification of the situation that induces the audience to feel closer to others in need is critical for effective appeal especially when delivering aid campaign for distant people.

II. Literature Review

1. Empathic Concern

Empathy is generically defined as indirect experiences that are susceptible and suitable to situations that affect others[9]. Empathy can be decomposed into dimensions of self- or other-oriented or neither[5]. Empathic concern is considered to be at the core of the other-oriented dimension[4]. Empathic concern, also similarly referred to as sympathy, is the foundation of the other-oriented empathy because it includes both emotional assimilation into the misfortune of others and care for their welfare[9].

Empathic concern is not only a state response that is evoked by certain situations; it is also an

individual's shaped disposition[3]. DEC is formulated in childhood and is fairly well maintained across an individual's life span[10]. It has been shown that DEC is positively related to helping with no restraints imposed by the self or others, which render the situation easily avoidable[4]. This provides evidence that DEC elicits pure altruistic motivation, which, compared with egoistic motivation such as personal rewards and punishments, induces more autonomous, frequent, and sustained support for others[11][12].

Although DEC plays a key role in the various input and output processes of helping activity, it should be appropriately matched to contextual factors in order to influence decision making. For example, it was reported that DEC was positively correlated with monetary donation, but not with donating blood or organ[8]. It suggests that when targeting DEC during helping advocacies, it may be useful to examine differential appeals (e.g., framing) to seek contexts that are likely to produce a maximum level of effects.

2. Interaction between Dispositional Empathic Concern and Framing

In research of framing, personal disposition has received much attention as a moderator that would influence the direction of a behavioral effect[1]. Incipient research on the interaction has focused on cognitive factors including involvement[13] and need for cognition[14]. Recently, this research has expanded beyond the realm of cognition to also include motivational systems[6], the Big Five factors[15], and self-esteem[16]. These studies demonstrated that appropriate matching between personal disposition and message framing considering the type of desired behaviors could be maximally effective in achieving intended responses[2].

It has been shown that positive framing would be more effective than negative framing in messages about securing safety, whereas the opposite should be

true for messages concerning risky behavior[2]. As previously noted, individuals with a higher DEC have stronger motivation and concern for securing the well-being of others in distress[4]. Consequently, positive framing that emphasizes the safe outcomes of providing help should be better matched to higher DEC individuals. In contrast, lower DEC individuals hesitant to encounter unfortunate others may feel relatively negative given a message that is promoting an act of help. Negative moods make negative expressions (e.g., negative framing) more salient and potent[17]. Then, negative framing of a relief message may be more influential for lower DEC individuals in a relatively more negative mood. Hence, when an international relief message is presented:

H1: A positive frame will be more effective for higher DEC individuals while a negative frame will be more effective for lower DEC individuals.

3. Influence of Perceived Relationship Closeness

Empathic concern has been found to be more strongly associated with helping in close relationships than in distant ones[18]. It would be advantageous for an international relief campaign to find a better way to express the circumstances of distant others in need so that they are perceived as closer by the targeted audience. One feels closer to others when discovering clues that others are interconnected to the self[19].

In the current study, positive framing describes pleasant others who recovered from hunger as a result of helping, whereas negative framing depicts others still in pain without aid. Higher DEC individuals who highly anticipate safe and satisfactory feeling from helping may find desired images in the positive frame and feel closer to others described in the message. Lower DEC Individuals

who have weak motivation to help would not feel connected to pleasant others being described in the positive frame. Other persons depicted in the negative frame, however, may be more salient to lower DEC individuals affected by negative mood. People feel closer to others who are more attentive and involved [20]. Then, lower DEC individuals may perceive others in need closer when they are depicted as a loss. When others in need are presented with an international relief message:

H2: For the positive frame, higher DEC individuals will perceive more close while for the negative frame, lower DEC individuals will perceive more close to others in need.

Relationship closeness imagined for a needy person as stranger, friend, or sibling has been shown to mediate the influence of empathic concern on helping intention[21]. Then perceived relationship closeness should be a mediator between empathic concern and helping behaviors. Hypothesis 2 predicted that the interaction of DEC and framing would influence perceived relationship closeness in a similar way as the message effects in H1. Then, it is presumable that perceived relationship closeness may mediate the message effects of the DEC and framing interaction.

H3: Perceptions of relationship closeness will mediate the message effects of DEC × framing.

III. Methods

1. Design and Procedure

The experiment was conducted using an DEC (higher/lower) × Framing (positive/negative) factorial

design with data collected at two stages. At the first stage, a survey questionnaire including DEC, issue relevance, and others not related to the current study was delivered to potential participants. The questionnaire was distributed 7 to 10 days before the second stage (the main experiment). The main experiment was conducted in a room accommodating 40 desks and with groups of 10 to 20 people at a time. Participants were seated in desks temporarily partitioned from one another with cork-colored boards. They were then asked to read one of two messages (positive or negative) assigned randomly. Participants indicated which parts of the message they found particularly important or interesting by underlining them. After reading the international relief message, participants then responded to a questionnaire that included framing manipulation checks, perceived relationship closeness, behavioral intention, and demographic information. After the experiment was completed, each participant was sent a debriefing e-mail describing the procedure.

2. Participants

The participants (N = 175) were recruited from communication courses at a major university in Seoul. In return for their participation, they received required course or extra credits. The participant sample consisted of 86 males and 89 females, with a mean age of 20.73 (SD = 2.22) years.

3. Stimuli and Independent Variables

The study stimuli were constructed as international relief campaigns for child hunger (see Appendix). The message framing was differentiated by changing the configuration of parts of the texts and images. The positive message was designed to elicit relatively pleasant emotions with the help provided, whereas the negative message was designed to elicit relatively

unpleasant emotions in the absence of helping. The stimulus images were pictures of African children, aged 4 to 5 years. In the positive framing, the children were pictured smiling and receiving support, whereas in the negative framing, the children appeared sad and were awaiting help. The accompanying message texts consisted of a title and text body. The first two paragraphs of the text body introduced a situation where some of African children faced a difficult circumstance. In the third and fourth paragraphs, the positive message highlighted the beneficial outcomes of helping while the negative message emphasized the losses that would result from not helping.

The second independent variable, DEC, was measured using a 7-item scale for which the validity and reliability had been previously demonstrated[3][22]. A sample item is “I would describe myself as a pretty soft-hearted person.” (1 = strongly disagree to 7 = strongly agree, Cronbach’s $\alpha = .79$). The mean was 5.08 (SD = .82). The participants were grouped into a higher DEC or a lower DEC using a median split. The median value was 5.14, and the data from ten participants whose score was equivalent to the median, were excluded from analysis in order to show a clear difference.

4. Measured Variables

Effectiveness of the message was evaluated by behavioral intention. For behavioral intention, the participants were asked to indicate their intention to support children in need using 3 items: “Given the opportunity, I will participate in activities to help the children in hunger,” “I have no intention of participating in activities to help the children in hunger (reverse coded),” “I will consider participating in activities to help the children in hunger.” (1 = very unlikely to 7 = very likely, Cronbach’s $\alpha = .87$). The mean was 4.84 (SD = 1.05). For perceived relationship

closeness, the participants were asked to rate the inclusion of other in the self (IOS) scale[19]. The scale presented 2 circles, and each circle represented self and others (children in hunger). The proportion of overlap of the two circles represents relationship closeness (1 = no overlap to 7 = two circles mostly overlapped). The mean was 2.58 (SD = 1.07). Involvement in the international hunger issue was employed as a covariate. Past research has found that issue involvement influences the effects of campaigns for helping others[16]. Issue involvement was assessed in terms of the personal relevance of the international relief activity and was measured using 4 items. A sample item is “the international activity of relieving hunger is important to me.” (1 = strongly disagree to 7 = strongly agree, Cronbach’s $\alpha = .86$). The mean was 3.73 (SD = 1.11).

5. Analysis

To test the effects of the DEC \times framing interaction on the dependent variables, an analysis of covariance (ANCOVA) was conducted with issue relevance as the covariate. The bootstrapping test was used to examine the mediating effect of perceived relationship closeness because this method offers higher statistical power compared to the conventional Sobel test[23]. The bootstrapping test included an independent variable (X, DEC \times framing interaction), a dependent variable (Y, behavioral intention), and a mediator (M, perceived relationship closeness). To maintain a full model of the ANCOVA tests, the main effects and covariates, other than the interaction effect, were entered as covariates into the bootstrapping test.

IV. Results

1. Manipulation Check

Positivity and negativity were measured for the manipulation check of message framing during the experiment. Positivity was measured by three items, “happy”, “joyful”, and “pleasant” with responses on a 7-point scale (1 = not felt at all to 7 = strongly felt, Cronbach’s $\alpha = .76$). The positive message ($M = 1.98$, $SD = 1.07$) was rated more positively than was the negative message ($M = 1.52$, $SD = .88$), $F(1,160) = 8.46$, $p < .01$, partial $\eta^2 = .05$. Negativity was measured by five items, “distressed”, “painful”, “depressed”, “grieved”, and “disturbed” with responses on a 7-point scale (1 = not felt at all to 7 = strongly felt, Cronbach’s $\alpha = .83$). The negative message ($M = 4.30$, $SD = 1.09$) was rated more negatively than was the positive message ($M = 3.80$, $SD = 1.03$), $F(1,159) = 8.93$, $p < .01$, partial $\eta^2 = .05$.

2. Hypothesis 1

There was a significant interaction of DEC \times framing on behavioral intention [Table 1]. In the positive frame, higher DEC individuals ($M = 5.17$, $SD = .87$) exhibited a stronger intention to help than did lower DEC individuals ($M = 4.51$, $SD = .86$). In the negative frame, behavioral intention did not appear to differ between higher ($M = 4.90$, $SD = .71$) and lower ($M = 4.73$, $SD = 1.32$) DEC individuals [Figure 1]. Post hoc ANCOVA analyses were conducted for both framing conditions, and the difference of the DEC levels was significant in the positive frame, $F(1, 80) = 19.42$, $p < .01$, partial $\eta^2 = .18$, but not in the negative frame ($F < 1$).

Table 1. Analysis of Covariance for Behavioral Intention

	df	F	partial η^2	p
Involvement	1	114.01	.41	.00
DEC(A)	1	11.28	.07	.00
Framing(B)	1	.03	.00	.85
A \times B	1	4.49	.03	.03
error	160			

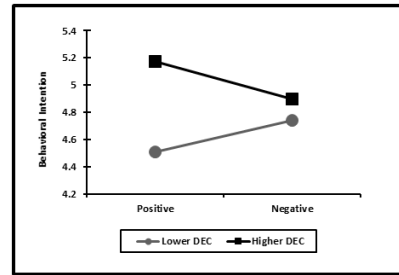


Figure 1. Interaction of DEC \times Framing on Behavioral Intention

3. Hypothesis 2

As predicted in H2, there was a significant interaction for DEC \times framing on perceived relationship closeness ([Table 2] and [Figure 2]). In the positive frame, higher DEC individuals ($M = 2.73$, $SD = 1.17$) perceived a closer relationship to children in need than did lower DEC individuals ($M = 2.33$, $SD = .94$), and in the negative frame, lower DEC individuals ($M = 2.74$, $SD = 1.24$) perceived a closer relationship to the children than did higher DEC individuals ($M = 2.43$, $SD = .66$). Post hoc ANCOVA analyses were conducted for each of the framing conditions, and the difference of the DEC levels was significant in the positive frame, $F(1, 80) = 4.07$, $p < .05$, partial $\eta^2 = .03$, but not in the negative frame ($F = 1.53$, $p = .22$).

Table 2. Analysis of Covariance for Perceived Relationship Closeness

	df	F	partial η^2	p
Involvement	1	58.58	.29	.00
DEC(A)	1	.09	.00	.75
Framing(B)	1	.17	.00	.67
A \times B	1	6.20	.04	.01
error	160			

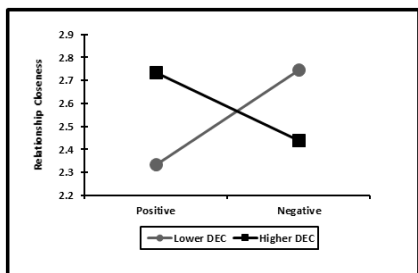


Figure 2. Interaction of DEC X Framing on Perceived Relationship Closeness

4. Hypothesis 3

Mediation analyses were conducted for perceived relationship closeness. Results for behavioral intention revealed that the confidence interval from the bias-corrected bootstrapping test for the indirect effect ($X \rightarrow M \rightarrow Y$) did not include zero ($-.2641$ to $-.0258$), and thus, mediation was established. The direct path of the interaction to behavioral intention ($X \rightarrow Y$) was not significant (coefficient = $-.3845$, $p = .11$), which suggested full (indirect only) mediation by perceived relationship closeness based on the interpretation by [23].

V. Discussion

The main goal of the present study was to examine whether DEC, a personal trait, and message framing interact to influence responses to messages that advocate international relief activities. The results from the experiment provide evidence that DEC interacts with positive/negative framing on responses to messages for international charity. It appears that the interaction effect was generated mainly by the difference between the DEC levels in response to the positive framing; the negative framing produced no significant difference between the DEC levels. Positive framing was more effective in appealing to

higher DEC individuals.

The current study demonstrates that responses to framing types depend on the people and behaviors that are being advocated. Suggestions have been made that framing be influenced by personal traits, especially when the advocated behavior does not elicit strong beliefs or motivational involvement from those who receive the message[2]. Messages that target international relief activities are directed at distant groups of people and thus likely to elicit low levels of motivation and attention to the message. In this case, positive framing may attract more attention from higher DEC individuals than lower DEC individuals because the message framing matches the individual's disposition.

Negative framing did not lead to significant differences in the responses according to the DEC levels. There was only weak tendency for negative framing to be relatively effective for lower DEC individuals based on the result of perceived relationship closeness. It was initially presumed that lower DEC individuals might have relatively negative feelings towards messages for aid and thus negative framing might have a greater influence on lower DEC individuals than higher DEC individuals; however, the magnitude was found to be very weak, if any. This might be because lower DEC individuals do not harbor negative feelings much when confronted with helping activities. Additional fine-grained studies will be necessary to fully understand the interaction process among personal traits and framing in a context in which individuals are persuaded to help others.

The present study showed an interaction between person and framing over perceived relationship closeness in that higher DEC individuals felt closer to children in need described in the positive frame than lower DEC ones. Furthermore, perceived relationship

closeness fully (indirect-only) mediated the effect of the interaction on behavioral intention. Indirect-only mediation means that the effect (behavioral intention in this study) can be realized only through the mediator. As shown [Figure 3] which describes the full mediation, the interaction of DEC and framing impacts on behavioral intention only through perceived relationship closeness. Considering the results of H1 and H2, closer feeling of higher DEC individuals to others in need pictured in a positive frame can be the decisive motivator in participating in the relief activities.

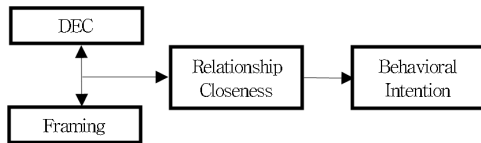


Figure 3. Interaction of DEC X Framing on Behavioral Intention mediated by Perceived Relationship Closeness

Practically, the campaign executives can not manipulate the disposition of the audience. They, however, can design a message aiming for people with higher level of a disposition when it is clearly associated with the attribute of the potential target group. For example, higher DEC individuals should be a target group for relief campaigns because they can be easily motivated for altruistic behaviors. The results of the current study demonstrates importance of exploiting positive emotion in order to appeal higher DEC individuals. Past research traditionally insisted that negative emotion such as sadness and anger is the core factor to elicit helping activities[25]. On the contrary, this study provides the practical evidence that positive emotion can be of great use in some contexts.

The findings should be interpreted in light of a number of limitations. First, the study stimuli were

limited to international relief messages. Thus, there should be caution in generalizing the current findings to messages that promote helping for in-group members or other types of assistance, such as blood donations. Second, college students attending a large university represent a small range of the general population. This limitation can be worsen because students and parents in Korea excessively prefer the colleges located at Seoul. The present study should be replicated using a sample with a broader range of age, income, education level, religious affiliation, and social values Third, the stimuli for framing in the current study were created by changing the configurations of the texts and images. This manipulation has the disadvantage that it is impossible to determine exactly whether the image or the text had more influence on the effects. For future studies, it will be important to examine the effects of text and image separately.

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<관심분야> : 설득커뮤니케이션, 감성 미디어

Appendix: Stimuli used in the experiment.

Positive Framing

With your help, plenty of young lives in Africa will be saved.



A large number of the children living in Africa are forced to live under an impoverished land, devastated by repeated droughts and endless ethnic conflicts. They are exposed to the constant threat of war and starvation. Hundreds of thousands of children are separated from their parents who have left to search for food, while tens of thousands are dying of hunger. It is estimated that one out of six children loses his/her life before he/she reaches the age of five.

Even before the age of ten years old, many are forced to serve as child soldiers, wandering around the deserts holding guns instead of pencils in their little hands. They are suffering from diseases such as malaria and pneumonia, as well as hunger and digestive disorders after drinking severely polluted water due to prolonged droughts.

Your help can greatly increase the healthy lives of the children born in civil wars and devastating poverty. Your donation and voluntary service will provide opportunities to vaccinate the children and save them from dying of infectious diseases. Your help will also feed and nurture these children emerging from pain of hunger.

Your small contribution will bring back smiles to the children relieved of severe hardship in their impoverished land.

Negative Framing

Without your help, plenty of young lives in Africa will be lost.



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Your indifference to help can greatly cost the lives of the children born in civil wars and devastating poverty. Without your donation and voluntary service, the children will not have the opportunity to be properly vaccinated and will most likely die of infectious diseases. Without your help, these children in chronic malnutrition will continue to suffer from pain of hunger.

Without your small contribution, these children will continue living their whole lives in severe hardship in their impoverished land.