

## ***Moderating Effects of Consumer Involvement and the Need for Cognition on Goal Framing***

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### **Abstract**

Goal framing effect refers to the finding that different ways of presenting the same communication content to a consumer tends to generate distinct levels of persuasion for the emitted message. This research is aimed at investigating the interaction between goal framing effect, consumer involvement and the Need for Cognition (NfC) on consumer decision making. Two experiments have been carried out to test the hypothesis that the level of persuasion for a promotional text elevates as consumer involvement increases, independent of the message frame or the NfC. Results showed that consumer's involvement seemed to draw the text's persuasion level up, as it increases, or down, as it decreases, independent of the text frame and the NfC.

*Keywords:* Judgment and decision making; Goal framing effect; Consumer involvement; Need for cognition; Communication.

### **Efeitos Moderadores do Envolvimento do Consumidor e do *Need for Cognition* no Efeito de Configuração de Objetivos**

#### **Resumo**

O efeito de configuração de objetivos refere-se ao achado de que diferentes formas de apresentação de um mesmo conteúdo de comunicação ao consumidor tendem a gerar níveis de persuasão distintos para a mensagem emitida. Essa pesquisa visou investigar a interação entre o efeito de configuração de objetivos, o envolvimento do consumidor e o *Need for Cognition* (NfC) na tomada de decisão do consumidor. Dois experimentos foram realizados para testar a hipótese de que o nível de persuasão de um texto promocional aumenta, conforme o envolvimento do consumidor cresce, independentemente da configuração da mensagem e do NfC. Os resultados mostraram que o envolvimento do consumidor pareceu elevar o nível de persuasão do texto, conforme aumenta, ou reduzi-lo, conforme diminui, de forma independente da configuração da mensagem e do NfC.

*Palavras-chave:* Julgamento e tomada de decisão; Efeito de configuração de objetivos; Envolvimento do consumidor; *Need for cognition*; Comunicação.

Goal framing effect refers to changes in persuasiveness levels for communication contents, facing different frames of the same message, which can be found, for example, in studies for credit card advertising (Ganzach & Karsahi, 1995; Ganzach, Weber, & Bem Or, 1997). In these studies, gain-framed advertising stresses the potential gains of using credit cards, while loss-framed messages exalt the losses by not using them in comparison to other payment methods.

Theoretical explanations for goal framing detection are commonly based on risk framing studies. Researchers

usually turn to risk framing theories, mainly Prospect Theory (PT), to explain their findings (Levin, Schneider, & Gaeth, 1998; see also Tversky & Kahneman, 1981, for the Asian Disease classic risk framing study).

Levin et al. (1998) and Meyerowitz and Chaiken (1987) agree that PT is not the best choice to explain the goal framing effect. Different from risk framing studies, the experimental situation in goal framing studies cannot be defined in terms of the relative risks. Besides that, in goal framing situations, it is impossible to identify perceived risk, considering that the decision tasks do not expose probabilities associated to the possible outcomes, as it would occur in risk framing.

Goal framing and risk framing studies have also produced different results. In goal framing situations, the loss-framed communications seem to be more persuasive than the gain-framed (the opposite from risk

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framing effects). Regarding the information process when judging and making decisions, alternative explanations seem to be more consistent to better understand the goal framing effect. Levin et al. (1998) and Meyerowitz and Chaiken (1987) agree that, in goal framing, there is a negative bias in the information process, when judging loss-framed messages, leading to a greater impact of negative information on people's judgments. Besides that, in goal framing studies, encoding negative information (loss-framed communications) seems to happen faster than it does for positive data (gain-framed communications) as result of an adaptative warning system coming into action.

Divergent findings from the usual goal framing results (loss-framed as the most persuasive) were found in studies for credit card advertising. Goal framing research for credit card communications has shown the gain frame as the most persuasive. However, these divergent results were found in artificial environments (Ganzach & Karsahi, 1995; Ganzach et al., 1997). The explanation for the higher persuasion level for the gain frame in credit card advertising studies, comparing to the loss frame, could be found on intuitive reactions (System 1<sup>2</sup>). When facing loss-framed communications, an adaptive system would act by producing negative labels, drawing persuasion levels down. Facing a gain frame, this adaptive system could produce a positive label and it could draw persuasion level for communication contents upwards. This mechanism, which can draw persuasion levels up and down according to positive and negative labeling for communication content, is called affect heuristic (Kahneman, 2003; Slovic, Finucane, Peters, & MacGregor, 2002).

Would intuition affect persuasion levels in goal framing studies, when service's relevance or importance to the consumer are being assessed? Would any personal tendency to engage in rational thinking affect intuition when evaluating a promotional text? Following these questions, two moderating variables seem to be strongly related to the activation of intuition in goal framing studies: (a) consumer involvement, and (b) Need for Cognition (NfC).

*Consumer Involvement.* Refers to the relevance or importance for the consumer of products or services (Mittal, 1995; Zaichkowsky, 1985). Laurent and Kapferer (1985), for example, argue that consumer involvement is related to personal interest in a product or service and its hedonistic and symbolic value for the consumer,

as well as risk probability and importance of its purchase. Other scholars consider involvement as a motivational state, or analyze it in a phenomenological perspective (Sridhar, 2007). Despite some diverse views, there has been an agreement that consumer involvement is a motivational force nonetheless (Mittal, 1989).

The Split Half Theory has been used as a theoretical framework to explain consumer involvement (Mittal, 1987), which states that the left and right halves of the human brain process information in different ways. Krugman (1965) had originally proposed a dichotomy for involvement (there being only low and high levels). Today, however, involvement is understood as a continuum with low and high levels in its two extremes (Laurent & Kapferer, 1985; Zaichkowsky, 1985).

High involved consumers tend to behave in a different way from low involved consumers. A high involved consumer tends to search for more information about the decision task (Beatty & Smith, 1987) and use more criteria for choice making (Mitchell, 1989). They also tend to know more information about the alternatives in decision tasks (Petty & Cacioppo, 1983; Maheswaran & Levy, 1990), processing the relevant information in detail (Chaiken, 1980) and forming more resistant attitudes towards products and services (Petty, Cacioppo, & Schumann, 1983).

If the consumer involvement is related to the intuition and both of them have an impact over the way that people evaluate products, services and communication material, would goal framing effect persist when evaluated in its relation to consumer involvement?

We predict that involvement would activate consumer's intuition, playing the role of a moderator for the goal framing effect. As proposed by Chaiken (1980), the high involved consumer tends to process the relevant information in detail, but only the relevant information. The idea of 'relevance' proposed by the authors would mean that people would not allocate any additional cognitive effort to judge situations that are already known, as it is would be irrelevant to spend time and energy in such situations. Furthermore, the high involved consumer tends to form more resistant attitudes towards products and services, which would make consumer evaluations of communication contents in goal framing studies dependent on involvement (Petty et al., 1983). Therefore, more involvement would lead to higher persuasion and lower involvement to a lesser persuasion, regarding the communication content. These hypotheses are based on the idea that intuition (based on consumer involvement) is more important or stronger than a message frame for persuasion.

Considering that consumer involvement is responsible for activating the intuitive system, this activation would not even be affected by the person's willingness

<sup>2</sup> System 1 operations tend to be fast, automatic, associative, effortless, implicit, emotionally charged, governed by habit and difficult to control and modify. System 2 operations tend to be slower, serial, effortful, consciously monitored, deliberately controlled, relatively flexible and rule governed (Stanovich & West, 2000).

to make complex evaluations. Saving time and cognitive effort in everyday life is an adaptive human method to deal with the complex world (Peters, Finucane, & MacGregor, 2005).

*Need for Cognition.* People's tendencies to engage themselves in demanding cognitive activities consist in a personality trait defined as the Need for Cognition (Cohen, Stotland, & Wolfe, 1955). Previous studies have suggested two different information process routes: central and peripheral (Cacioppo, Kao, Petty, & Rodriguez, 1986). The central route (due to high NfC) involves message content evaluation, as well as rational information evaluation (System 2 operation). The peripheral route's action (due to low NfC) tends to draw people's attention to irrelevant and superficial information in decision tasks, producing the framing effect (Simon, Fagley, & Halleran, 2004; Zhang & Buda, 1999), as it involves low cognitive effort (typical System 1 operation), the use of heuristics (Chatterjee, Heath, Milberg, & France, 2000), and higher influence from previous knowledge and environmental stimuli (Smith & Levin, 1996).

Therefore, we presume that intuition really is the key to understand goal framing effect, and that involvement would moderate the goal framing results. These premises lead us to the question: Does NfC interact with consumer involvement in the detection of goal framing effect for advertising contents?

We don't think so. Involvement seems to be more relevant for consumers, than any tendency to engage in rational thought about a particular object (NfC). The explanation for this hypothesis is that, when consumers have already had their first experiences, their judgments would be constructed based upon information from their previous contact with that type of object. Once this has been done, their evaluations would take merit from the experience (involvement) to save time and energy, despite their NfC level (Peters et al., 2005).

In order to investigate these predictions, two experiments have been carried out. The first one tested the interaction between preferred payment methods and goal framing effect in a sample of credit card owners and non-owners. The second experiment has investigated the moderator effect of the consumer involvement and NfC on goal framing effect in a credit card owners sample.

## Experiment 1

### Method

In a between subject design experiment, participants were split into two conditions and performed a decision task. In condition one, participants were exposed to a gain-framed promotional text on credit cards, and in condition two they were exposed to an equivalent text

in content, but now framed in losses. The dependent measure was participants' estimation on how persuaded they felt about the promotional text. They were also asked to choose their favorite payment methods among the given alternatives (cash, check, credit card and debit card).

### Participants

One hundred and fifty two southern Brazilian undergraduates (mean age=20.47;  $SD=3.16$ ) anonymously and voluntarily took part in the study. The sample was composed by both credit card owners and non-owners.

### Materials and Procedures

The instrument was a single credit card promotional text, framed in two ways – gains and losses. Both versions included information about safety, convenience, benefits, flexibility, insurance and the possibility of purchasing anywhere in the world with the credit card. The gains version stressed the advantages of using credit cards rather than cash or checks (eg. In using a credit card you gain in services that are not available when using checks!), while the loss frame stressed the disadvantages of not using credit cards instead of cash or checks (eg. In using cash or checks you lose in services that are only available when using a credit card!).

Respondents were given the task in an academic environment, which included reading a promotional text and answering how persuaded they were afterwards, using an 11-point Likert scale, anchored in zero (not at all persuaded), three (somewhat persuaded), seven (quite persuaded) and eleven (very persuaded). They also indicated their favorite payment method (cash, check, credit card and debit card). Participants were tested in one of two different conditions: gain frame ( $N=78$ ) and loss frame ( $N=74$ ).

## Results and Discussion

Results indicated that participant's persuasion levels for the gain-framed and the loss-framed promotional texts seemed to be affected by (a) the text frame, and (b) consumer's favorite payment method. Intuition seemed to be the explanation for the levels of persuasion of the promotional texts, as persuasion did not seem to be affected by the text content itself in the current study, but by the text frames and/or consumer's preferences on payment methods.

*Text Frame.* The gain-framed version of the promotional text produced a higher level of persuasion among consumers ( $M=6.5$ ,  $SD=2.53$ ), than that of the loss-framed text ( $M=5.43$ ,  $SD=2.53$ ) ( $t(150)=2.601$ ,  $p<0.01$ ). The gain frame seems to be a better choice to improve persuasion for credit card communications in an artificial environment, which seems to be a trend in

money-related decision tasks (Ganzach & Karsahi, 1995; Ganzach et al., 1997).

Intuition (System 1 and the affect heuristic) could be a coherent explanation for higher persuasion from the gain-framed text, comparing to the loss-framed text (Kahneman, 2003; Slovic et al., 2002). When facing money-related tasks, people would tend to judge loss-framed stimuli in an aversive way, meaning that they are less persuaded by the text, as in the finances world, “less in fact is less”.

*Consumer’s Preferences on Payment Methods.* Table 1 shows that, taking into consideration parti-

cipant’s favorite payment method (not just the fact of having a credit card), goal framing effect was not detected among preferential credit card users. Goal framing effect was detected only among those preferring other payment methods (cash, check, credit card and debit card) ( $t(124)=2.658, p<0.01$ ), as the gain-framed text seemed to be more persuasive than the loss-framed one. Taking a closer look into the responses of preferential payers of other methods, framing effect only occurred among cash preferred users ( $t(72)=2.242, p<0.05$ ), not among customers who prefer the use of either check or debit card.

Table 1  
*Mean Persuasion Level as a Function of Text Frame and Favorite Payment Methods*

<i>Preferred payment method</i>	<i>Text frame</i>	<i>N</i>	<i>Persuasion</i>	<i>SD</i>
Credit card	Gain	15	6.47	2.59
	Loss	11	6.09	2.77
Other methods	Gain	63	6.51	2.53
	Loss	63	5.32*	2.49

*Note.* \*  $p<0.01$ .

Data indicated that participants preferring to pay by credit card did not seem to be affected by the text frames, as both the gain and the loss frames generated equivalent persuasion levels ( $p>0.05$ ). Consumers preferring the use of credit cards seemed to use intuition and to attribute positive labels to the promotional text (independent of the text frame) as an influence from their preferences on payment method (Kahneman, 2003; Slovic et al., 2002).

For those who are cash preferred payers, the text frame did affect the persuasion levels. Cash payers seemed to be more sensitive to the message framing, which can be due to their low familiarity of using other methods rather than cash. Thus, the text frame would have an impact over the persuasion level for a promotional text only when facing consumers with no or poor experience in using credit cards (cash preferred payers, in this study). It is still an intuitive judgment, as it seemed to be based on the text frame instead of the text content (the gain frame appeared to be more persuasive than the loss frame) (Kahneman, 2003; Slovic et al., 2002). Positive and negative labeling when evaluating the promotional text still seemed to be in use by the consumer in order to simplify their judgments on how persuasive the text is, but, in this case, being dependent on text frame (positive labels would be in use due to the gain frame, and negative labels, due to the loss frame).

Is the preference of paying with credit cards the key to understand why credit card preferred payers were not

affected by the text frames? Does it matter how engaged in cognitive activities (NfC) credit card users are when evaluating communication contents? Experiment 2 was designed to try to explain these questions, using a sample composed exclusively by credit card owners (not a mixed sample of credit card owners and non-owners, as in Experiment 1). In order to look for the answers to these questions, ‘consumer involvement’ will take the place of ‘favorite payment methods’ as a more refined way of evaluating ‘preferences’.

**Experiment 2**

**Method**

In a between subject design experiment, participants were split into two different conditions, which follow the same conditions as in Experiment 1 (gain and loss frames). The dependent measure, as in the first study, was participants’ estimation on how persuaded they felt after reading a promotional text. They were also asked to fill in scales on consumer involvement with credit card services (low, medium, high) and NfC (low, medium, high).

**Participants**

Two hundred and six southern Brazilian undergraduates anonymously and voluntarily took part in the study (mean age: 20.68; *SD*: 4.54). The sample was composed exclusively by credit card owners.

## Materials and Procedures

Credit card promotional texts described in Experiment 1 were used here, as well as the Consumer Involvement for Credit Card Services Scale<sup>3</sup> (26 items, 5-point concordance Likert scale) and the Need for Cognition scale (18 items, 9-point concordance Likert scale<sup>4</sup>).

The task was given in an academic environment. Respondents were asked to read a promotional text and answer how persuaded they felt afterwards, using an 11-point Likert scale. They were also asked to fill in the Consumer Involvement for Credit Card Services Scale and the NfC scale. The undergraduates were randomly assigned to two different conditions: the gain-framed text ( $N=101$ ) and the loss-framed text versions ( $N=105$ ).

## Results and Discussion

The persuasion level of the promotional texts seemed to be affected by (a) the consumer involvement level independently from (b) the Need for Cognition in this study. As involvement level decreased, the persuasion level for the promotional text also decreased. The text frame impacted the persuasion level of the promotional texts only among high involved consumers, as the gain-framed text produced a higher level of persuasion compared to the loss-framed text.

*Consumer Involvement.* We have detected (a) the effect of the consumer involvement in the level of persuasion of the promotional texts, and (b) that this result was qualified by the interaction between both the involvement scale and text frame.

(a) A main effect of the consumer involvement in the persuasion level of the promotional texts was detected ( $F(2,153)=10.91, p<0.001$ ). Low persuasion levels, independently of the text frame, were shown among low involved consumers ( $M=6.25, SD=2.13$ ) in comparison to the other groups, the medium ( $M=7.39, SD=1.64$ ) and the high involved consumers ( $M=8.1, SD=1.57$ ) ( $p_s<0.05$ ).

The lower persuasion detected among low involved consumers suggests that consumers are more-so persuaded by the texts not because of their frames, but because of their involvement with their credit card services. Intuitive judgments (Kahneman, 2003) based upon previous pleasant experiences with their credit card (manifested with higher involvement) seemed to draw persuasion levels upwards. The affect heuristic (Kahneman, 2003; Slovic et al., 2002) could now be in action because of the consumer experience, as persuasion levels for the text seemed to be related to the involvement levels.

(b) Table 2 shows an interaction between the involvement level and text frame ( $F(2,153)=3.25, p<0.05$ ). Highly involved consumers were persuaded more-so by the gain-framed text as opposed to the loss-framed ( $p<0.05$ ).

Table 2  
*Mean Persuasion Level as a Function of Consumer Involvement and Text Frame*

<i>Involvement Groups</i>	<i>Text Frame</i>	<i>N</i>	<i>Persuasion</i>	<i>SD</i>
Low involved consumers	Gain	21	6.38	2.04
	Loss	15	6.07	2.31
Medium involved consumers	Gain	39	7.1	1.8
	Loss	40	7.68	1.44
Highly involved consumers	Gain	20	8.65*	1.27
	Loss	19	7.53	1.68

Note. \*  $p<0.05$ .

It is important to highlight that a linear regression detected the interaction between consumer involvement and persuasiveness (independent of text's frame) related to the promotional texts. Consumer involvement explains 16% of the persuasion related to the promotional text, which means that as involvement

increases the persuasions related to the text will also elevate ( $b=2.02$ ). An ANOVA test indicates that the results are trustworthy ( $F(1,204)=39.24, p<0.001$ ).

Why were the highly involved consumers more persuaded by the gain frame rather than the loss frame? One possible explanation for this result could be the affect heuristic (Kahneman, 2003; Slovic et al., 2002). Among highly involved consumers with credit card services, the intuitive system tends to produce positive labels for the promotional text when facing a gain-framed communication. The goal framing effect was

<sup>3</sup> Developed by the authors for the Brazilian reality.

<sup>4</sup> Originally developed by Cacioppo, Petty, and Kao (1984), and adapted for the Brazilian reality by Deliza, Rosenthal, and Costa (2003).

detected among highly involved consumers as the persuasion level for the loss-framed text version was lower than that for the gain-framed text, even though both persuasion levels were high comparing to the other two involvement groups ( $p < 0.05$ ).

*The Need for Cognition.* Even for those with high NfC scores, the persuasion level seemed to be affected only by their involvement level. A linear regression analysis did not detect an association between the NfC and the persuasiveness related to the promotional texts ( $R = 0.034$ ,  $p > 0.05$ ). This data seems to ratify that consumers' previous experiences with credit card services (involvement level) are more important than any tendency to engage themselves into processing information in detail (Chaiken, 1980). Involvement could be responsible for creating resistant attitudes towards credit card services as even high-leveled NfC participants do not seem to be persuaded by the promotional texts, but by their own preferences (involvement) (Petty et al., 1983).

Despite the consumer's NfC level, involvement could also induce the peripheral information process when reading the promotional texts, as the persuasion for the communication materials seemed to be dependent on involvement, not on NfC (Cacioppo et al., 1986). The peripheral information process involves high influence from previous knowledge, which could mean that people's attention (and the persuasion level for the text) was drawn by their involvement levels, even among those with high NfC scores (Smith & Levin, 1996).

### General Discussion

Does consumer's previous experience affect goal framing effect? We believe that the data from involvement and the NfC provided arguments that would support that it does.

Goal framing effect was detected for the promotional text when evaluating a mixed population of credit card owners and non-owners (Experiment 1). Intuition would act when reading the promotional texts, producing the goal framing effect. The effect seems to be due to attributing positive or negative labels to the text and so drawing persuasion up (when facing the gain-framed text) and down (for the loss-framed text) accordingly.

In Experiment 1, framing seemed to be affected by consumer's preference of payment method as the phenomenon was not detected among those preferring to pay by credit card. For those who prefer credit card as their payment method, the intuition seems to draw persuasion in the direction of their preference independently of the text frame.

Data on consumer involvement with credit card services and its interaction with goal framing effect was crucial to define the proposal that intuition is guided by

consumers' previous experiences (Experiment 2). Low involved consumers tended to be less persuaded by the text than the other groups (medium and highly involved consumers). Once more, persuasion seemed to depend more on involvement with credit card services than promotional texts, whichever frame it uses to emit the message.

The effect from involvement over persuasion would also be due to the labeling process of the promotional text. Positive or negative labels would be attributed to the communication material, due to high or low involvement, accordingly. Thus, consumer's persuasion would be drawn up when they are highly involved with credit card services (as a result of the positive labeling process) and drawn down for low involved consumers (negative labeling).

The NfC, even being a personality trait, did not seem an influence strong enough to play the role of a mediator in consumer's persuasion level. Intuition is adaptive, as it saves time and energy. Intuition, not rational evaluations by those with high NfC scores, could be the key to persuasion for those consumers already involved with a particular product or service.

Consumer involvement seems to be more related to persuasion than message framing. It seems that the investment in providing positive experiences for consumers could be more relevant than a communication message, regardless of the frame used. Consumer experience could therefore be a key to persuasion, as the message content in our studies never seemed to be the most relevant factor taken into consideration for the decision makers when they were exposed to a promotional text. The persuasion levels could be affected by other factors rather than text content, such as the message framing or consumer involvement, and in all cases their previous experience seemed to be more relevant to guide their judgments.

When relating consumer involvement and goal framing effect, it appears that more involvement would mean less need to worry about a given communication message. In this manner, persuasion is a process that seems to have a greater impact by consumer involvement rather than the message framing, meaning a heightened realization from intuitive evaluations, instead of reasoning. The new approach to investigate goal framing effect on consumer behavior, on its relation to involvement, looks ecologically accurate and more-so relevant to make the academic world and the real consumer market closer.

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