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VISUAL ART AND REGULATORY FIT MESSAGES ON CONSUMER EVALUATIONS
Arte visual e foco regulatório na avaliação dos consumidores
Arte visual y mensaje de ajuste regulatorio en evaluaciones de consumidores

ABSTRACT
In this study, we demonstrate that the art infusion effect, in which the presence of visual art causes a positive impact on consumers’ perceptions of products and advertising messages, might have a moderation effect on regulatory fit and non-fit messages. We investigate the impact of visual art on advertisement evaluations in regulatory (non-) fit conditions. Regulatory focus theory suggests that consumers rely on their motivational focus (prevention vs. promotion) for their evaluations and decisions. Usually, consumers prefer products that fit with their personal motivational focus. In the present study, the results of three experiments indicate that using visual art with a promotion or prevention fit message is recommended, while non-art images increase message persuasiveness when non-fit messages are presented. Therefore, not all information compatible with the consumer’s motivational focus are best evaluated. When non-art images are presented, non-fit messages might be more persuasive.

KEYWORDS | Visual art, regulatory fit, persuasiveness, advertising messages, willingness to buy.

RESUMO
Neste artigo, demonstramos que o fenômeno da infusão da arte, no qual a presença de arte visual influencia positivamente a percepção dos consumidores sobre produtos e mensagens de anúncios, tem um efeito moderador sobre as mensagens com ajuste e não ajuste regulatório. A teoria do foco regulatório sugere que os consumidores se baseiam no seu foco motivacional (prevenção vs. promoção) para fazer suas avaliações e decisões. Normalmente, os consumidores preferem produtos que se ajustam ao seu foco motivacional. No presente estudo, três experimentos indicam que é melhor usar arte visual com mensagens de ajuste, enquanto imagens não artísticas aumentam a persuasão do anúncio quando são apresentadas em condições de não ajuste entre a mensagem e o foco motivacional do indivíduo. Portanto, nem todas as informações compatíveis com o foco motivacional do consumidor são as mais bem avaliadas. Quando imagens não artísticas são apresentadas, mensagens de não ajuste podem ser mais persuasivas.

PALAVRAS-CHAVE | Arte visual, ajuste regulatório, persuasão, mensagens de anúncios, propensão de compra.

RESUMEN
En este estudio, demostramos que el efecto de la inclusión de arte, donde la presencia de arte visual provoca un impacto positivo en la percepción de los consumidores de productos y mensajes publicitarios, podría tener un efecto moderador en forma reglamentaria y mensajes publicitarios. Investigamos el impacto del arte visual en las evaluaciones de publicidad en las condiciones de regulación (o no). La teoría del enfoque regulatorio sugiere que los consumidores confían en su enfoque motivacional (prevención frente a promoción) para sus evaluaciones y decisiones. Por lo general, los consumidores prefieren productos que se ajustan a su enfoque personal de motivación. En el presente estudio, los resultados de tres experimentos indican que se recomienda el uso del arte visual para las promociones o mensajes de prevención, mientras que las imágenes incrementan el mensaje persuasivo cuando se presentan mensajes no aptos. Por lo tanto, no toda la información compatible con el enfoque motivacional es mejor evaluada. Cuando se presentan imágenes no artísticas, los mensajes no aptos pueden ser más persuasivos.

PALABRAS CLAVE | Arte visual, ajuste regulatorio, capacidad de persuasión, mensajes publicitarios, disposición a comprar.
INTRODUCTION

The presence of visual art is often used to promote unrelated products for consumers and is a common practice in the market. An example is the advertisement of Flor de Esgueva, a Spanish sheep cheese manufacturer from the Nestlé Group, in which the product is inserted in paintings by famous Spanish artists along with the phrase a masterpiece always has the stroke of a genius. The use of art with functional and market purposes started in the late nineteenth century with painter Toulouse-Lautrec, who was the pioneer in the application of artistic illustrations in advertising posters (Gombrich, 1999).

Recent research has suggested that the status of art could be used to enhance product attitude and purchase intention, given the perceptions of luxury associated with art’s specialness, triggering an art infusion effect (Hagtvedt & Patrick, 2008, 2011; Huettl & Gierl, 2012; Kim, Ko, & Lee, 2012). In addition to the contribution of art infusion to product evaluation, there are a few concerns about the interaction between art images and advertising arguments. One avenue of research has focused on how advertisements’ verbal and visual components affects consumers’ evaluation (Wyer, Hung, & Jiang, 2008) and the role of affects and sensory processes in social comprehension and judgment (Bagozzi, 2008). Other research has examined the visual preference heuristic (Townsend & Kahn, 2014), according to which individuals prefer visual to verbal information when many options are available in the choice process. However, little empirical effort has been made to understand how visual art and verbal arguments interact. We use regulatory fit theory (RFT) as a framework for understanding when visual art influences positive advertising evaluations and when non-art images might be better than visual art in terms of message effectiveness.

In doing so, we show that visual art is not always as persuasive as non-art images. When verbal information is consistent with consumers’ regulatory orientation, visual art has a positive impact on ad persuasiveness. We suggest that regulatory fit information will change how consumers will use art and non-art images to evaluate message persuasiveness. Regulatory fit messages make consumers feel more comfortable with ad messages that have a content aligned with their own regulatory focus, because of the feeling right effect (Avnet, Laufer, & Higgins, 2013; Higgins & Scholer, 2009; Motyka et al., 2014). This effect increases processing fluency, which facilitates the processing of more global and abstract information. Since art images also increase the positive assessment of the ad, consumers will be more persuaded by visual art images when they are presented in regulatory fit conditions. On the other hand, non-fit messages are more difficult to process because they create a perceptual disfluency (Pham, Lee, & Stephen, 2012). Therefore, consumers might rely on the ad’s visual information. Since non-art images are easier and more concrete to process, non-fit ads will benefit from non-art images.

Although visual art is widespread in advertising campaigns, its interaction with other advertising information is not clearly understood and has not been systematically studied. In the present study, we considered whether regulatory fit information, which is a kind of verbal information, is consistent with visual art presentation. In contrast with most research on regulatory fit and visual art, which have separately predicted positive effects for these two elements on consumers’ evaluations, we predict that their interaction might show different results. As such, this study contributes to the research stream focused on the effects of advertisements’ verbal and visual elements on consumer evaluation, revealing visual art presentation to be suboptimal for non-fit messages, but positive for regulatory fit messages.

THE ART INFUSION EFFECT

The association of art with luxury and exclusiveness dates back to the Roman Empire, and was consolidated by the manufacturing bourgeoisie of the eighteenth century, who became the major consumers of paintings and other forms of art. Therefore, art differs from other stimuli because of this historical association with prestige and luxury values. At some level, any good that is consumed can be analyzed through the lens of aesthetics.

In fact, there is a difference between the perception of visual art and common visual stimuli, but this issue still lacks explanation. Recent research on art in consumer contexts has identified a phenomenon called the Art Infusion Effect (Hagtvedt & Patrick, 2008), according to which art has the ability to imbue unrelated objects with a sense of luxury.

Using emotions as a dimension of analysis – combined with cognition – Hagtvedt, Hagtvedt, and Patrick (2008) suggested a model of perception and evaluation specifically for visual art. Thus, research in applied art increased its focus on the specific factors of aesthetics judgment (Hagtvedt, Hagtvedt, & Patrick, 2008; Joy & Sherry, 2003), testing mainly the interaction of colors with shapes, facial expressions, and other characteristics.

Consumers evaluated products more positively when they were associated with art images in packaging, advertisement, or in themselves compared to when they were related to non-art images picturing the same content, although they were never interpreted as art by the consumers (e.g. a photo of a woman with a pearl earring vs. a painting of a woman with a pearl earring) (Hagtvedt & Patrick, 2008). Therefore, recognizing a picture as art
alone suffices to impact one’s buying behavior, i.e., it triggers a positive effect by itself. Appearing in a seminal study, the original art infusion model was simple and tested mainly the impact the presence of art could have on product evaluation, mediated by the luxury perception the artwork could bring. Nevertheless, these results indicate that art images are more persuasive than non-art images mainly because art adds a special glamour to the product.

Art infusion was also tested in other fields than advertising. For example, Kim, Ko, and Lee (2012) investigated the art infusion effect in the context of fashion goods. Their study focused on the impact of visual art on the products (handbags, scarves, and t-shirts) of a little-known brand in order to find whether art infusion could positively affect brand image perception. The authors noticed that luxury perception and brand image varied according to the presence of art, i.e., products associated with art had a more positive evaluation than non-art products.

Art was also found to increase positive response to brand extensions (Hagtvedt & Patrick, 2008), such that when brands were paired with art, consumers perceived more positively both category fit and brand extension. On the other hand, Huettl and Gierl (2012) found that the effect of art infusion was significant only for hedonic products. The authors also noticed that the application of art resulted in conflicting effects. They showed that, although using visual art increased the perceived luxury associated with the product (which positively affects the willingness to buy), it also increased the perception that the price negatively affected willingness to buy. Thus, regarding utilitarian products, although they were evaluated more positively in the presence of visual art, the perception of price increase triggered a negative evaluation in terms of purchase intention.

Although there is evidence in the literature that art infusion positively affects the evaluation of products, brands, and advertising (Crader & Zaichkowsky, 2007; Hagtvedt, Hagtvedt, & Patrick, 2008), it should be noted that as a product is presented in an advertising context, consumers are also exposed to the message arguments promoting it. Interestingly, the aforementioned research describes how artwork influences consumer behavior, however, most of that research is based on the use of art images and does not consider the joint effect of art image and the message frame. For instance, Hoegg, Alba, and Dahl (2010) suggested that little empirical work had been done to understand how visual pieces and verbal information conflicts are reconciled.

**Regulatory Focus Theory**

There is a basic process in goal engagement known as Regulatory Focus Theory (Higgins, 1997). According to it, people have different regulatory guidelines for the pursuit of their goals. Moreover, there are a few mechanisms operating in the motivational process of pursuing goals, such as the mechanisms of promotion and prevention (Aaker & Lee, 2001).

The promotion focus involves an attempt to achieve positive results, and it seeks to minimize the discrepancies between an actual condition and a desired one. Promotion-focused individuals understand success and failure as the achievement and non-achievement of positive results, respectively (Higgins, 2002). The promotion focus is responsible for regulating nutrition needs (Scholer & Higgins, 2010). Thus, the promotion-focused individual is concerned with growth, advance, and achievement, being guided by ideals, wishes, and aspirations.

The prevention focus is characterized by sensitivity to negative results and the attempt to avoid them. For a prevention-focused person, success and failure are viewed as the absence or presence of negative results, respectively (Higgins, 2002). The prevention focus aims at regulating safety needs. Prevention-focused people are concerned with duties and responsibilities (Scholer & Higgins, 2010). Moreover, the prevention-focused use negative points of reference to evaluate their success, using the absence and the presence of negative results to calculate this balance.

Regulatory focus theory is being increasingly used to explain a range of consuming phenomena (psychological and behavioral processes). The relationship and the impact of regulatory focus on consumer behavior have been studied in recent years and have made relevant contributions to assess how consumers define their consumption goals and motivations. Aaker and Lee (2001) argue that, depending on the predominant regulatory focus, individuals will react differently to marketing advertising information and communication arguments.

In the last few years, many studies have examined the impact of regulatory focus on consumer behavior. These studies demonstrate how regulatory focus manipulation directly affects consumers’ preferences and evaluations towards products (Dholakia, Gopinath, Bagozzi, & Natarajan, 2006; Mogilner, Aaker, & Pennington, 2008; Werth & Foerster, 2007), as well as persuasion (Lee & Aaker, 2004), ad message evaluation (Florack, Ineichen, & Bieri, 2009; Pham & Avnet, 2009), interpretation and attitudes (Lee, Keller, & Sterntthal, 2010), among other aspects.

Therefore, in the present study, we adopt the viewpoint of regulatory fit and non-fit to analyze the relationship between the individual’s regulatory focus and his subsequent consumption evaluation.
Regulatory fit and non-fit

Regulatory fit is the congruence between an individual’s regulatory focus (i.e., a promotion or prevention focus), and his way of achieving goals. The congruence between regulatory focus and goal engagement affects evaluations, perceptions, and behavior (Higgins, 1997, 2012).

In a broader definition, the concept of fit relates the individual’s regulatory focus and his means to pursue an activity (Higgins, 2002). When one makes a decision using a strategy consistent with one’s actual motivational orientation, there is an experience of regulatory fit, which will influence subsequent decisions (Avnet, Laufer, & Higgins, 2013; Higgins, 2012).

Higgins (2012) argues that, in terms of regulatory fit, people’s reviews about past decisions or the pursuit of future goals will be more positive – like the value assigned to products selected under these conditions – because the fit increases the perception that they have used the correct approach in their decision-making. A fundamental premise of regulatory focus theory is that individuals are more concerned with information that is relevant to their regulatory focus. Therefore, attributes compatible with such focus are more likely to be positively evaluated and considered most relevant in decision processes (Chernev, 2004).

Several studies have shown that consumers are more influenced by messages in situations of regulatory fit (Higgins & Scholer, 2009). For instance, respondents who were presented with messages that fit their regulatory orientation improved their healthy eating behavior (Cesario & Higgins, 2008) and increased their practice of sports (Latimer et al., 2008).

Such an effect can be explained by the experience of feeling right (Appelt, Zou, & Higgins, 2010; Avnet, Pham, & Stephen, 2012; Pham & Avnet, 2009; Pham et al., 2012). In this experience, the individual notices certain messages as the most correct ones. Individuals in a state of promotion feel that promotion-focused messages are more congruent because they use this perception of promotion as information to evaluate messages. The same holds for prevention-focused individuals in relation to messages containing prevention arguments. Therefore, people feel regulatory fit when their goal motivation is supported by major strategies of goal pursuit, and non-fit when their motivation is not aligned with major strategies of goal pursuit.

Although many studies have supported this regulatory congruence experience (Aaker & Lee 2001; Avnet et al., 2012), it is still not clear to what extent this principle interacts with the visual aspects of ad messages. We propose that message persuasiveness will be more positive when the art image presented is combined with a regulatory fit message frame. The art infusion has a positive effect on consumers’ both product and advertising perceptions (Hagtvedt & Patrick, 2008, 2011; Huettl & Gierl, 2012; Kim et al., 2012).

When people experience regulatory fit, they feel right about what they are doing (Avnet et al., 2012; Pham et al., 2012). Since art triggers a favorable assessment, the presence of art would be a congruent stimulus to regulatory fit conditions, increasing the ‘feeling right’ experience. Thus, the perception of art’s specialness that is associated with visual artwork (Hagtvedt & Patrick, 2008, 2011) is consistent with regulatory fit, and the experience of feeling right increases the message’s persuasion.

Lacey et al. (2011) found that individuals had a neural response that activated their reward circuit when they saw an art image; the same did not occur with non-art images. Therefore, artwork might also increase the feeling right effect by activating the brain’s reward circuit.

The feeling right effect is an abstract perception per se, which might be more associated with a global, instead of local processing style. A global processing style focuses on abstract information and superordinate understanding, while a local processing style is associated with focusing on details and on concrete information (Dijkstra, Pligt, & Kleef, 2013; Forster, 2009; Forster & Dannenberg, 2010). Since an artwork requires mainly abstract interpretation, it tends to be more associated with a global processing style, which is congruent with the fit (vs. nonfit) message.

On the other hand, non-art images are more associated with a local processing style because they are a more concrete source of information. Non-fit messages are relatively difficult to process (Pham et al., 2012) because they create a perceptual disfluency. Since art images are more abstract than non-art images, the processing difficulty might increase, thus requiring a more local processing style. Because of its perceptual disfluency, abstract art does not help consumers to minimize doubts (Dunn & Zhu, 2013), thus decreasing positive evaluations. Recent studies proposed that non-fit conditions requires more information processing (Harding, Lisjak, & Lee, 2009; Lee 2009; Tam & Spaniol, 2012). Therefore, non-art images would be an important source of information because they are easier to interpret. Consumers would feel more comfortable if they see a non-art (vs. art) image when they are in a non-fit condition, as this would make information easier to process, thus increasing the positive effect on reviews for non-fit ad messages.

Thus, an image considered to be art (e.g., a painting) is a congruent stimulus for regulatory fit (vs. non-fit), but a photograph (considered to be less artistic than the painting) is more suitable for processing under regulatory non-fit (vs. fit) condition, thus increasing message persuasiveness. Therefore, it follows that:
EXPERIMENT 1

The goal of experiment 1 was to demonstrate the moderator effect of regulatory fit (vs. non-fit) in the relationship between art infusion and consumers’ evaluation of advertising messages. Respondents in experiment 1 did not participate again in experiments 2 and 3.

Participants and design

One hundred forty-five undergraduate students (54.5% female, mean age: 22) participated in this experiment in exchange for course credit. The design of the study was a 2 (type of regulatory fit: fit vs. non-fit) x 2 (art vs. non-art) between-subject design with respondents randomly allocated to one of the four conditions. A variable type of fit (fit vs. non-fit) was created by combining the priming of regulatory focus and the focus of the message, following the same procedure adopted in Higgins (2012) and Harding, Lisjak and Lee (2009).

In this experiment, all participants were exposed to the promotion priming. Therefore, those exposed to the prevention ad message were in a non-fit condition, whereas those exposed to the promotion ad message were allocated in a fit condition.

Procedure

The experiment was computer-based, designed in Qualtrics, and employed a two-independent-study cover story. In the first study, participants received the promotion focus manipulation. Respondents were told to write their main hopes and aspirations regarding their academic and professional future and then list at least five strategies to help achieve their goals (Dholakia, Gopinath, Bagozzi, & Natarajan, 2006). The theme of the essay was success in life is determined by action, not by inertia (Higgins, 1997).

Respondents were then invited to participate in a second unrelated study about evaluation of advertising messages for the Welch’s Grape Juice. The prevention and promotion messages were adapted from the study of Aaker and Lee (2001). Participants in the promotion condition read about promotion-focused benefits related to energy creation: Welch’s Purple Grape Juice has three times more naturally occurring Vitamin C and iron than other juices, which meets the very highest standards for great taste and energy. Welch’s: more Vitamin C, more energy and enjoyment. The prevention-framed advantages were related to cancer and heart disease prevention: Welch’s Purple Grape Juice has three times more antioxidants than other juices, which reduces the risk of some cancers and heart disease. Welch’s: more antioxidants, more prevention.

The visual ad also included the art infusion manipulation. The art image was a painting by Vincent van Gogh, named “Still Life with Grapes”, and the non-art image was a photograph of a portion of grapes. We followed the Hagtvedt and Patrick (2008) definition of visual art, with painting and photo as the art and non-art conditions respectively. We pretested these images with 28 undergraduate students (50% female, mean age: 23.2). Participants were told to evaluate the images and describe whether each image was an artwork (1 = not at all and 7 = definitely). Participants also indicated the extent to which they agreed that the images were very similar (1 = disagree and 7 = agree). Results showed that the art image was considered as art to a greater degree than the nonart picture (Mart = 6.14 vs. Mnon-art = 3.68; F(1, 27) = 4.48, p < 0.05), besides the fact that they were perceived as similar in content (Mart = 4.7 vs. Mnon-art = 4.05; F(1, 27) = 1.00, p = 0.35). The final versions of the four advertising conditions are presented in Figure 1.

After reading the ad, respondents evaluated on a seven-point Likert scale how much they considered the message as persuasive (“how much have you considered this message as persuasive?”). This question served as the dependent variable. Participants also assessed the advertising on four items using semantic differential scales, which were 1 = unfavorable; 7 = favorable; 1 = negative; 7 = positive; 1 = bad; 7 = good; 1 = unpleasant; 7 = pleasant; and 1 = dislike very much; 7 = like very much. We combined the items to form an ad-evaluation index (α = 0.88). This measure, also based on Hagtvedt and Patrick (2008), served as a manipulation check for the art infusion effect.

Respondents were then told to report the degree to which their thoughts were focused on the promotion benefits (1= I thought about the energy and the vitamins) and prevention benefits (5= I thought about the antioxidants; see Aaker & Lee, 2001). This question served as a manipulation check for the regulatory focus of the ad message. Participants also rated on seven-point scales their impressions about the product as prestigious, attractive, luxurious, and high-class (Hagtvedt & Patrick, 2008). We combined these items to form a perception of luxury index (α = 0.89).

Finally, a question was used to verify whether respondents had noticed the relationship between the two studies (hypothesis guessing check). None of the respondents associated the two studies or guessed the purpose of the research. Then they were thanked and debriefed.
Figure 1. Stimuli for experiments 1 and 2

**A:** Product with art image and prevention message

![Welch's Purple Grape Juice](image1)

Welch’s Purple Grape Juice has three times more antioxidants than other juices, which reduces the risk of some cancers and heart disease.

*Welch’s: more antioxidants, more prevention.*

**B:** Product with non-art image and prevention message

![Welch's Purple Grape Juice](image2)

Welch’s Purple Grape Juice has three times more antioxidants than other juices, which reduces the risk of some cancers and heart disease.

*Welch’s: more antioxidants, more prevention.*

**C:** Product with art image and promotion message

![Welch's Purple Grape Juice](image3)

Welch’s Purple Grape Juice has three times the naturally occurring vitamin C and iron than other juices, which meets the very highest standards for great taste and energy.

*Welch’s: more Vitamin C, more energy and enjoyment.*

**D:** Product with non-art image and promotion message

![Welch's Purple Grape Juice](image4)

Welch’s Purple Grape Juice has three times the naturally occurring vitamin C and iron than other juices, which meets the very highest standards for great taste and energy.

*Welch’s: more Vitamin C, more energy and enjoyment.*
Manipulation checks

The promotion regulatory focus manipulation check was performed according to Dholakia et al. (2006), in a qualitative way. Statements of respondents in promotion condition should be directed to achieve positive results. No case needed to be removed from the sample for this reason.

To check for the impact of message frame manipulation, we conducted an ANOVA with message frame and art infusion as the two factors, and post-message thought as the dependent variable. As expected, a main effect of message frame was observed. Participants reported thinking more about prevention benefits when exposed to a prevention focus ad (M = 4.18; SD = 0.84) and more about the promotion benefits when exposed to a promotion focus ad (M = 1.89; SD = 1.04; F(1, 144) = 216.28, p < 0.001, η² = 0.60). No interaction or main effects of art infusion were observed (Fs < 1).

A one-way ANOVA on the ad-evaluation index demonstrated that the art image had a more positive impact on product evaluations compared to the non-art image (M_art = 5.32 versus M_non-art = 3.27; F(1, 144) = 8.22, p < 0.05, η² = 0.17), demonstrating the art infusion effect.

Perceived message persuasiveness

We predicted regulatory fit to impact persuasiveness so that, in the non-art image condition, the ad persuasiveness should be more positive in the non-fit condition, compared to the fit condition. On the other hand, with the art-infusion image, persuasiveness should be more positive in the fit condition than in the non-fit condition. Thus, we predicted a regulatory (non)fit versus (non) art infusion interaction.

A 2 (fit vs. non-fit) x 2 (art vs. non-art) ANCOVA revealed no significant main effects for art infusion (F(1, 140) = 0.269, p = 0.605) or regulatory fit (F(1, 140) = 0.756, p = 0.385) on ad persuasiveness. The predicted interaction effect between regulatory (non)fit and (non)art (F(1, 140) = 5.022, p = 0.027, η² = 0.035, Graphic 1), was statistically significant.

Hagtvedt and Patrick (2008) predicted that perceptions of luxury mediated the presence of art in product evaluations. Therefore, we included this construct as a covariate. As expected, results showed a main effect of perceptions of luxury on persuasiveness (F(1, 140) = 32.98, p = 0.000, η² = 0.19).

Planned contrast analyses showed that under nonart condition, the ad messages were more persuasive in the regulatory non-fit condition (M = 4.49; SD = 1.59) than in the fit condition (M = 3.68; SD = 1.7) (F(1, 140) = 4.94, p < 0.05, η² = 0.034). Under art-included condition, there was no difference between fit (M = 4.03; S.D = 1.32) and non-fit (M = 3.74; S.D = 1.84) (F(1, 140) = 0.920, p = 0.33) conditions, although in both cases the means are in the direction of the hypothesis.

DISCUSSION

The results of experiment 1 provide initial support for hypothesis 1. When participants were in a non-fit condition, they were more persuaded by the non-art advertising, but the fit condition increased the persuasiveness of the art ad.

Persuasiveness is an important driver of consumers’ beliefs (Campbell & Kirmani, 2008). In some situations, consumers elaborate on the arguments made in the advertising based on their own feelings and on the knowledge about the communicated issue. Therefore, message persuasiveness is one of the most important constructs to determine the message’s impact. Persuasiveness is driven by consumers’ motivation as a consequence of finding information that is consistent or
inconsistent with their perceptions (Campbell & Kirmani, 2008; Harding et al., 2009). In our study, this perception is based on their regulatory concerns. Therefore, the goal of experiment 2 is to address these issues and to replicate the findings of experiment 1 for the prevention regulatory fit.

**EXPERIMENT 2**

The main purpose of experiment 2 is to replicate the findings obtained in the first study, but in a prevention fit vs. non-fit context.

**Participants and design**

One hundred twenty-seven undergraduate students (52% male, mean age: 25) participated in this experiment in exchange for course credit. The design of the study was a 2 (type of regulatory fit: fit vs. non-fit) x 2 (art vs. non-art) between-subject design with respondents randomly allocated to one of the four conditions. Similarly to experiment 1, a variable type of fit (fit vs. non-fit) was created by combining the priming of regulatory focus and the message focus, following the same procedure adopted in Higgins (2012) and Harding et al. (2009).

In this experiment, however, all participants were exposed to the prevention priming. Therefore, those exposed to the prevention ad message were in a fit condition, whereas those exposed to the promotion ad message were allocated in a non-fit condition.

**Procedure**

Experiment 2 followed the same basic procedures of experiment 1, except for the manipulation regulatory focus manipulation. Participants were asked to write about their main duties and obligations involving their academic and professional future, and then list at least five strategies that they could use to prevent something to stop them from executing those strategies (Dholakia et al., 2006). Then they were asked to prepare an essay on “prevention is the best way to prevent trouble”

Then the respondents were invited to participate in a second unrelated study about evaluation of advertising messages for the Welch’s Grape Juice. The prevention and promotion messages were the same as those presented in study 1. After reading the ad, respondents evaluated the message persuasiveness on a seven-point Likert scale (1= not at all, 7= very persuasive), which also served as the dependent variable measure.

Participants also evaluated the advertising (α = 0.87) and perceptions of luxury (α = 0.88), based on the same four items included in study 1. All other measures followed the procedures of study 1. None of the respondents associated the two studies or guessed the purpose of the research. They were, then, thanked and debriefed.

**Manipulation checks**

The prevention regulatory focus manipulation check was performed according to Dholakia et al. (2006), in a qualitative way. Statements of respondents in prevention condition should be directed to avoid negative results. It was not necessary to remove any case from the sample.

The message frame manipulation check indicated only a main effect of message frame, as expected. A two-way ANOVA with message frame and art infusion as the two factors and postmessage thought as the dependent variable demonstrated that respondents reported thinking more about prevention benefits when exposed to a prevention focus ad (M = 6.08; S.D = 1.14) and more about the promotion benefits when exposed to a promotion focus ad (M = 3.43; S.D = 1.41; F(1, 123) = 11.58, p < 0.001, ηp2 = 0.07). No interaction or main effects of art infusion were observed (Fs < 1).

The results of the Anova on the ad-evaluation index showed that the art picture increased the positive appraisal for the product when compared to the non-art picture (Mart = 5.45 versus Mnon-art = 2.92; F(1, 123) = 9.18, p < .001), demonstrating the art infusion effect.

**Perceived message persuasiveness**

A two-way ANCOVA on message persuasiveness indicated only an interaction effect between regulatory (non)fit and (non)art (F(1,123) = 4.64, p = 0.032, np2 = 0.018, Graphic 2). The main effects for (non)art infusion (F(1,123) = 0.89, p = 0.34) and regulatory (non)fit (F(1,123) = 0.64, p = 0.42) did not show statistical significance. As expected, there was a main effect of the covariate perceptions of luxury on persuasiveness (F(1, 123) = 7.4, p = 0.001, ηp2 = 0.06).
Graphic 2. Impact of regulatory (non)fit and (non)art on message persuasiveness

Planned contrast analyses showed that the regulatory nonfit conditions indicated significant differences between the art ($M = 3.70; S.D = 1.71$) and non-art conditions ($M = 4.30; S.D = 1.54$) ($F(1,123) = 4.71, p < 0.05, \eta^2_p = 0.018$), with non-fit participants having higher ratings when exposed to the non-art condition. For the regulatory fit condition, no differences were found between the art ($M = 4.17; S.D = 1.31$) and non-art ($M = 3.89; S.D = 1.73$) groups ($F(1,123) = 0.75, p = 0.39$).

Within the art condition, the ad messages were more persuasive in the regulatory fit condition ($M = 4.17; S.D = 1.31$) than in the non-fit condition ($M = 3.70; S.D = 1.71$) ($F(1,123) = 4.40, p < 0.05, \eta^2_p = 0.017$). Under the non-art condition, there was no difference between fit ($M = 3.89; S.D = 1.73$) and nonfit ($M = 4.30; S.D = 1.54$) ($F(1,123) = 0.90, p = 0.34$) conditions, although in both cases the means are in the direction of the hypothesis.

**DISCUSSION**

Study 2 supports the hypothesis that the relationship between art infusion and consumers’ evaluation of advertising messages is moderated by the regulatory (non)fit message.

Several studies have described the role of the regulatory fit in persuasion and purchasing situations (Aaker & Lee, 2001; Avnet et al., 2013; Cesario & Higgins, 2008; Pham & Avnet, 2009). But questions related to regulatory non-fit still require further theoretical insights and this study contributes to highlight this effect.

The current study presents an additional theoretical contribution to explain under what conditions regulatory fit and non-fit can influence choices and consumer subsequent evaluations. Basically, when participants are exposed to an art ad message, consumers’ evaluation will be more positive for regulatory fit messages, while with non-art messages, consumers’ evaluation will be more positive for non-fit ads.

Regulatory fit theory (RFT) postulates that one’s motivation improves when one pursues a goal in a way that is consistent with one’s current regulatory orientation, creating a feeling right experience and increasing the perceived value of that pursuit (Pham & Avnet, 2009; Pham et al., 2012). Regulatory fit occurs when the one’s focus and means to achieve a goal are aligned. Empirical studies show that persuasiveness (Avnet et al., 2013; Higgins & Scholer, 2009; Motyka et al., 2014) increases under regulatory fit.

The feeling right effect creates a processing fluency, facilitating information interpretation. Therefore, abstract elements, such as art images are easily processed. In fact, recent research shows a positive relationship between fluency and visual interpretation (Cseh, Phillips, & Person, 2015). We expected that message persuasiveness would be more positive when the ad with an art image was presented with regulatory fit message frame, since art also triggers a favorable assessment of the ad. In fact, in the art condition, participants in regulatory fit were more persuaded than non-fit respondents.

However, other studies have demonstrated that non-fit messages demand more information processing (Harding et al., 2009). Lee (2009, p. 135) argues that “the experience of regulatory non-fit may be similar to encountering an opposing force”, which in turn, produces lower cognitive processing fluency (Lee & Aaker, 2004). Non-art images would be an important source of information in non-fit conditions because they are easier to interpret, influencing more positive reviews than art images in advertising messages.

Tam and Spanjol (2012) empirically showed that, when faced with the same goal, individuals experiencing regulatory non-fit perceive that task to be more difficult to perform than those experiencing regulatory fit. When information processing is more difficult, individuals prefer a local processing style, because they are more aligned with concrete construals (Dijkstra et al., 2013). Non-art images are more concrete, facilitating information interpretation when consumers find an opposing force. Results empirically demonstrate this prediction. Non-fit respondents evaluated the advertising as more persuasive in the non-art than in the art condition.

Although these results support the hypothesis, a few concerns must be highlighted. First, the results of the
two experiments were separated in promotion regulatory fit (experiment 1) and prevention regulatory fit (experiment 2). However, our hypothesis does not separate these two conditions. Besides the fact that we found interaction effects in both studies, it is necessary to demonstrate the interaction effect between regulatory fit (promotion vs. prevention) and art infusion.

Another issue is that persuasiveness is our dependent variable because it is the first consequence of consumers’ perception about information (Campbell & Kirmani, 2008). However, other reactions are also important, such as willingness to buy. These issues are addressed in experiment 3.

**EXPERIMENT 3**

The goal of experiment 3 is to replicate the findings obtained in the previous experiments, but we included both promotion and prevention conditions of fit and non-fit.

**Participants and design**

One hundred forty-eight undergraduate students (58% female, mean age: 24.9, SD = 4.9) participated in this experiment in exchange for course credit. We manipulated visual art (art vs. non-art), regulatory focus (promotion vs. prevention) and appeal type (promotion vs. prevention) in a between-subjects design, collapsing regulatory focus and appeal type conditions into fit and non-fit cells for analysis. For similar procedures, see Harding et al. (2009). Respondents were randomly assigned to one of the four conditions.

**Procedure**

The experiment was computer-based, designed in Qualtrics, and employed a two-independent-study cover story. Promotion regulatory focus manipulation followed the same procedures of experiment 1, and prevention regulatory focus was identical to the one presented in experiment 2. Respondents were then invited to participate in a second unrelated study about evaluation of advertising messages for the brand Delicia Chocolate. The prevention and promotion messages were adapted from the study of Micu (2010). Participants in the promotion condition read about promotion-focused benefits related to enjoyment, while prevention-focused benefits were associated to avoiding unhappiness.

Similarly to the previous experiments, the visual ad also included the art infusion manipulation. The art image was a painting by Claude Monet, named “The Summer, Poppy Field”, and the non-art image was a photograph similar to the art painting. We also pretested these images with 23 undergraduate students (55% female, mean age: 22). Participants were told to evaluate the images and describe whether each image was an artwork (1 = not at all and 7 = definitely). Participants also indicated the extent to which they agreed that the images were very similar (1 = disagree and 7 = agree). Results showed that the art image was considered as art to a greater degree than the non-art picture (Mart = 5.94 vs. Mnon-art = 3.79; F(1, 22) = 3.29, p < 0.05), but they were perceived as similar in content (Mart = 3.57 vs. Mnon-art = 2.9; F(1, 22) = 0.93, p = 0.37). The final versions of the four advertising conditions are shown in Figure 2.

After reading the ad, participants indicated their willingness to buy (WTB) the advertised product (the chocolate) using a 7-point scale (1 = would certainly not buy, 7 = would certainly buy). This question served as the dependent variable. Participants were asked to indicate the degree to which their thoughts were focused on the promotion benefits (1 = I thought about the energy and the happiness) and prevention benefits (5 = I thought about the antioxidants; see Aaker and Lee, 2003).

Participants also evaluated the advertising (α = 0.88) and perceptions of luxury (α = 0.89), based on the same four items included in studies 1 and 2, which served as a manipulation check for the art infusion effect.

**Manipulation checks**

The prevention and promotion regulatory focus manipulation checks were performed according to Dholakia et al. (2006), i.e., in a qualitative way. Any cases were removed from the sample.

The message frame manipulation check indicated only a main effect of message frame, as expected. A two-way ANOVA with message frame and art infusion as the two factors, and postmessage thought as the dependent variable, was conducted. As expected, only a main effect of message frame was observed. Participants reported thinking more about prevention benefits when exposed to a prevention focus ad (M = 4.18; SD = 0.84) and more about the promotion benefits when exposed to a promotion focus ad (M = 1.79; SD = 1.04; F(1,116) = 16.28, p < 0.001, η² = 0.40). No interaction or main effects of art infusion were observed (Fs < 1).

The results of the Anova on the ad-evaluation index showed that the art image increased the positive appraisal about the product when compared to the non-art image (Mart = 5.32 versus Mnon-art = 3.27; F(1, 116) = 4.33, p < 0.01), demonstrating the art infusion effect.
Figure 2. Stimuli for experiment 3

| A: Product with art image and prevention message |
| B: Product with non-art image and prevention message |
| C: Product with art image and promotion message |
| D: Product with non-art image and promotion message |

**Willingness to buy**

A between-subject ANCOVA was conducted to test the impact of regulatory fit and art infusion on the willingness to buy the advertised product. Only the interaction between these two factors on WTB was observed ($F(1, 116) = 3.88, p < 0.05, \eta^2_p = 0.025$; Graphic 3). Again, the perceptions of luxury as a covariate showed significant results, as we expected ($F(1, 116) = 8.44, p < 0.001, \eta^2_p = 0.032$). No main effects were found for art infusion or regulatory fit ($F_s < 1$).

Planned contrast analyses within the art condition showed that participants demonstrated higher WTB in the regulatory fit condition ($M = 5.41; S.D = 1.62$) than in the non-fit condition ($M = 4.54; S.D = 1.55$) ($F(1, 116) = 5.74, p < 0.05, \eta^2_p = 0.07$). Under the non-art condition, there was a marginal difference between fit ($M = 5.01; S.D = 1.7$) and non-fit ($M = 5.67; S.D = 1.42$) ($F(1, 116) = 1.71, p = 0.09$) conditions.
An analysis within the regulatory fit did not provide significant differences between the art \((M = 5.41; S.D = 1.62)\) and non-art conditions \((M = 5.01; S.D = 1.70)\) \((F(1,116) = 0.733, \ p = 0.41)\). However, within the regulatory non-fit condition, a significant difference was observed \((F(1,116) = 4.34, \ p < 0.05, \eta^2 = 0.06)\). The non-art condition reported higher WTB \((M = 5.67; S.D = 1.55)\) than the art condition \((M = 4.54; S.D = 1.55)\).

**GENERAL DISCUSSION**

Previous studies have recognized art as an interesting area of academic studies and as a singular consumption category (Hagtvedt & Patrick, 2008). There is also consistent evidence that artistic characteristics could be applied in marketing to have a positive impact on consumers’ evaluations (Crader & Zaichkowsky, 2007).

At the same time, to date, hardly any research has been conducted to investigate the influence of visual art and regulatory fit messages on the perception and evaluation of consumer products. The results demonstrate that the art infusion effect is more persuasive when presented with regulatory fit messages. On the other hand, regulatory non-fit messages are not congruent with art images. For non-fit messages, non-art images provide a more favorable impact on message persuasiveness. We demonstrate this art infusion phenomenon and regulatory fit interaction in two studies, using art versus non-art images in advertising messages with fit and non-fit frames.

For marketers and scholars these results provide significant contributions. From the academic perspective, we show the limits of the art infusion effect. Specifically, we demonstrate that the presence of art does not always influence consumers in a favorable way. When the ad message is not congruent with the individuals’ regulatory focus, the use of art images is not recommended. From a managerial perspective, this prediction means that marketers should be aware of their consumers’ current regulatory focus, in order to adjust the message frame and the use of art images in their advertising and product presentations.

For instance, a product that is consumed in promotion focus, therefore guided towards ideals, wishes and aspirations, such as hedonic products, should use promotion message frames if it is to employ an art image. Advertising campaigns for perfume and clothing should reinforce the benefits and hedonic aspects of the product if the art image is presented. The same pattern is suggested for prevention fit messages. Products that are usually consumed in a prevention focus should use prevention messages and the presence of an art image would increase the message persuasiveness.

On the other side, we found a circumstance where regulatory non-fit messages would be more persuasive. Previous literature demonstrated that when consumers are motivated to process more information or when they find incongruent information, non-fit messages would be more persuasive (Pham et al., 2012). Since art images are more abstract than non-art images, the processing difficulty would increase. Therefore, consumers would feel more comfortable if they find information that is easier to process, increasing the positive impact of the non-art image in a non-fit context. The non-fit experience causes the individual to have the perception that the environment is different from what was expected, causing an effect of feeling wrong. Thus, consumers seek ways to correct this feeling that something is wrong in the decision-making, attempting to boost their confidence (Harding et al., 2009). The presence of a nonart image would facilitate information processing and decrease the feeling wrong effect.

From a managerial perspective, for products that could be consumed in a promotion or prevention focus, it is hard to define what the consumers’ current regulatory focus will be when they evaluate the product. For instance, a person may seek information about a holiday trip in order to avoid problems or to achieve a positive experience. In these situations, the use of art image may decrease message persuasiveness.

Besides the contributions of our study, there are interesting avenues for future research. There is little research in marketing examining the impact of abstract vs. representational art on consumer behavior (see Dunn & Zhu, 2013 for an exception). If we consider that abstract art is applied in marketing actions, it is fruitful for future research to understand how artwork can impact consumer behavior and judgments. Also, the use of representational art may have the same effect as the non-art image in our study. Therefore, the use of representational art images might have a more persuasive effect when interacting with non-fit messages.

**REFERENCES**


