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The value of art in marketing: An emotion-based model of how artworks in ads improve product evaluations

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ABSTRACT

Arts-based initiatives provide many benefits for organisations, managers, and employees, but little is known of how marketing can incorporate art to add value for consumers. The present research situates marketing tools within broader organisational theory to develop and empirically test an emotion-based model of how artworks in advertisements can increase the perceived value of a product (art infusion effect). Across three experiments (N = 516) using three different artworks (by Vermeer, van Gogh, and da Vinci), three different products (mineral water, toilet paper, and chocolate), and three different measures of product value (product evaluation, willingness to buy, and willingness to pay), brand affect strongly mediated the art infusion effect. Furthermore, this affect-mediation was stronger for utilitarian products (water) than for hedonic products (chocolate). Thus, in support of general theories of arts-based methods in management, emotion appears to be a fundamental mechanism through which art affects product and price evaluations.

1. Introduction

Many theoretical insights explaining the benefits of arts-based initiatives for business processes and outcomes have emerged recently in organisational and management research (e.g., Adler, 2006; Barry & Meisiek, 2010; Meisiek & Barry, 2014a; Schiuma, 2011; Taylor & Ladkin, 2009). Nevertheless, Meisiek and Barry (2014b) recently lamented that "the field...is desperately in need of deeper and more carefully worked out theorizing that can help explain empirical findings and guide research efforts" (p. 83). With that goal in mind, this study addresses a research problem related to how marketers can utilize art to create value both for companies and for their customers. More specifically, marketing constructs are situated within broader organisational theory to investigate two research questions: a) how can artworks in advertisements impact the perceived value of a product?; b) do brand affect and product type mediate and moderate this impact? To answer these questions, we develop a highly specified conceptual model of one particular marketing effect (i.e., the 'art infusion effect', explained below) and empirically test it through three experiments that pit our emotion-based model against an alternative luxury-based model. After the introduction of the theoretical framework adopted in the research, the value of art in organisation, management and marketing is considered, focusing on the use of visual arts in advertising. Then we describe an emotion-based model of how art in advertisements can affect consumers' evaluations and valuations of products, and we report methods and results of three experiments. Following this, we discuss the theoretical contributions of this study and the main managerial implications.

2. Theoretical framework

2.1. The value of art in organisation and management

Recent years have borne a "cross-fertilization" of art and management (Adler, 2006), with initiatives ranging from adding art courses to business school curricula and engaging employees in artistic activities, to hiring artists for management positions and even using artistic processes for structuring organisations. Arts-based methods in management have arisen from a growing skepticism that traditional management methods can adequately address the increased complexity of the modern business context, combined with a growing optimism that the arts can provide dynamic and innovative methods for handling that complexity (Adler, 2006; Nissley, 2010; Schiuma, 2011; Troilo, 2015). Adler summarized these sentiments thus: "Creating the next great thing demands constant innovation; it's a design task, not merely an analytical or administrative function. Historically, such creativity has been the primary competence of artists, not managers" (p. 490; see also Troilo, 2015). Taylor and Ladkin (2009) identify four distinct

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contributions that the arts can provide to managerial development within organisations: (1) the transfer of art skills (e.g., unbiased perception) to management activities; (2) projecting managers' subconscious thoughts into their managerial strategies; (3) discovering the true essence of one's product, service, or situation; and (4) increasing managers' experience of personal presence, which can positively impact their business decisions and actions. To be sure, many other scholars have contributed additional important insights about how the arts create value for organisations (see the other papers in this Special Issue), but it is beyond the scope of the present research to fully review that literature here. Rather, we now turn attention to the broad theoretical framework in which the present research is situated.

Schiuma (2011) presents a general framework for understanding and implementing arts-based initiatives in organisations. This framework distinguishes between dynamic- and static-based views of art. The dynamic view concerns the organisational factors through which value creation occurs; it addresses how an arts-based initiative creates value. These factors include such processes as how the organisation utilizes the arts in managerial learning and leadership, and how employees are exposed to and interact with the arts to improve performance and create value. The static view instead assesses the generated value at a specific time; it addresses what value the arts-based initiative delivers. It essentially entails a snapshot of the outcomes of an arts-based initiative. These outcomes include such measures as the flexibility of the organisation to adapt to environmental changes, the innovativeness of its managers, and the creativity of employees in solving work-related problems. Importantly, these dynamic and static views are intricately interdependent and complementary; how arts-based initiatives create value is tightly linked to what value they create. Nonetheless, these different views do support distinct methods for incorporating the arts into the business. The dynamic view suggests that arts-based initiatives may be implemented as a general organisational approach for managerial learning, or as a technique for infusing aesthetic and emotive characteristics into the value creation process. The static view instead suggests that the arts be incorporated into the organisation for instrumental purposes, that is, for creating value in the components or products themselves. By this view, then, the organisation might consider simpler and more easily implemented methods of incorporating the arts to increase the value of the organisation's outputs.

The present research examines Schiuma's (2011) static-based view of arts-based initiatives, investigating how standard marketing tools can utilize art to create added value in products. Before conceptualizing the specific research question, however, one should consider whether Schiuma's framework is applicable to the marketing of products. In fact, this framework focuses almost exclusively on organisation and management, so its relevance to product marketing can reasonably be doubted. However, Schiuma's definition of arts-based initiatives includes "the exploitation of the arts to create intangible value to be incorporated into products" (p. 3). Thus, we assume that the static-based view of arts-based initiatives can indeed be applied felicitously to product marketing. Specifically, our research investigates how the simple method of incorporating artworks in advertisements can increase consumers' valuations of the product (Hagtvedt & Patrick, 2008b). This research is among the first to examine how simple marketing actions can fit into the broader context of arts-based methods in organisation and management. Moreover, because using artworks in ads is among the simplest, most direct, and most easily implemented forms of arts-based initiative, it provides a rather conservative empirical test of arts-based methods: if simply including art in an ad increases the valuation of a product, this would clearly reveal that the arts can directly create tangible, financial value for business.

2.2. The value of art in marketing

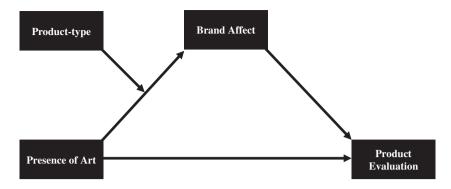
So then, in what ways can arts-based initiatives be implemented in marketing to create value for the business? To begin with, marketing managers can benefit from arts-based initiatives in all the same ways that other types of managers can, such as Taylor and Ladkin's (2009) four contributions of the arts to managerial development (described earlier). Indeed, art may be incorporated more easily and naturally into the marketing unit than into other units within an organisation. Furthermore, art can additionally be incorporated into several marketingspecific processes and outcomes, such as new product development and product design, to create value (Troilo, 2015). For example, artistic product designs can improve product evaluations and even compensate for moderately poor functionality (Hagtvedt & Patrick, 2014). But on the other hand, artistic product design can also backfire: an artistic design can decrease evaluations of products with extremely poor functionality (Hoegg, Alba, & Dahl, 2010). More generally, the crucial role of art in product development and design is unequivocal, and current theorizing within organisation and management research clearly recognises this (e.g., Barry & Meisiek, 2010; Schiuma, 2011). Notably however, those broad theoretical frameworks have largely overlooked advertising as another effective tool for utilising the arts.

Many products and services are packaged or advertised with art. Perhaps the most famous example is Absolut's long-enduring marketing campaign (1986–2004) in which the brand's iconic vodka bottle was illustrated by famous contemporary artists such as Andy Warhol and Keith Haring. Other brands have used art in more or less engaging ways, such as alluding to or re-creating famous artworks, placing art on a package, or merely including artworks in the background of an ad. Indeed, marketing with art is ubiquitous, and for good reason: the exact same product may be evaluated substantially more positively when advertised with art than without art (Hagtvedt & Patrick, 2008a,b, 2011). Thus, art in advertising creates value for consumers. Although this art infusion effect is now well established, its underlying psychological mechanism is less well understood. Here we propose and demonstrate that one of the most fundamental aspects of art – its emotionality – underlies the art infusion effect.

2.3. Art infusion

Relatively few studies have examined the simple practice of merely placing art on products, packages, or in advertisements. In a seminal demonstration of art infusion, Hagtvedt and Patrick (2008b) presented advertisements for bathroom fittings that contained either an artwork (Vermeer's Girl with a Pearl Earring), a photographic re-creation of the same scene (which was judged not to be art), or no image at all. Participants evaluated the bathroom fittings more positively when viewing the ad with an art image than with either a nonart image or no image. In a subsequent experiment they found similar art infusion effects on evaluations of a soap dispenser regardless of whether the artwork itself was judged positively (Monet's Palazzo da Mula) or negatively (Turner's Burning of the House of Lords and Commons). Moreover, if the artwork is perceived as an illustration rather than an artwork, then product evaluations decline substantially (Hagtvedt & Patrick, 2011). Thus, art improves product evaluations regardless of participants' evaluations of the artwork itself, so long as the artwork is perceived as an artwork. This art infusion effect generalizes to novel brand extensions (Hagtvedt & Patrick, 2008a), and it appears to be mediated by perceived luxury (Hagtvedt & Patrick, 2008a,b; Lee, Chen, & Wang, 2015). Evidently, the mere presence of art endows products with an image of luxury, which in turn improves evaluations of the associated products.

These prior studies have definitively documented a theoretically interesting and practically important effect of art on consumers' evaluations of products. The present study substantially advances this prior work by developing a well-specified conceptual model of art infusion that includes a more proximal mediating mechanism and a practically important moderator. A new conceptual model emerged from two critical observations. First, although luxury perceptions are known to mediate art infusion effects (Hagtvedt & Patrick, 2008a,b; Lee et al., 2015), luxury perceptions themselves arise from several antecedent



factors (Wiedmann, Hennigs, & Siebels, 2009), and hence it is unclear which lower-level factor(s) may explain art infusion. We therefore examined brand affect, which is a positive emotional response to the brand (Chaudhuri & Holbrook, 2001; Holbrook & Batra, 1987), as a potential mediator of art infusion. Second, the prior studies have tended to use utilitarian products such as bathroom fittings, cutlery, soaps, or soap dispensers (Hagtvedt & Patrick, 2008a,b, 2011). However, given that hedonic products differ from utilitarian products in brand affect (Hirschman & Holbrook, 1982), the two product-types may elicit differential art infusion effects. These considerations led us to develop and test a novel model of how art in ads increases the perceived value of products. Our conceptual model is illustrated in Fig. 1 and described below.

2.4. An affective model of art infusion

Current frameworks of arts-based methods in organisation and management emphasize the role of aesthetics and emotions in value creation not only within the organisation, but also in its outcomes (e.g., products and services). In support of this assumption, we propose and demonstrate that the use of art in advertising provides one such method of value creation by stimulating consumers' emotions. Indeed, much research confirms the common intuition that art evokes emotion (Cirrincione, Estes, & Carù, 2014; Silvia, 2005). For instance, viewing artworks strongly activates the reward-processing circuits in the brain (for a review see Lacey et al., 2011). Furthermore, emotion is known to affect a broad range of consumer behaviors, from product perceptions (Holbrook & Batra, 1987) to price evaluations (Xia, Monroe, & Cox, 2004). In particular, brand affect is a well-established mediator of consumer perceptions and attitudes. For example, Chaudhuri and Holbrook (2001) found that brand affect increases brand loyalty, which in turn increases market share and relative price. So given that art evokes affect, and affect influences product and price evaluations, our overarching hypothesis was that art enhances the perceived value of a product (i.e., art infusion effect) by evoking emotion in consumers (i.e., brand affect). Although Hagtvedt and Patrick (2008a,b) found that luxury perceptions mediate art infusion effects, brand sophistication (cf. luxury) and brand affect are positively correlated (Sung & Kim, 2010), and indeed affect is an antecedent of luxury perceptions (Wiedmann et al., 2009). Thus, brand affect may provide a more proximal, lowerlevel mediating mechanism. Note also that brand affect and perceived luxury are not mutually exclusive mediators. Indeed, the present experiments will examine whether they simultaneously or serially mediate the art infusion effect.

H₁. Brand affect mediates the art infusion effect.

We further hypothesized that the mediating role of brand affect depends on the type of product being evaluated. A basic and widely supported distinction is between utilitarian and hedonic products (Chaudhuri & Holbrook, 2001; Hirschman & Holbrook, 1982). *Utilitarian products* such as water and laundry detergent have tangible

features that offer functional benefits, whereas hedonic products such as chocolates and perfumes have symbolic features that provide emotional pleasure. The predicted relationship between brand affect and the differing product types may be counterintuitive: we expected art to increase brand affect more for utilitarian products than for hedonic products. This prediction may be understood in terms of "diminishing returns". Because hedonic products already possess salient emotional features, the addition of art should have a relatively small positive influence on brand affect. In contrast, because utilitarian products primarily have functional features, adding emotion via art should increase brand affect relatively more. Essentially, once a product has sufficient utilitarian attributes, then hedonic attributes begin to dominate product choice and satisfaction (Chitturi, Raghunathan, & Mahajan, 2007). For instance, hedonic messages and features improve evaluations more for utilitarian products than for hedonic products (Gill, 2008; Klein & Melnyk, 2016). In their discussion, Hagtvedt and Patrick (2008b, p. 387) speculate similarly that "counter to popular conceptions, visual art works harder for functional products than for hedonic products, endowing the former with hedonic properties and thus increasing evaluation." We therefore predicted the following.

H2. The mediation of art infusion by brand affect is larger for utilitarian products than for hedonic products (i.e., moderated mediation).

The present research examines the effect of art in ads on product evaluation, willingness to buy (WTB), and reported willingness to pay (WTP), all of which are consumer-based measures of product value. This research also investigates whether brand affect – which is a specific marketing construct that captures the broader theoretical role of emotion in arts-based value creation - mediates these art infusion effects on both utilitarian and hedonic products. Thus, this research provides a more general test of art infusion (hedonic and utilitarian products) on more directly practical measures (WTB and WTP) with a more proximal mediating mechanism (brand affect). Study 1 first examined the differential mediating effects of brand affect and perceived luxury on evaluations of a utilitarian product (bottled water) advertised with an artwork or a photograph. Study 2 replicated this theoretical comparison, but with a different product (toilet paper), a different artwork, and a different measure of product value (WTB). Finally Study 3 examined the differential mediating effects of brand affect on WTP for utilitarian (water) and hedonic (chocolate) products advertised with or without an artwork.

3. Study 1

Study 1 was an online experiment that tested H1. Participants viewed a mock ad for a fictitious brand of mineral water, *Purity*, that included either a painting (Vermeer's *Girl with a Pearl Earring*) or a photographic recreation of it (a perceptually similar photo; see Fig. 2A). We used a fictitious brand to avoid potentially confounding effects of brand knowledge, and we used mineral water because consumers view it as a utilitarian product.¹ This study was designed to conceptually

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PURITY

LIBOA

Spring water, available in still or sparkling.



Fig. 2. Stimuli used in Study 1 (Panel A), Study 2 (Panel B), and Study 3 (Panel C).













replicate Hagtvedt and Patrick's (2008b) Study 2, using the same artwork and photo and the same measures of perceived luxury and product evaluation. Critically however, to test H_1 , we also included a measure of brand affect as an additional mediator.

3.1. Methods

3.1.1. Design

The experiment had one independent variable (ad image: painting, photograph; between-participants), and measures consisted of the two presumed mediators (perceived luxury and brand affect) and the primary dependent variable (product evaluation).

3.1.2. Participants

199 US-based respondents (age M=33 years, SD=10, Range=19–60; 41% females) participated via Mechanical Turk, which is an online labor pool that has been extensively validated for behavioral data collection (Berinsky, Huber, & Lenz, 2012). Participants were randomly assigned to one of the two experimental conditions (i.e., painting or photograph). Four participants were excluded from data analyses for failing an attention check (described below), leaving 195 valid participants.

3.1.3. Stimuli See Fig. 2A.

3.1.4. Procedure

Participants first provided informed consent and indicated their sex and age. They then completed an attention check, which asked "How much attention are you willing and able to dedicate to this very brief

 $^{^{\}rm 1}$ This assumption that water is utilitarian was later confirmed in the Product selection pre-test reported in Study 3.

study? If you select VERY LITTLE, then we will have to reject your work.", with two response options labelled "very little" and "a whole lot". All but four participants responded validly (i.e., "a whole lot") on the attention check, and those four were excluded from analyses. Participants then read the following instructions: "We are investigating consumer attitudes toward a new brand that we may introduce into the market...On the following pages you will see an ad for a new brand, and you will be asked to evaluate several aspects of the brand." Participants then advanced to a new page, where they viewed one of the two ads, rated affect toward and perceived luxury of the brand, and then evaluated the product (in that order). The three brand affect items (I would feel good if I use this brand: This brand makes me happy: This brand gives me pleasure) were from Chaudhuri and Holbrook (2001), and the three perceived luxury items (This brand is luxurious/prestigious/high class) were from Hagtvedt and Patrick (2008a,b). Respondents indicated their level of agreement with each statement on a scale from 1 ("strongly disagree") to 7 ("strongly agree"). Participants then advanced to a new page and indicated their product evaluations on five 7point semantic differential scales (unfavorable/favorable, negative/ positive, bad/good, unpleasant/pleasant, dislike very much/like very much) used by Hagtvedt and Patrick (2008b, 2011). Next, as in Hagtvedt and Patrick (2008b, 2011), participants rated the degree to which the image in the ad "is an artwork (in terms of the manner in which it was created)" on a scale from 1 (not at all art) to 7 (definitely art). Finally, participants advanced to a new page where they were congratulated and completed another attention check ("To validate your participation, please select option 3 below. If you fail to select 3, we will have to assume that you are not paying attention, and we will have to reject your work."). All participants responded validly on this attention check.

3.2. Results

3.2.1. Data and analyses

The full, anonymized dataset is available through the first author's personal website (or upon request). Each participant provided 15 datapoints: sex, age, two attention checks, three brand affect ratings, three perceived luxury ratings, and five product evaluation ratings. The three multi-item measures (brand affect, perceived luxury, and product evaluation) were tested for inter-item reliability (Cronbach α) and then combined into composite measures, as described next. Given that the experiment consisted of a single independent variable with two levels (ad image: painting, photograph) manipulated between-participants, group means were statistically compared via independent samples t-tests. Effect sizes are reported in terms of Cohen's d. Finally, mediation analyses were conducted via Hayes' (2013) PROCESS macro for SPSS statistical analysis software.

3.2.2. Validity and reliability

Participants judged the painting (M=5.76, SE=0.17) to be more "an artwork" than the photo (M=3.70, SE=0.21), t(193)=7.56, p<0.001, thereby validating the art manipulation. The measures of brand affect (3 items, Cronbach $\alpha=0.93$), perceived luxury (3 items, $\alpha=0.97$), and product evaluation (5 items, $\alpha=0.98$) were all highly reliable.

3.2.3. Art infusion

As illustrated in Fig. 3A, relative to a perceptually similar photograph, the painting elicited significantly higher brand affect [t(193) = 3.29, p < 0.001, Cohen's d = 0.47], perceived luxury [t(193) = 2.27, p < 0.05, d = 0.32], and product evaluation [t(193) = 3.65, p < 0.001, d = 0.53]. These results replicate the positive effect of art on product evaluation (Hagtvedt & Patrick, 2008a,b, 2011), and suggest that brand affect and/or perceived luxury may mediate this effect.

3.2.4. Mediation analyses

To test whether brand affect and/or perceived luxury mediated the effect of art on product evaluation, we conducted a series of bootstrap mediation analyses (Hayes, 2013, model 4) with 10,000 re-samples and bias-corrected 95% confidence intervals (CIs). Effect sizes are reported as the unstandardized coefficient B, and CIs that exclude zero are significant at p < 0.05. The predictor was art (photo = 0, painting = 1) and the criterion was product evaluation ratings. A first analysis included perceived luxury as the sole mediator. The indirect (mediated) effect of art on evaluation via luxury was significant, B = 0.29, CI = 0.05 to 0.58. This observation replicates Hagtvedt and Patrick's (2008a,b) original demonstration that luxury perceptions mediate the art infusion effect (see also Lee et al., 2015). However, the direct effect of art on evaluation also remained significant and substantially larger, B = 0.55, CI = 0.17 to 0.94, indicating only partial mediation by luxury and suggesting that another mediator is likely present.

A second analysis included brand affect as the sole mediator. The indirect (mediated) effect of art on evaluation via affect was significant, $B=0.61,\ CI=0.23$ to 0.99. Indeed, the mediation effect by brand affect (B=0.61) was twice as large as that by perceived luxury (B=0.29). Moreover, the direct effect was no longer significant, p>0.10, indicating that brand affect fully mediated the effect of art on product evaluation.

To directly compare the mediating effects of brand affect and perceived luxury on product evaluation, a third analysis included both affect and luxury as potential mediators in the same model. Results are illustrated in Fig. 4A. Once again the direct effect was nonsignificant, B = 0.23, p > 0.10, indicating full mediation. Critically, although the presence of art in the advertisement significantly increased both brand affect (B = 0.64, p < 0.01) and perceived luxury (B = 0.54,p < 0.05), brand affect significantly increased product evaluations (B = 0.88, p < 0.001) but perceived luxury did not (B = 0.09, p < 0.001)p = 0.08). Thus, when entered simultaneously, the indirect effect of art on product evaluation via brand affect was significant (B = 0.57, CI = 0.23 to 0.93), but the indirect effect via perceived luxury was not (B = 0.05, CI = -0.003 to 0.18). Furthermore, the indirect effect of brand affect was significantly larger than the indirect effect of perceived luxury, B = 0.52, CI = 0.20 to 0.89. Thus, the art infusion effect was better explained by brand affect than by perceived luxury.

Finally, a fourth analysis tested for serial mediation (Hayes, 2013, model 6) in which art increases brand affect, which then increases perceived luxury, which ultimately improves product evaluation. However, this serial model was nonsignificant, B = 0.05, CI = -0.003 to 0.15, and it was significantly outperformed by a model with brand affect as the sole mediator, B = 0.52, CI = 0.22 to 0.89.

3.2.5. Conclusions

In sum, these results replicate the art infusion effect, but also demonstrate for the first time that art infusion is mediated by brand affect. Although perceived luxury did mediate the art infusion effect when included as the sole mediator (as in Hagtvedt & Patrick, 2008a,b), its mediating effect was relatively weak and diminished to nonsignificance when brand affect was included. In fact, the mediating effect of brand affect was twice as large, which was significantly larger, and it fully mediated the art infusion effect even when perceived luxury was also included either simultaneously or serially. Overall, these results indicate that brand affect underlies the art infusion effect, thus supporting H_1 . These results also provide general support for theories of arts-based methods in organisation and management, which emphasize emotion as a primary means through which the arts can create value for business (e.g., Adler, 2006; Barry & Meisiek, 2010; Schiuma, 2011; Taylor & Ladkin, 2009).

4. Study 2

Study 2 was an online experiment that provided a further test of H₁.

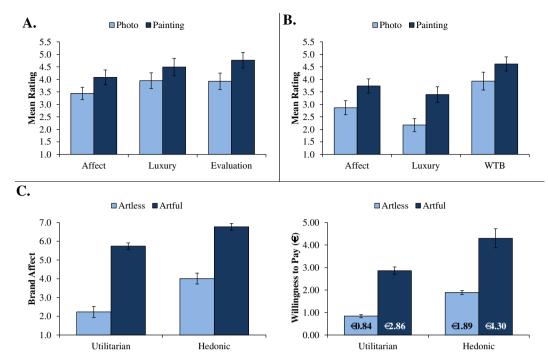


Fig. 3. Brand affect, perceived luxury, and product evaluations in Study 1 (Panel A), willingness to buy in Study 2 (Panel B), and willingness to pay in Study 3 (Panel C). Bars represent $M \pm 95\%$ CI.

Study 2 replicated the procedure of Study 1, but in order to generalize the results more broadly, we used a different artwork, product, and dependent measure of perceived value. Participants rated their willingness to buy (WTB) a fictitious brand of toilet paper (*Costex*) advertised with either van Gogh's *Self Portrait* or a photographic recreation of it (see Fig. 2B).

4.1. Methods

202 US-based respondents (age M=36 years, SD=12, Range=21–73; 44% females) participated via Mechanical Turk. One participant was excluded for failing an attention check; all other participants answered both attention checks correctly, leaving 201 valid participants. The procedure was identical to Study 1, except that the ads differed in terms of both the product and the images (Fig. 2B), and WTB was measured via three items (I would consider purchasing this brand; I would use this brand; For the right price, I would buy this brand)

4.2. Results

4.2.1. Data and analyses

The full, anonymized dataset is available through the first author's personal website (or upon request). All analyses followed the same methods and procedures as in Study 1.

4.2.2. Validity and reliability

Participants judged the painting (M=6.13, SE=0.13) to be more "an artwork" than the photo (M=2.57, SE=0.19), t(199)=15.78, p<0.001, validating the art manipulation. The measures of brand affect (3 items, $\alpha=0.94$), perceived luxury (3 items, $\alpha=0.98$), and WTB (3 items, $\alpha=0.95$) were all highly reliable.

4.2.3. Art infusion

As illustrated in Fig. 3B, relative to a perceptually similar photograph, the painting elicited significantly higher brand affect [t(199) = 4.27, p < 0.001, d = 0.61], perceived luxury [t(199) = 5.93, p < 0.001, d = 0.84], and WTB [t(199) = 2.95, p < 0.01, d = 0.42].

These results replicate the art infusion effect (Hagtvedt & Patrick, 2008a,b, 2011), and again suggest that brand affect and/or perceived luxury may mediate this effect.

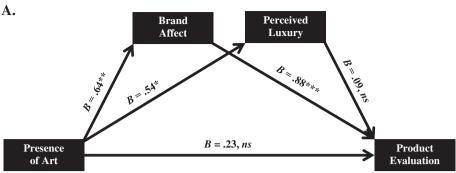
4.2.4. Mediation analyses

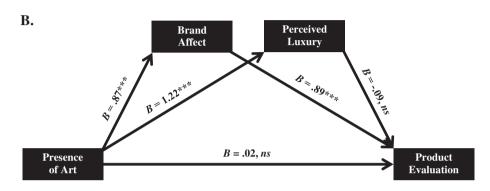
Mediation analyses included art as the predictor variable (photo = 0, painting = 1) and WTB ratings as the criterion variable. When perceived luxury was included as the sole mediator (Hayes, 2013, model 4), the indirect (mediated) effect of art on WTB via luxury was large and significant, B = 0.70, CI = 0.46 to 0.99, with a nonsignificant direct effect of art on WTB, p = 0.96. When brand affect instead was included as the sole mediator, the indirect effect of art on WTB via affect was equally large and significant, B = 0.72, CI = 0.39to 1.07, with a nonsignificant direct effect of art on WTB, p = 0.85. Most critically, when the mediating effects of brand affect and perceived luxury were directly compared by including both simultaneously (see Fig. 4B), art significantly increased both brand affect (B = 0.87, p < 0.001) and perceived luxury (B = 1.22, p < 0.001), and brand affect significantly increased WTB (B = 0.89, p < 0.001) whereas perceived luxury did not (B = -0.09, p = 0.27). Thus, when entered simultaneously, the indirect effect of art on WTB via brand affect was significant, B = 0.78, CI = 0.41 to 1.21, whereas the indirect effect via perceived luxury was not, B = -0.11, CI = -0.34 to 0.08. Furthermore, the indirect effect of brand affect was significantly larger than the indirect effect of perceived luxury, B = 0.89, CI = 0.43 to 1.52. Finally, a serial mediation model (art \rightarrow affect \rightarrow luxury \rightarrow WTB) was also nonsignificant, B = -0.06, CI = -0.22 to 0.03, and it was significantly outperformed by a model with brand affect as the sole mediator, B = 0.84, CI = 0.43 to 1.41. Thus, brand affect rather than perceived luxury mediated the art infusion effect.

4.2.5. Conclusions

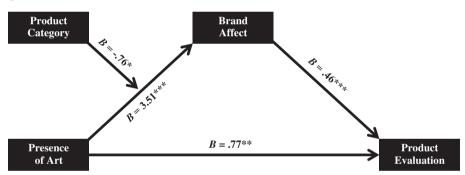
These results corroborate the results of Study 1 with a different artwork, a different product, and a different measure of value. Although perceived luxury mediated the art infusion effect when included as the sole mediator (as in Hagtvedt & Patrick, 2008a,b), its mediating effect diminished to nonsignificance when brand affect was included. In

Fig. 4. Mediation results in Study 1 (Panel A), Study 2 (Panel B), and Study 3 (Panel C).





C.



contrast, brand affect fully mediated the art infusion effect even when perceived luxury was also included either simultaneously or serially. Results thus supported H_1 in our specific conceptual model of art infusion, as well as general theories of arts-based initiatives in management (e.g., Adler, 2006; Barry & Meisiek, 2010; Schiuma, 2011; Taylor & Ladkin, 2009).

5. Study 3

Study 3 was a lab experiment that tested H_2 . Having demonstrated in Studies 1 and 2 that brand affect strongly mediates the art infusion effect, Study 3 tested whether this mediation is moderated by product-type, with stronger mediation (H_2) for a utilitarian product (water) than for a hedonic product (chocolate). The products were advertised with either no art or da Vinci's *Mona Lisa* (see Fig. 2C). Participants rated their brand affect and then reported their willingness-to-pay (WTP) for the given product. Notably, WTP is a direct measure of consumers' valuations of the product, thus providing tangible evidence of the value created by including artworks in advertisements.

5.1. Methods

5.1.1. Design

The experiment had a 2 (Art: artless, artful) \times 2 (Product: utilitarian, hedonic) between-participants design, and measures consisted of the presumed mediator (brand affect) and the primary dependent variable (WTP).

5.1.2. Participants

Participants were 120 Italian respondents (47% females) from a broad age range (36% were 18–25 years old, 39% were 26–40, and 25% were > 40 years old), and the study was conducted in Italian. Thirty respondents participated in each condition, with random assignment to condition. An additional 15 respondents participated in pre-testing, as described next.

5.1.3. Product selection pre-test

To select appropriate products and validate the manipulation of product-type, we conducted a pre-test in which 15 participants each evaluated 10 products on both hedonic value (I love this product; I feel good when I use this product) and utilitarian value (I rely on this product; This product is a necessity for me). Participants indicated their level of agreement with each statement for each product on a scale from

1 ("strongly disagree") to 7 ("strongly agree"). Following Chaudhuri and Holbrook (2001), the two hedonic ratings (r=0.86, p<0.001) and the two utilitarian ratings (r=0.89, p<0.001) were separately averaged. We then selected two products that were from comparable categories but with extreme and opposite hedonic scores and utilitarian scores: chocolate was highly hedonic (M=6.20, SD=0.65) and low in utility (M=2.73, SD=0.65), whereas water was low in hedonism (M=2.50, SD=0.71) and high in utility (M=6.60, SD=0.43).

5.1.4. Stimuli

See Fig. 2C.

5.1.5. Procedure

Participants viewed the ad, rated affect toward the brand, and then indicated their WTP. The brand affect measure was identical to the preceding study. Participants indicated their WTP via a single item (Above what price would you not buy the product, because you can't afford it or because you didn't think it was worth the money?; see Breidert, Hahsler, & Reutterer, 2006). Perceived artistry was not measured because unlike the preceding study, the control condition contained no artwork, and because the *Mona Lisa* is an extremely well-known artwork.

5.2. Results

5.2.1. Data and analyses

The full, anonymized dataset is available through the first author's personal website (or upon request).

5.2.2. Validity and reliability

The measure of brand affect was highly reliable ($\alpha = 0.90$). Given the unbounded nature of reported WTP, we checked for outliers more than \pm 2.5 *SD*s from the mean, but no outliers were observed.

5.2.3. Art infusion

Brand affect ratings are illustrated in Fig. 3C. A 2 (Art: artless, artful) \times 2 (Product: utilitarian, hedonic) ANOVA revealed large and significant main effects of both art, F(1, 116) = 652.94, p < 0.001, and product, F(1, 116) = 130.35, p < 0.001. However, those effects were qualified by a significant interaction, F(1, 116) = 9.49, p < 0.01. Art increased brand affect significantly more for the utilitarian product [t(58) = 20.33, p < 0.001, d = 5.22] than for the hedonic product [t(58) = 15.83, p < 0.001, d = 4.10].

Reported WTP is illustrated in Fig. 3C. A 2 (Art) × 2 (Product) ANOVA revealed a large and significant main effect of art, F(1, 116)= 347.07, p < 0.001. The presence of art in advertising increased WTP. A significant main effect of product, F(1, 116) = 109.42, p < 0.001, confirmed that chocolate (hedonic) elicited higher WTP than water (utilitarian). The interaction was marginally significant, F(1,116) = 2.80, p = 0.097; it should be interpreted with caution. Although the effect of art on raw WTP estimates was slightly larger for the hedonic product (artful-artless = €2.41) than for the utilitarian product (€2.02), this was due to the higher base WTP for the hedonic product. In fact, the presence of art actually elicited a larger price premium for the utilitarian product (240%) than for the hedonic product (128%). So although the artful condition elicited significantly higher WTP than the artless condition for both utilitarian [t(58)]= 22.19, p < 0.001 and hedonic products [t(58) = 10.99, p < 0.001], the effect size was twice as large for the utilitarian product (d = 5.74) as for the hedonic product (d = 2.83). Thus, utilitarian and hedonic products both exhibited art infusion effects that were extremely large, but this effect was marginally larger for the utilitarian product (water) than for the hedonic product (chocolate).

5.2.4. Moderated mediation

To test whether affect mediated the effect of art on WTP, and

whether this presumed mediation was further moderated by producttype (H₂), we conducted a test of moderated mediation (Hayes, 2013, model 7) that included art (artless = 0, artful = 1) as the predictor, WTP as the dependent measure, with affect as mediator and product (utilitarian = 0, hedonic = 1) as moderator. As shown in Fig. 4C, the presence of art in the ad significantly increased brand affect (B = 3.51, p < 0.001), which in turn significantly increased WTP (B = 0.46, p < 0.001). Critically however, although this indirect effect of brand affect on WTP was significant for both the utilitarian product (B = 1.62, CI = 1.24 to 2.07) and the hedonic product (B = 1.27, CI = 1.24)CI = 0.93 to 1.74), this mediation effect was significantly larger for the utilitarian product than for the hedonic product, as confirmed by a significant moderation effect (B = -0.76, p < 0.05). Thus, the mediation by brand affect was significantly moderated by product category (B = -0.35, CI = -0.56 to -0.14). This finding of moderated mediation supports H2. Nonetheless, the direct effect of art on WTP remained significant (B = 0.77, CI = 0.24 to 1.31), indicating only partial mediation by brand affect.

5.2.5. Conclusions

The present study provides the first evidence that the art infusion effect is larger in utilitarian products than in hedonic products. The presence of art in advertising increased brand affect (significantly) and WTP (marginally) more for water (utilitarian) than for chocolate (hedonic). In the extreme, participants reported a willingness to pay more than three times as much for the same water when advertised with the *Mona Lisa* (M = £2.86) than without art (M = £0.84). This finding provides direct, tangible evidence that art in advertising increases the perceived value of a product. Moreover, this effect of art on WTP again was mediated by brand affect, but this mediation was significantly larger for the utilitarian product than for the hedonic product. Thus, product-type moderated the art infusion effect, thereby supporting H_2 .

6. Discussion

We first summarize the empirical methods and results in terms of our affective model of the art infusion effect. We then delineate the theoretical contributions of this research in terms of more general theories of arts-based methods in management. Finally we consider the practical implications of this research for managers in business and marketers in the field.

6.1. Empirical summary

The presence of art in marketing tends to improve product evaluations (Hagtvedt & Patrick, 2008a,b, 2011; Lee et al., 2015). Although this art infusion effect was well established, its psychological explanation was less clear. On the basis that art evokes emotion in the viewer (Cirrincione et al., 2014; Lacey et al., 2011; Silvia, 2005), and emotion affects product and price evaluations (Chaudhuri & Holbrook, 2001; Holbrook & Batra, 1987; Mano & Oliver, 1993; Xia et al., 2004), we hypothesized that emotion underlies art infusion. Across three studies using three different artworks (by Vermeer, van Gogh, and da Vinci), three different measures of product value (product evaluation, WTB, and WTP), in all cases brand affect mediated the art infusion effect. Thus, emotion appears to be a fundamental mechanism through which art affects product and price evaluations.

This research also supports the prior work establishing perceived luxury as a conceptual mediator of art infusion (Hagtvedt & Patrick, 2008a,b; Lee et al., 2015), and indeed the present studies replicated this mediation by luxury. However, given that emotion is one of several antecedents of perceived luxury (Wiedmann et al., 2009; see also Sung & Kim, 2010), we hypothesized that emotion is the lower-level mechanism driving the higher-level effect of perceived luxury on product evaluations. And in fact, when brand affect was included as an

additional mediator, perceived luxury became nonsignificant whereas brand affect significantly and fully mediated the art infusion effect. Thus, when directly compared, brand affect better explained art infusion than did perceived luxury.

Product-type moderated the art infusion effect. Whereas prior research showed art infusion almost exclusively with utilitarian products. the present study directly compared art infusion with utilitarian and hedonic products. Art increased brand affect more for a utilitarian product than for a hedonic product. This finding is consistent with other demonstrations that affective attributes differentially influence utilitarian and hedonic products (Chitturi et al., 2007; Gill, 2008; Hagtvedt & Patrick, 2014; Hoegg et al., 2010; Klein & Melnyk, 2016), presumably due to a sort of "diminishing return". Because hedonic products primarily possess emotional attributes, the additional affect induced by an artwork has a smaller influence on evaluations. And contrarily, because utilitarian products tend to possess functional attributes, increasing affect via art has a relatively large effect on evaluations. Results thus supported a model in which art infusion is mediated by brand affect and moderated by product-type, as conceptualized in Fig. 1 and empirically supported in Fig. 4C.

6.2. Theoretical contributions

This research provides several theoretical contributions, ranging from the very specific to the relatively general.

- (1) As elaborated above, this research develops, tests, and supports a new, more powerful explanation of the art infusion effect on product evaluations. This improved model is important insofar as the two alternative mechanisms (i.e., brand affect and perceived luxury) yield divergent predictions in other marketing and consumption contexts. For instance, the two models make divergent predictions about which consumers will be most sensitive to art in marketing: whereas the affective model predicts that consumers who are high in emotionality or emotional intelligence will be most susceptible to the use of art in marketing, the luxury model instead predicts that consumers who aspire to sophistication or are high in brand consciousness will exhibit larger art infusion effects.
- (2) Following from the point above, this new affective model of art infusion also led to the identification of a new moderator of this effect. Given that utilitarian and hedonic products differ in their instantiation of and reliance on emotional aspects of marketing, we successfully predicted that those product-types would also differ in their magnitude of the art infusion effect. In fact, the affective model suggests that other factors related to the processing or perception of emotion might also moderate such effects of art on product value.
- (3) Relatedly, this research provides direct, tangible evidence of how art in marketing can create value for business. Much of the prior research in management has documented various ways in which businesses have implemented arts-based initiatives, and have correctly pointed out the many benefits that these initiatives may have for business (see e.g., Adler, 2006; Nissley, 2010). Much less evidence has been provided, however, that such organisational benefits translate into financial value. By measuring consumers' willingness to buy and willingness to pay for the given products, the present research demonstrates quite simply and clearly that the arts can, in fact, add financial value to business.
- (4) This research is also among the first to conceptualize how arts-based initiatives in marketing may fit into broader theoretical frameworks from organisation and management. To be clear, prior theorizing has acknowledged that the arts may also create value through marketing actions (e.g., Troilo, 2015). For instance, management scholars often refer to the importance of art for product development and design. However, the potential of advertising for implementing arts-based initiatives has been overlooked. More

- generally, the present research conceptualized such marketing tools as fitting within Schiuma's (2011) static view of the arts. That is, marketing actions like product design, packaging, promotion, and advertising can add value to consumers' perceptions and consumption experiences of the company's products or services. Indeed, we have shown that static aspects of arts-based initiatives can provide direct and tangible financial value.
- (5) Finally, this research provides specific support for theoretical models of arts-based initiatives in management. A common theme among theorizing in organisation and management is that a primary mechanism through which arts-based initiatives improve business is *emotion*. Thus, our emphasis on emotion as a consequence of art and a cause of business performance can be incorporated naturally into management theories: given that emotion explains the art infusion effect, this can be viewed as support for the generalizability of those management theories.

6.3. Managerial implications

The main findings of this research also provide practical, implementable guidance for marketers, especially for brand managers who face increasing challenges due to economic instability, the impact of digital technologies, the dynamism of consumer preferences, the growing power of distribution, and the rapid emergence of new competitors. These challenges highlight the importance of brand equity development and enhancement. The use of art in advertising can significantly and positively influence brand affect and hence the brand's potential to elicit favorable emotional responses in the consumer (Chaudhuri & Holbrook, 2001, p.82). According to the means-end model of consumer categorization Peter & Olson, 1990), the enactment of this potential produces an increase in the degree of abstraction of brand associations, which in turn reinforces the consumer self-connection to the brand (Gutman, 1982; Reynolds & Gutman, 1988). As the emotional ties with the brand strengthen, consumer attitudes toward both the present brand offer (e.g., product evaluation, WTB, WTP) and possible brand extensions improve (Hagtvedt & Patrick, 2008a). This improves brand scope and hence brand equity, which is strictly related to the growth opportunities deriving from the development of brand

Another implication of these results for brand strategies is related to the positive impact that art infusion, mediated by brand affect, could have on consumer behaviors. By adding emotional attributes to the brand, art increases both consumer involvement and perceived differentiation and hence reinforces the stability of consumer choices. As a matter of fact, in the case of high involvement and high perceived differentiation among brands, consumers go through a complex decision process that – being based on active information processing and differentiation among alternatives – favors the establishment of brand loyalty.

The evidence also suggests that marketing managers in charge of utilitarian products should especially value the art infusion effect. In these categories consumer evaluation processes are mainly based on tangible attributes, linked to functional benefits, and consumers try to find a rational solution to the purchase problem, which ultimately reduces the potential for brand affect. Chaudhuri and Holbrook (2001) even found a significant negative correlation between the utilitarian value of the product category and brand affect. So for utilitarian products the use of art in brand communications is an effective way to prevent this limitation. Counterintuitively, utilitarian products for which affective features are relatively less important are precisely the types of products that benefit most from art in advertising. In contrast, hedonic products that already induce high emotions tend to benefit less from artful advertising.

Finally, the addition of affective attributes to utilitarian (informative) categories through art can cause a shift of the typical hierarchy of effects underlying product evaluation and choice, opening

innovative options in future brand communication strategies. For example, affective categories (Vaughn, 1986) are processed through the sequence feel-learn-do (instead of learn-feel-do), and this may influence the design of creative strategy, the media strategy, copy testing and appraisal of advertising effects. Thus, like arts-based initiatives more generally, arts-based marketing actions have tremendous potential to create value not only for companies, but also for their customers.

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References

- Adler, N. J. (2006). The arts and leadership: Now that we can do anything, what will we do? Academy of Management Learning and Education, 5(4), 486-499.
- Barry, D., & Meisiek, S. (2010). Seeing more and seeing differently: Sensemaking, mindfulness, and the workarts. Organization Studies, 31(11), 1505-1530.
- Berinsky, A. J., Huber, G. A., & Lenz, G. S. (2012). Evaluating online labor markets for experimental research: Amazon.com's Mechanical Turk. Political Analysis, 20(3), 351-368.
- Breidert, C., Hahsler, M., & Reutterer, T. (2006). A review of methods for measuring willingness-to-pay. Innovative Marketing, 4, 8-27.
- Chaudhuri, A., & Holbrook, M. B. (2001). The chain of effects from brand trust and brand affect to brand performance: The role of brand loyalty. Journal of Marketing, 65(2), 81-93.
- Chitturi, R., Raghunathan, R., & Mahajan, V. (2007). Form versus function: How the intensities of specific emotions evoked in functional versus hedonic trade-offs mediate product preferences. Journal of Marketing Research, 44(4), 702-714.
- Cirrincione, A., Estes, Z., & Carù, A. (2014). The effect of ambient scent on the experience of art: Not as good as it smells. Psychology & Marketing, 31(8), 615-627.
- Gill, T. (2008). Convergent products: What functionalities add more value to the base? Journal of Marketing, 72(2), 46-62.
- Gutman, J. (1982). A means-end chain model based on consumer categorization processes. Journal of Marketing, 46(2), 60-72.
- Hagtvedt, H., & Patrick, V. M. (2008a). Art and the brand: The role of visual art in enhancing brand extendibility. Journal of Consumer Psychology, 18(3), 212-222.
- Hagtvedt, H., & Patrick, V. M. (2008b). Art infusion: The influence of visual art on the perception and evaluation of consumer products. Journal of Marketing Research, 45(3), 379-389.
- Hagtvedt, H., & Patrick, V. M. (2011). Turning art into mere illustration: Concretizing art renders its influence context dependent. Personality and Social Psychology Bulletin, 37(12), 1624-1632,
- Hagtvedt, H., & Patrick, V. M. (2014). Consumer response to overstyling: Balancing aesthetics and functionality in product design. Psychology & Marketing, 31(7), 518-525
- Hayes, A. F. (2013). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach. New York: Guilford.
- Hirschman, E. C., & Holbrook, M. B. (1982). Hedonic consumption: Emerging concepts, methods and propositions. Journal of Marketing, 46(3), 92-102.
- Hoegg, J., Alba, J. W., & Dahl, D. W. (2010). The good, the bad, and the ugly: Influence of aesthetics on product feature judgments. Journal of Consumer Psychology, 20(4), 419_430

- Holbrook, M. B., & Batra, R. (1987). Assessing the role of emotions as mediators of consumer responses to advertising. Journal of Consumer Research, 404-420.
- Klein, K., & Melnyk, V. (2016). Speaking to the mind or the heart: Effects of matching hedonic versus utilitarian arguments and product. Marketing Letters, 27(1), 131-142.
- Lacey, S., Hagtvedt, H., Patrick, V. M., Anderson, A., Stilla, R., ... Sathian, K. (2011). Art for reward's sake: Visual art recruits the ventral striatum. NeuroImage, 55(1),
- Lee, H.-C., Chen, W.-W., & Wang, C.-W. (2015). The role of visual art in enhancing perceived prestige of luxury brands. Marketing Letters, 26(4), 593-606.
- Mano, H., & Oliver, R. L. (1993). Assessing the dimensionality and structure of the consumption experience: Evaluation, feeling, and satisfaction. Journal of Consumer Research, 20(3), 451-466.
- Meisiek, S., & Barry, D. (2014a). The science of making management an art. Scandinavian Journal of Management, 30(1), 134-141.
- Meisiek, S., & Barry, D. (2014b). Theorizing the field of arts and management. Scandinavian Journal of Management, 30(1), 83-85.
- Nissley, N. (2010). Arts-based learning at work: Economic downturns, innovation upturns, and the eminent practicality of arts in business. Journal of Business Strategy,
- Peter, J. C., & Olson, J. C. (1990). Consumer behavior and marketing strategy. Homewood: Irwin.
- Reynolds, T. J., & Gutman, J. (1988). Laddering theory: Method, analysis and interpretation. Journal of Advertising Research, (February-March), 11-34.
- Schiuma, G. (2011). The value of arts for business. Cambridge University Press.
- Silvia, P. J. (2005). Emotional responses to art: From collation and arousal to cognition and emotion. Review of General Psychology, 9, 243-357.
- Sung, Y., & Kim, J. (2010). Effects of brand personality on brand trust and brand affect. Psychology & Marketing, 27(7), 639–661.
- Taylor, S. S., & Ladkin, D. (2009). Understanding arts-based methods in managerial development. Academy of Management Learning and Education, 8(1), 55–69.
 Troilo, G. (2015). Marketing in creative industries: Value, experience and creativity. London:
- Palgrave.
- Vaughn, R. (1986). How advertising works: A planning model revisited. Journal of Advertising Research, (February-March), 57-66.
- Wiedmann, K. P., Hennigs, N., & Siebels, A. (2009). Value-based segmentation of luxury consumption behavior. Psychology & Marketing, 26(7), 625-651.
- Xia, L., Monroe, K. B., & Cox, J. L. (2004). The price is unfair! A conceptual framework of price fairness perceptions. Journal of Marketing, 68(4), 1-15.

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