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The Effect of Adding Novel Attributes to Hedonic vs. Utilitarian Base: Role of Holistic vs. Analytic Thinking Style*

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Combining theories of the goal-derived product evaluation and holistic versus analytic thinking style, the authors investigate the effects of adding novel attributes on new product evaluation. While one may predict that adding novel attributes may be appealing to consumers as it provides new benefits, the authors propose that, in some cases, it may not. The current research investigates consumers' view of new attribute addition depends on the novel attribute's goal congruence with the consumption goals of the base product, which may be hedonic or utilitarian in nature. Further, consumers' holistic versus analytic thinking style moderates the effect of such goal congruence. Study 1 examines the asymmetric evaluation towards new products when a goal-incongruent (vs. congruent) attribute is added to either a hedonic or a utilitarian base product. When the base product is hedonic (vs. utilitarian) by nature, consumers show lower evaluations for new products with the addition of goal-incongruent (utilitarian) attributes compared with the addition of goal-congruent (hedonic) attributes. Study 2 examines the moderating role of thinking style. The results indicate that in promoting products with novel goal-incongruent (vs. congruent) attributes, using a holistic thinking style effectively increases product evaluations compared with using an analytic thinking style. Study 3 replicates studies 1 and 2 to prove the generalizability of the effects by using different stimuli. These findings have implications for new product positioning and promotion strategies.

Keywords: hedonic product, utilitarian product, goal congruence, holistic vs. analytic thinking style, new product evaluation

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Ⅰ. Introduction

Firms differentiate or improve their products by adding novel attributes to the base product (Mukherjee and Hoyer 2001). For example, a toothpaste manufacturer may add herbal mint flavor to toothpaste, or a product manager of chocolate may add proteins to a chocolate bar. Products can be primarily hedonic or utilitarian (Baltas, Kokkinaki, and Loukopoulou 2017; Dhar and Wertenbroch 2000). The consumption goals associated with the hedonic or utilitarian base product and the added attribute are a way to conceptualize the nature of additions (Gill 2008). Adding new features to the base product could result in hedonic or utilitarian goal congruence or incongruence. For example, while adding a sensory (functional) attribute to the hedonic (utilitarian) base product would be goal congruent, adding a functional (sensory) attribute to the hedonic (utilitarian) base product would be goal incongruent. Product "benefits" function as consumption goals (Van Osselaer et al. 2005; Van Osselaer and Janiszewski 2012). Thus, the match or congruence between the product benefits and the goals plays a crucial role in product evaluation (Klein and Melnyk 2016). When goal-incongruent functionalities are added to the base products, the "asymmetric additivity effect" could occur (Gill 2008; Noseworthy and Trudel 2011). This research finds that consumers show more negative evaluation for a new product when a goal-incongruent (vs. congruent) attribute is added to the hedonic base than to the utilitarian base. This result is in line with the previous research result of Gill (2008) and Noseworthy and Trudel (2011).

Consumers naturally strive for internal consistency (Sirgy 1982). So, the goal congruence between the base product and novel attribute would enhance consumers' product evaluations (Klein and Melnyk 2016). However, when goal-incongruent attributes are added to the base products, the effect of adding novel attributes to the existing product would differ by the context (e.g., culture, thinking style, arousal, positioning, pricing, or advertising of the products) or by the consumer characteristics (e.g., cognitive closure, thinking style, self-construal, or trait innovation newness level) (Chung and Lee 2019; Gill 2008; Jain, Desai, and Mao 2007; Lalwani and Shavitt 2013; Ma, Gill, and Jiang 2015; Monga and John 2007; Mukherjee and Hoyer 2001; Noseworthy and Trudel 2011; Noseworthy, Di Muro, and Murray 2014).

Among these variables, in the present research, we focus on the role of thinking style. Thinking style influences every aspect of a human being's decision-making process consciously or unconsciously. The differences in thinking style result in even differences in cultures (Choi, Koo, and Choi 2007; Choi, Nisbett, and Norenzayan 1999; Markus and Kitayama 1991). When

people make purchase decisions, thinking style plays a significant role in price-quality judgment (Lawani and Shavitt 2013), brand extension evaluation (Monga and John 2007, 2008), mental accounting system (Hossain 2018), and new product evaluation (Chung and Lee 2019).

When consumers evaluate a new product, they may adopt one of two thinking styles (Chung and Lee 2019; Epstein et al. 1996; Escalas and Bettman 2005; Hossain 2018; Jain, Desai, and Mao 2007). While evaluating objects, holistic thinkers demonstrate flexibility in categorization and emphasize the relationships across categories. On the other hand, analytic thinkers assign objects to unique categories and evaluate them concerning the category-specific attributes. Holistic thinkers have connected-thinking orientation and show deviation from categorization norms. On the contrary, analytic thinkers have discrete thinking orientation and institute a well-defined structure within their categorization norms (Choi et al. 2003; Choi, Koo, and Choi 2007; Hossain 2018; Kühnen and Oyserman 2002; Lalwani and Shavitt 2013; Monga and John 2007, 2008, 2010).

In this research, we seek to examine how different thinking styles (holistic vs. analytic) influence consumers' product evaluations when novel attributes (sensory or functional) are added to the base products (hedonic or utilitarian). We suggest that the effectiveness of adding novel attribute depends on (1) the (hedonic vs. utilitarian) goal congruence of added attributes to the base products and (2) (holistic vs. analytic) thinking style. We expect the differences in new product evaluation between holistic versus analytic thinking styles will be evident when the goal-incongruent (vs. congruent) attributes are added to the base products. Compared with using an analytic thinking style, using a holistic thinking style may enhance positive product evaluation of new products.

The following section provides the relevant theoretical background on the hedonic versus utilitarian consumption goals, the goal-congruence versus goal-incongruence of novel attributes, holistic versus analytic thinking style, and predicted interaction effects. Next, we report three studies. In particular, in study 1 and 3, we examine asymmetric product evaluation towards adding a goal-congruent versus a goal-incongruent attribute to the hedonic versus utilitarian base. Study 2 and 3 manipulates thinking style (holistic vs. analytic) and examines how consumers evaluate the new products when goal-incongruent (vs. congruent) attributes are added to the base products. Finally, the findings of our research are discussed with suggestions for future research.

Ⅱ. Theoretical Background and Hypothesis Development

2.1 Hedonic vs. Utilitarian Consumption Goal

Consumers purchase and use products or services with different goals and motives: (1) consummatory hedonic gratification from *sensory attributes*, and (2) instrumental, utilitarian reasons (Batra and Ahthola 1990, p.159; Botti and McGill 2011; Voss, Spangenberg, and Grohmann 2003, p.130). This product categorization is "a function of the relative salience of its hedonic and utilitarian attributes" (Chernev 2004, p.143). Hedonic products are associated with sensory, experiential, and enjoyment-related attributes. On the other hand, utilitarian products are associated with functional, practical, and tangible attributes. People consume and evaluate utilitarian products primarily on the basis of functional, instrumental, and practical benefits (Chernev 2004; Chitturi, Raghunathan, and Mahajan 2008; Gill 2008).

The criteria for product evaluation may differ systematically between hedonic and utilitarian products (Chernev 2004; Holbrook and Hirschman 1982; Melnyk, Klein, and Völckner 2012). People consume hedonic products for sensual or aesthetic pleasure (Dhar and Wertenbroch 2000). Thus, consumers evaluate hedonic products on the basis of the experiential or holistic meaning of the products rather than individual product attributes (Holbrook and Hirschman 1982). On the other hand, consumers use utilitarian products for practical or functional benefits. Thus, when consumers evaluate utilitarian products, they look at all available information closely, pay more attention to individual product attributes (Gürhan-Canli and Maheswaran 1998; Melnyk, Klein, and Völckner 2012).

By nature, human beings seek pleasure, and this results in a *pro-hedonic preference* effect (Alba and Williams 2013). Perceived incongruity derived from adding novel attributes creates arousal and this arousal leads to different responses by the hedonic versus utilitarian nature of the base products. Chaudhuri, Aboulnasr, and Ligas (2010) found that consumers' responses to new product were significantly different by the hedonic or utilitarian nature of description about the new product. They also found that the effect of arousal on positive and negative emotion is greater for hedonic rather than utilitarian descriptions. Pham (1998) contends that affect is used as information in making evaluative judgments. Consumers' reliance on such feelings is greater under hedonic motives than under utilitatian motives (Chaudhuri, Aboulnasr, and Ligas 2010).

According to Gill (2008), when goal-incongruent (vs. congruent) attributes are added to the base products, consumers' evaluation of the new product depends on the valence of the

contrast. For new products with a *utilitarian base*, adding an *incongruent hedonic attribute* leads to a *positive contrast* (Gill 2008). In addition, because hedonic attributes are perceived as more fun and pleasurable than utilitarian attributes (Hirschman and Holbrook 1982), adding a hedonic attribute to a utilitarian base provides more fun and pleasure. Therefore, adding a hedonic attribute to the utilitarian base results in a positive contrast effect (Gill 2008; Keller and McGill 1994; MacInnis and Price 1987). In contrast, for new products with a *hedonic base*, adding *an incongruent utilitarian attribute* is *negatively contrasted* (Gill 2008). Utilitarian attributes are more practical and instrumental, and these benefits are perceived as less pleasurable and fun than hedonic attributes (Holbrook and Hirschman 1982). Although there are perceived benefits from utilitarian attributes, the associated loss in hedonic benefits of the base products results in a negative contrast effect (Gill 2008; Noseworthy and Trudel 2011). Thus, we propose that the effect of adding goal-incongruent (vs. congruent) attributes will be more negative when the base product is hedonic (vs. utilitarian) by nature.

2.2 The Goal Congruence vs. Incongruence of Novel Attributes

Goals are "abstract benefits sought by the consumer that are available through the (abstract or concrete) features of a product class that offer fulfillment of those goals (Martin and Stewart 2001)." Consumers usually evaluate a product based on the benefits. These benefits that a product provides function as consumption goals (Friedman, Savary, and Dhar 2018; Van Osselaer and Janiszewski 2012). Thus, product evaluation depends on the congruence between consumers' consumption goals and products' benefits (Klein and Melnyk 2016). Previous research defined the term "congruence" as the "extent to which associations of one object share content and meaning with another object's association (Keller 1993; Melnyk, Klein, and Völckner 2012).

The consumption goals of using hedonic and utilitarian products are different (Chernev 2004; Klein and Melnyk 2016). This research investigates the goal-congruence effect of adding novel attributes to the hedonic versus utilitarian base. Consumers pursue more pleasure-related goals for hedonic products, whereas they pursue more functionality-related goals for utilitarian products (Chernev 2004; Chitturi, Raghunathan, and Mahajan 2008). Here, the goal congruence between the added attribute and the base product is defined as the extent to which the novel attribute and the base product share similar/different goals in terms of their hedonic versus utilitarian benefits. For example, ice cream with added chocolate or dish detergent with added baking soda would be considered goal-congruent. In contrast, ice cream with added chlorella or dish detergent

with orchid flower scent would be considered goal-incongruent. A question explored in this research is how consumers evaluate new products when goal-congruent versus goal-incongruent attributes are added to hedonic or utilitarian base products.

When goal-congruent attributes are added to the bases, the new attributes will be assimilated to the base products due to the similarity in consumption goals. However, when goal-incongruent attributes are added to the bases, the new attributes will be contrasted with the existing base product due to the dissimilarity in consumption goals. Thus, the assimilation versus contrast effect will affect how consumers evaluate the new product (Gill 2008). Further, depending on consumers' (holistic vs. analytic) thinking style, their product evaluation would be different.

First, when goal-congruent attributes are added to the base, consumers will easily understand the benefits of the new products (Jhang, Grant, and Campbell 2012) evaluate the products more favorably. Because the novel attributes' and the base products' consumption goals are already related to each other, (holistic vs. analytic) thinking style will not make any differential impact on the perceived relatedness (between the base products and added attributes) and product evaluations.

Second, when goal-incongruent attributes are added to the base, consumers' evaluation of the new product will depend on their thinking style. Thinking style determines most of the cognitive processing and decision-making process (Choi, Koo, and Choi 2007; Hossain 2018; Nisbett et al. 2001). Holistic thinking fosters similarity perception and intuitive reasoning, whereas analytic thinking prompts dissimilarity perception and logical reasoning (Förster 2009). Thus, when the goal-incongruent attributes are added to the existing products, their dissimilarity perception will increase when people use analytic thinking compared with holistic thinking. On the contrary, when people evaluate a product with goal-incongruent attributes, their similarity perception would increase by using holistic thinking rather than using analytic thinking. This will lead to higher perceived relatedness of the consumption goal between the base product and added novel attributes. Thus, consumers' evaluation of the new product with goal-incongruent attributes will be more favorable when they use holistic thinking compared with analytic thinking. In the next section, we will review the prior research on thinking style.

2.3 The Role of Holistic vs. Analytic Thinking Style

Decades of research have shown that people with different thinking styles (i.e., whether they are holistic thinkers or analytic thinkers) are fundamentally different in several ways, including in their attributions (Zárate, Uleman,

and Volis 2001), in categorization (Nisbett et al. 2001; Markus and Kitayama 1991), in mental accounting system (Hossain 2018), and in product evaluation (Gürhan-Canli and Maheswaran 1998; Jain, Desai, and Mao 2007; Lawani and Shavitt 2013; Monga and John 2007, 2008).

When consumers evaluate a product, they may adopt one of two thinking styles (Chung and Lee 2019; Epstein et al. 1996; Escalas and Bettman 2005; Hossain 2018; Jain, Desai, and Mao 2007; Monga and John 2007, 2008). The previous research suggests that the holistic thinkers view the world as composed of connected elements, whereas the analytic thinkers view the world as isolated elements (Nisbett et al. 2001).

Holistic versus analytic thinking detects different kinds of connections between objects (Monga and John 2010, p.81). While holistic thinking fosters the tendency to find thematic interdependencies and similarities between objects, analytic thinking enhances the tendency to find categorical memberships and dissimilarities between objects (Förster 2009; Melnyk, Klein, and Völckner 2012). Holistic thinkers reported greater degrees of association than analytic thinkers when they are asked about the degree of association among objects (Choi, Koo, and Choi 2007; Hossain 2018).

The previous literature suggests that holistic versus analytic thinking differentially impact evaluations of brand extension (Hossain 2018). Holistic thinkers' perceived fit among a parent brand and the extended product category was greater compared to analytic thinkers (Monga and John 2007). Further, thinking style also differentially influences price-quality judgments. Holistic thinkers have greater tendencies to use price as a signal of quality (Lalwani and Shavitt 2013).

Holistic thinkers' connected-thinking orientation, emphasis on relationships across categories and events induce categorization flexibility and deviation from categorization norms (Hossain 2018; Jain, Desai, and Mao 2007; Monga and John 2010). On the contrary, analytic thinkers' discrete thinking orientation results in a well-defined structure within their categorization systems and enhanced susceptibility to the categorization effect (Hossain 2018). Analytic thinkers assign the objects to unique categories and evaluate them about category-specific attributes (Hossain 2018; Jain, Desai, and Mao 2007; Monga and John 2010).

In sum, while holistic thinking enhances relation-based thinking, analytic thinking fosters rule-based thinking. Holistic thinkers engage in broadly defined flexible categorization. Given this tendency, we predict that consumers who engage in holistic thinking will easily find the connections among various product categories. As a result, holistic thinkers will tolerate adding both a *goal-congruent and incongruent* attribute to the base. By contrast, analytic thinkers are inclined to exhibit narrow and

inflexible categorization tendencies. Therefore, we predict that consumers who engage in analytic thinking are more likely to consider adding a goal-incongruent attribute to the base as a violation of the categorization norm and give a negative evaluation of it.

Due to the nature of the categorization flexibility and connected thinking orientation, holistic thinking (vs. analytic thinking) will result in higher product evaluations when goal-incongruent (vs. congruent) attributes are added to the base products. Therefore, we posit that:

H1: For the evaluation of the new products, the effect of adding a *goal-incongruent* (vs. congruent) attribute will be *asymmetric* by the *hedonic vs. utilitarian* nature of the base product. Specifically, adding a goal-incongruent (utilitarian) attribute to the hedonic base would result in lower product evaluation, whereas adding a goal-incongruent (hedonic) attribute to the utilitarian base would result in favorable product evaluation.

H2: Thinking style (*holistic vs. analytic*) will moderate the effect of goal congruence on product evaluation. Specifically, when the goal *incongruent* (vs. congruent) attributes are added to the base, compared to *analytic* thinking, *holistic* thinking will result in *more favorable* product evaluation toward a new product.

Ⅲ. Methods and Analysis

Study 1 and 3 examines the asymmetric effect of adding goal-incongruent (vs. congruent) attributes on evaluations of new products with hedonic versus utilitarian nature. Study 2 and 3 manipulates thinking style and then examines how holistic versus analytic thinking style influences the effect of adding goal-incongruent (vs. congruent) attributes to the bases on new products evaluation.

3.1 Study 1.

3.1.1 Pretest

In order to check the validity of stimuli, we conducted a pretest. Twenty-nine respondents (males 58.6%; age: 20-29 years old 55.2%) participated in the study via an online survey platform Prolific. Following current literature (Baltas, Kokkinaki, and Loukopoulou 2017; Crowley, Spangenberg, and Hughes 1992; Khan and Dhar 2010; O'curry and Strahilevitz 2001), two product categories were used in the experiment: toothpaste as a utilitarian product and chocolate as a hedonic product.

To determine base product type manipulation, we asked the respondents to rate these two product categories according to their hedonic or utilitarian benefits. We used the three-dimensional multi-item measures from Voss,

Spangenberg, and Grohmann (2003). Hedonic benefits were measured by asking respondents to rate the products in terms of "fun" (1 = not at all fun at all, 9 = very fun), "delightful1" (1= not delightful at all, 9 = very delightful) and "enjoyable" (1 = not enjoyable at all, 9 = very enjoyable) (Hedonic benetfit__Chocolate's α = .750; Hedonic benetfit__Toothpaste's α = .899). Utilitarian benefits were measured by asking participants to rate the products concerning "useful" (1 = not at all useful at all, 9 = very useful), "functional" (1 = not functional at all, 9 = very functional), "practical" (1 = not practical at all, 9 = very practical) (Utilitarian benefit__Toothpaste's α = .899; Utilitarian benefit__Chocolate's α = .822).

Results of a pretest confirmed that respondents perceived chocolate as significantly more hedonic than toothpaste ($M_{chocolate\_hedonic}$ = 8.26, $M_{toothpaste\_hedonic}$ = 3.48; t (28) = 17.52, $p < .001$). Similarly, participants perceived toothpaste as significantly more utilitarian than chocolate ($M_{toothpaste\_utilitarian}$ = 8.32, $M_{chocolate\_utilitarian}$ = 2.98; t (28) = 20.21, $p < .001$). Thus, we used chocolate as hedonic base product and toothpaste as utilitarian base product for experiments.

3.1.2 Experiment

Study 1 examines whether the type of base product (hedonic vs. utilitarian) has a differential impact on new product evaluation by varying the added attribute's goal congruence (congruent vs. incongruent).

3.1.3 Participants and Design

A total of one hundred and thirty-nine participants (46% male, 20-29 years old 57.6%, White/Caucasian 82.7%, more than bachelor's degree 55.4%) from Prolific participated in this survey. A 2 (goal congruence: congruent vs. incongruent) x 2 (base product type: hedonic vs. utilitarian) between-subject experiments were conducted in order to demonstrate that the novel attribute's goal congruence moderates the relationship between the base product type and new product evaluation. The instrument for this manipulation was adapted from Baltas, Kokkinaki, and Loukopoulou (2017) and Gill (2008).

3.1.4 Procedures and Measures

After accepting to participate in this study, each participant was randomly assigned to one of the four experimental conditions. Based on the pretest results, two product categories were used as stimuli: chocolate as a hedonic base product and toothpaste as a utilitarian base product. While chocolates varied in flavor (sensory attribute) or nutritional content (functional attribute), toothpaste varied in scents (sensory attribute) or active ingredients (functional attribute) (Baltas, Kokkinaki, and Loukopoulou 2017). Further, participants in

the hedonic goal-congruent condition read an advertisement of the sweet caramel (sensory attribute) added chocolate, whereas participants in the hedonic goal-incongruent condition read an advertisement of the rich protein (functional attribute) added chocolate. Similarly, while participants in the utilitarian goal-congruent condition read an advertisement of the fluoride (functional attribute) added toothpaste, participants in the utilitarian goal-incongruent condition read an advertisement of the herbal mint scent (sensory attribute) added toothpaste (See Appendix).

The base products' hedonic benefits were measured using "1 = fun / delightful / enjoyable at all, 9 = very fun / delightful / enjoyable) (α = .841). The base products' utilitarian benefits were measured using "1 = not at all useful / functional /practical at all, 9 = very useful / functional /practical) (α = .709).

The dependent variable for study 1 was product evaluation. Product evaluation was measured using five 9-point scale items - the extent to which subjects considered the product to be bad/good, not at all desirable/desirable, unattractive/attractive, negative/positive, don't like it at all/like it very much (Thompson and Hamilton 2006) (α = .964).

Novel attribute's goal congruence to the base product was measured using "How similar is the goal associated with (base product: toothpaste/chocolate) and (added attribute: herbal mint/fluoride, sweet caramel / rich protein)? (1 = not at all similar, 9 = very similar) (Friedman, Savary, and Dhar 2018).

In addition, single-item of 9-point scales were used to gauge involvement (how important) and familiarity (how familiar) with the product category. Demographic information, including gender, age, race, education, and income, was also collected.

3.1.5 Manipulation Check

The manipulation check confirmed that the chocolate was more hedonic than the toothpaste ($M_{chocolate\_hedonic}$ = 7.51, $M_{toothpaste\_hedonic}$ = 3.44; t (137) = 21.70, $p < .001$), whereas the toothpaste was more utilitarian than the chocolate ($M_{toothpaste\_utilitarian}$ = 8.40, $M_{chocolate\_utilitarian}$ = 2.74; t (137) = 45.48, $p < .001$). For the added attributes, we measured the sensory and functional characteristics of added attributes. Participants rated sweet caramel as more sensory than rich protein ($M_{sweet\ caramel\_sensory}$ = 7.44, $M_{rich\ protein\_sensory}$ = 1.80; t (67) = 27.68, $p < .001$) and rich protein more functional than sweet caramel ($M_{rich\ protein\_functional}$ = 7.26, $M_{sweet\ caramel\_functioal}$ = 2.28; t (70) = 24.04, $p < .001$). Similarly, respondents also rated herbal mint scent as more sensory ($M_{herbal\ mint\_sensory}$ = 7.49, $M_{fluoride\_sensory}$ = 1.71; t (68) = 26.63, $p < .001$) and fluoride as more functional than herbal mint ($M_{fluoride\_functional}$ = 8.03, $M_{herbal\ mint\_functional}$ = 2.17; t (68) = 29.81, $p < .001$).

Next, we measured the added attribute's goal congruence and the results confirmed that adding sweet caramel to chocolate was more goal congruent than adding rich protein ($M_{hedo\_congruent}$ = 7.56, $M_{hedo\_incongruent}$ = 2.66; t (67) = 15.73, p < .001), and adding fluoride to toothpaste was more goal congruent than adding herbal mint condition ($M_{util\_congruent}$ = 6.71, $M_{util\_incongruent}$ = 3.23; t (68) = 9.65, p < .001). Finally, the results of a one-way ANOVA showed that familiarity and involvement with the product category did not differ across base type conditions (all p's > .10). Thus, they were dropped from further statistical analyses.

3.1.6 Moderating Effects of Goal Congruence on New Product Evaluation

A 2 (goal congruence: congruent vs. incongruent) x 2 (base type: hedonic vs. utilitarian) ANOVA revealed a significant interaction on the product evaluation (F (1, 135) = 216.59, p = .000). As H1 predicted, adding goal-incongruent attributes to the base resulted in asymmetry in new product evaluation. For a new product with a hedonic base (chocolate), adding a goal-congruent attribute (sweet caramel) resulted in greater product evaluation (7.21 vs. 3.14; t (67) = 15.73, p < .001) than adding a goal-incongruent (rich protein) attribute. On the contrary, consumers' new product evaluation was greater when adding a goal-incongruent attribute (herbal mint) to the utilitarian base (toothpaste) than a goal-congruent attribute (fluoride) (6.29 vs. 5.77; t (68) = 2.11, p = .038). These results supported H1. Table 1 shows the results for product evaluation of four products of study 1.

3.1.7 Discussion

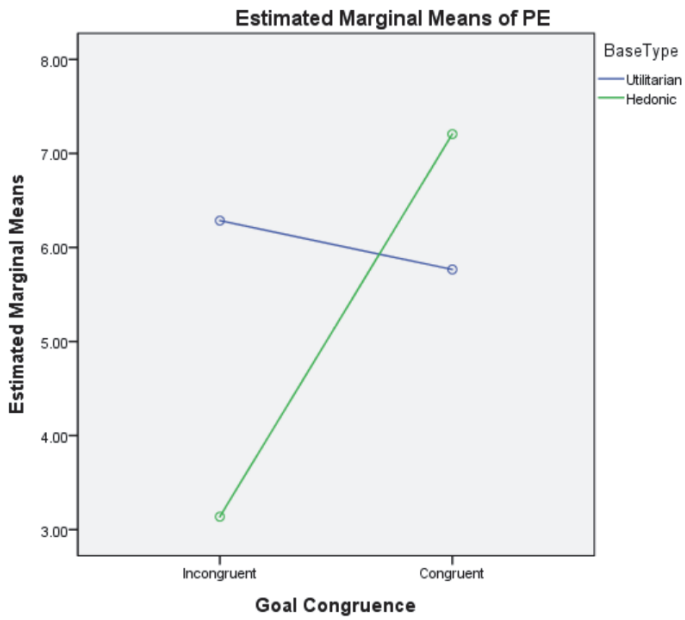
The results of study 1 showed that the added attribute's goal-incongruence (vs. congruence) led to lower product evaluation for the new product with a hedonic base than the new product with a utilitarian base. Study 1 showed the asymmetry in new product evaluations by the base product's nature, which supports H1. In study 2, to test the boundary condition of the impact of goal congruence on new product evaluation, we conducted an experiment in the addition of thinking style.

〈Table 1〉 New Product Evaluation as a Function of Base Product Type and Goal Congruence (Study 1)

	Hedonic Base Product (chocolate)		**Utilitarian Base Product (toothpaste)**	
	Congruent Hedonic Attribute (sweet caramel) n = 34	**Incongruent Utilitarian Attribute (rich protein) n = 35**	**Congruent Utilitarian Attribute (fluoride) n = 35**	**Incongruent Hedonic Attribute (herbal mint) n = 35**
Product Evaluation	**7.21(.90)**	**3.14(.67)**	**5.77(.99)**	**6.29(1.07)**

Note: N = 139 participants. Standard deviations are in parentheses.

〈Figure 1〉 The Interaction Effect of Base Product Type and Goal Congruence on New Product Evaluation (Study 1)



3.2 Study 2

Study 2 examines whether the consumers' thinking style (holistic versus analytic) has a differential impact on new product evaluation when a goal-congruent versus a goal-incongruent attribute is added to base products.

3.2.1 Participants and Design

A total of two hundred and seventy-eight participants from Prolific participated in this survey (male 47.8%, 20-29 years old 53.6%, White / Caucasian 80.2%, and 54 % more than bachelors' degree). A 2 (goal-congruence: congruent vs. incongruent) x 2 (thinking style: holistic vs. analytic) between-subject experiments were conducted in order to demonstrate the moderating effect of thinking style on the evaluation of the new product. Specifically, it was proposed that holistic (vs. analytic) thinking will result in more favorable product evaluations when goal-incongruent (vs. congruent) attributes are added to the base. The instrument for this manipulation was adapted from Baltas, Kokkinaki, and Loukopoulou (2017), Gill (2008), and Hossain (2018).

3.2.2 Procedures and Measures.

For Study 2, we used the same product

categories as in study 1: chocolate as a hedonic base product and toothpaste as a utilitarian base product. Sweet caramel and herbal mint were used as sensory attributes, and rich protein and fluoride were used as functional attributes. The procedure was identical to that of study 1, with the addition of the thinking style manipulation. Since our research aimed to test differences between the holistic versus analytic thinking style, thinking style (holistic vs. analytic) was manipulated by using a priming task. Participants were asked to read a paragraph about a trip to a city and identify the pronouns in the text (Hossain 2018). In the meta-analysis where relative effects of thinking style priming, Oyserman and Lee (2008) find that the strongest impact on the cognition is exerted by the pronoun-circling priming task (Gardner, Gabriel, and Lee 1999). This pronoun-circling priming task had the weakest impact on the other outcomes of self-construal, including relationality, self-concept, and values. Besides, this priming task was found to be the most effective in enhancing the salience of the cognitive aspects of thinking style (Hossain 2018; Kühen, Hannover, and Schubert 2001; Kühnen and Oyserman 2002; Monga and John 2007, 2008, 2010). Thus, we used this priming task in study 2 to manipulate thinking style. Please refer to the Appendix for the priming task.

To check the adequacy of thinking style manipulation, participants were asked to answer two items from the analytic-holistic tendency score (AHS) scale (Choi et al. 2003; Choi, Koo, Choi 2007), including "It is not possible to understand the pieces without looking at the whole picture.", "The whole is greater than the sum of its part." (α = .804).

Product evaluation (α = .870), utilitarian benefits (α = .974), hedonic benefits (α = .941), attribute's sensory and functional characteristics, novel attribute's goal congruence to the base, involvement, familiarity, and demographic variables were measured as identical as in study 1.

3.2.3 Manipulation Check

Consistent with the previous studies, the base product type manipulation was assessed by asking participants to rate the hedonic or utilitarian benefits. The mean hedonic benefits of chocolate was significantly higher than the mean hedonic benefits of toothpaste ($M_{chocolate\_hedonic}$ = 7.46, $M_{toothpaste\_hedonic}$ = 3.29; t (276) = 25.85, p < .001), whereas the mean utilitarian benefits of toothpaste was significantly higher than the mean utilitarian benefits of chocolate ($M_{toothpaste\_utilitarian}$ = 8.25, $M_{chocolate\_utilitarian}$ = 3.58; t (276) = 35.55, p < .001). In order to assess the attribute-type manipulation, participants were asked to rate each attribute as sensory or functional. Sweet caramel was perceived as more sensory than rich protein ($M_{sweet\ caramel\_sensory}$ = 7.35, $M_{rich\ protein\_sensory}$ =

2.56; t (138) = 26.70, p < .001) and rich protein was rated more functional than sweet caramel ($M_{rich\ protein\_functional}$ = 7.45, $M_{sweet\ caramel\_functioal}$ = 3.00; t (138) = 18.63, p < .001). Herbal mint scent was perceived as more sensory ($M_{herbal\ mint\_sensory}$ = 7.35, $M_{fluoride\_sensory}$ = 2.38; t (136) = 28.95, p < .001) than fluoride and fluoride was rated as more functional than herbal mint ($M_{fluoride\ \_functional}$ = 7.83, $M_{herbal\ mint\_functional}$ = 3.32; t (136) = 29.05, p < .001). For hedonic category, adding sweet caramel to chocolate was more goal congruent than adding rich protein ($M_{hedo\_congruent}$ = 7.71, $M_{hedo\_incongruent}$ = 2.72; t (138) = 29.68, p < .001). On the contrary, for utilitarian category, adding fluoride to toothpaste was more goal congruent than adding herbal mint condition ($M_{util\_congruent}$ = 7.06, $M_{util\_incongruent}$ = 3.38; t (136) = 18.37, p < .001). The manipulation check for goal-congruence was confirmed that participants in the goal-congruent condition rated more goal-congruent than those in the goal-incongruent condition ($M_{congruent}$ = 7.38, n = 139 vs. $M_{incongruent}$ = 3.04, n = 139; t (276) = 31.91, p < .001). The manipulation check for thinking style was also successful. Participants in the holistic thinking condition showed higher holistic scale score than those in the analytic thinking condition ($M_{holistic}$ = 7.05, n=142 vs. $M_{analytic}$ = 4.15, n = 136; t (276) = 23.29, p < .001). Finally, the results of a one-way ANOVA showed that familiarity, involvement with the category, and demographic variables such as age, gender, race, education, income did not differ across conditions (all p's > .10). Thus, they were dropped from further statistical analyses.

3.2.4 Moderating Effects of the Thinking Style on New Product Evaluation

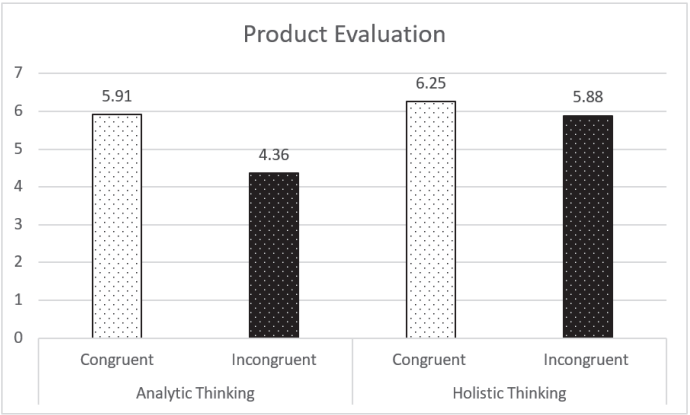
It was predicted that the thinking style would have a moderating effect on the evaluation of new products. It was proposed that the effect of goal congruence on product evaluation is *greater* when using *holistic* thinking than using analytic thinking for new products with a goal-incongruent attribute. We conducted an analysis of 2 (goal congruence: congruent vs. incongruent) x 2 (thinking style: analytic vs. holistic) ANOVA to find out the interaction effect of thinking style and goal-congruence on new product evaluation. The results revealed a significant goal-congruence x thinking style interaction (F (1, 274) = 18.24, p = .000). See Table 2 for means and standard deviations. As displayed in Figure 2, when goal-congruent attributes were added to the base, holistic versus analytic thinking style did not have a differential impact on the new product evaluations (6.25 vs. 5.91; t (139) = 1.72, p = .088). On the contrary, when goal-incongruent attributes were added to the base, compared with analytic thinking, holistic thinking led to higher product evaluations (5.88 vs. 4.36; t (137) = 8.95, p < .001). These results support H2.

〈Table 2〉 New Product Evaluation as a Function of Goal-Congruence and Thinking Style (Study 2)

	Analytic Thinking (n = 136)		Holistic Thinking (n = 142)	
	Congruent (n = 69)	Incongruent (n = 67)	Congruent (n = 70)	Incongruent (n = 72)
Product Evaluation	**5.91 (.94)**	**4.36 (1.21)**	**6.25 (1.53)**	**5.88 (.76)**

Note: Congruent conditions n=139, Incongruent conditions n=139, Total N=278

〈Figure 2〉 The Interaction Effect of Goal Congruence and Thinking Style on the Evaluation of New Products (Study 2)



3.2.5 Discussion

The results of study 2 revealed that holistic (vs. analytic) thinking increased new product evaluation when goal-incongruent attributes were added to the base products. In contrast, there was no differential impact of thinking style on product evaluations when goal-congruent attributes were added to the bases. Overall, holistic thinking, compared with analytic thinking, fostered favorable evaluations toward additions of novel attributes to the bases.

Our results provide support for thinking style as the driver of differences in new product evaluations. Priming holistic (vs. analytic) thinking increased consumers' evaluations of new products with incongruent (vs. congruent) novel attributes. This pattern is consistent with our theorizing that styles of thinking cause differences in product evaluations when the goal-incongruent attributes are added to the base products.

3.3 Study 3.

Study 3 was conducted to prove the generalizability of the effect in study 1 (interaction of goal-congruence and base type) and study 2 (interaction of goal-congruence and thinking style) by using different stimuli.

3.3.1 Pretest

Thirty participants (females 70%; age: 20-29 years old 60%) participated in the study via an online survey platform Prolific. The procedures and measures of this study was identical as in the study 2. Two product categories were used in the experiment: ice cream as a hedonic base product and dish detergent as a utilitarian base product. For added attributes, chocolate (sensory) and chlorella (functional) were selected for ice cream. And orchid flower scent (sensory) and baking soda (functional) were selected for dish detergent. Results of a pretest confirmed that respondents perceived ice cream as significantly more hedonic than dish detergent ($M_{ice\ cream\_hedonic}$ = 8.19, $M_{dish\ detergent\_hedonic}$ = 2.33; t (29) = 23.97, p < .001). Similarly, participants perceived dish detergent as significantly more utilitarian than ice cream ($M_{dish\ detergent\_utilitarian}$ = 8.44, $M_{ice\ cream\_utilitarian}$ = 2.80; t (29) = 22.99, p < .001). Chocolate was perceived as more sensory than chlorella ($M_{chocolate\_sensory}$ = 7.43, $M_{chlorella\_sensory}$ = 2.53; t (29) = 19.19, p < .001) and chlorella was rated more functional than chocolate ($M_{chlorella\_functional}$ = 7.37, $M_{chocolate\_functioal}$ = 2.47; t (29) = 20.71, p < .001). Orchid flower scent was perceived as more sensory ($M_{orchid\ flower\ scent\_sensory}$ = 8.57, $M_{baking\ soda\_sensory}$ = 1.93; t (29) = 12.21, p < .001) than baking soda and baking soda was rated as more functional than orchid flower scent ($M_{baking\ soda\_functional}$ = 7.50, $M_{orchid\ flower\ scent\_functional}$ = 2.17; t (29) = 23.03, p < .001). Thus, we used ice cream and dish detergent as base products and chocolate, chlorella, orchid flower scent, and baking soda as added attributes for experiment 3.

3.3.2 Participants and Design

A total of two hundred and forty participants from Prolific participated in this survey. Two participants were excluded from analysis for failing attention check, leaving a sample of two hundred and thirty-eight participants (gender: 36.1% male 63.9 % female; ages: 20-29 61.3%, 30-39 20.6%; race: White / Caucasian 61.8%, African American 26%, Asian 6.7%; education: completed some college 16.4%, bachelor's degree 34.9%, master's degree 10.1%; income: $10,000 ~ $39,999 24.4%, $40,000 ~ $69,999 20.2%). The study design was 2 (goal-congruence: congruent vs. incongruent) x 2 (thinking style: analytic vs. holistic) between subjects experiment.

3.3.3 Procedures and Measures

For Study 3, we used different product categories: ice cream as a hedonic base product and dish detergent as a utilitarian base product. Chocolate and orchid flower scent were used as sensory attributes, whereas chlorella and baking soda were used as functional attributes.

The procedures and measures were identical to that of study 2. And the reliability coefficients were ranged from .76 to 98. Thinking style (AHS score: α = .903), product evaluation (α = .757), utilitarian benefits (α = .977), hedonic benefits (α = .982).

3.3.4 Manipulation Check

Consistent with the previous study, the manipulation check for thinking style confirmed that the manipulation was successful. Participants in the holistic thinking condition showed a higher holistic tendency score (AHS score) than those in the analytic thinking condition. And participants in the analytic thinking condition showed lower holistic tendency score (AHS score) than those in the holistic thinking condition ($M_{holistic}$ = 7.10 vs. $M_{Analytic}$ = 2.97; F (1, 236) = 8.374, p < .001).

The base product type manipulation was assessed by asking participants to rate the hedonic or utilitarian benefits. People perceived ice cream as more hedonic than dish dertergent ($M_{ice\ cream\_\_hedonic}$ = 7.98, $M_{dish\ detergent\_\_hedonic}$ = 2.29; t (236) = 44.98, p < .001), whereas they perceived dish detergent as more utilitarian than ice cream ($M_{dish\ detergent\_\_utilitarian}$ = 7.86, $M_{ice\ cream\_\_utilitarian}$ = 2.69; t (236) = 40.18, p < .001). Respondents also rated each attribute's sensory or functional characteristics. Pople perceived chcolate as more sensory than chlorella ($M_{chocolate\_\_sensory}$ = 7.58, $M_{chlorella\_\_sensory}$ = 1.61; t (138) = 35.72, p < .001), whereas they rated chlorella as more functional than chocolate ($M_{chlorella\_\_functional}$ = 7.03, $M_{chocolate\_\_functioal}$ = 2.25; t (118) = 24.48, p < .001). People rated orchid flower scent as more sensory than baking soda ($M_{orchid\ flower\ scent\ \_\_sensory}$ = 5.87, $M_{baking\ soda\_\_sensory}$ = 2.09; t (116) = 9.74, p < .001); whereas they perceived baking soda as more utilitarian than lavender mint scent ($M_{baking\ soda\ \_\_functional}$ = 7.52, $M_{orchid\ flower\ scent\_\_functional}$ = 4.03; t (116) = 9.22, p < .001). For hedonic category, adding chocolate to ice cream was more goal congruent than adding chlorella ($M_{hedo\_\_\_congruent}$ = 5.86, $M_{hedo\_\_incongruent}$ = 4.74; t (138) = 29.68, p < .001). On the contrary, for utilitarian category, adding baking soda to dish detergent was more goal-congruent than adding orchid flower scent ($M_{util\_\_congruent}$ = 7.06, $M_{util\_\_incongruent}$ = 3.38; t (136) = 18.37, p < .001).

The manipulation check for goal-congruence was confirmed that participants in the goal-congruent condition rated more goal-congruent than those in the goal-incongruent condition. And participants in the goal-incongruent condition rated more goal-incongruent than those in the goal-congruent condition ($M_{incongruent}$ = 2.90 vs. $M_{congruent}$ = 6.98; F (1, 236) = 4.14, p < .001). Finally, familiarity, involvement with the product category, and demographic variables did not differ across conditions (all p's > .10).

3.3.5 Moderating Effects of Goal Congruence on New Product Evaluation

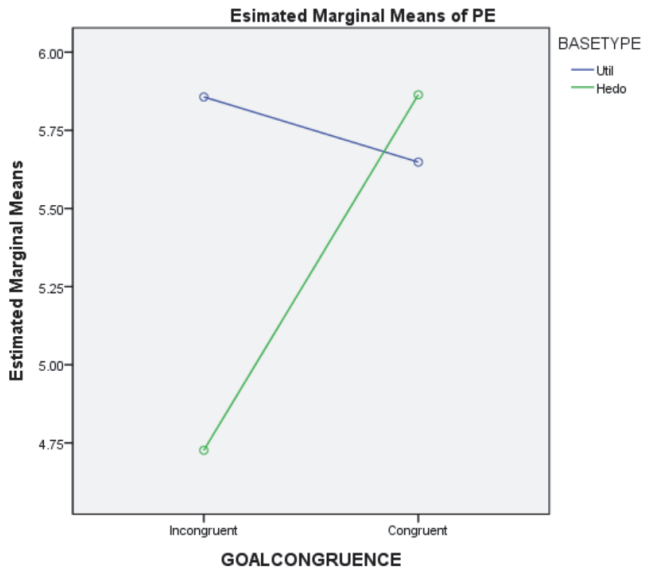
A 2 (goal congruence: congruent vs. incongruent) x 2 (base type: hedonic vs. utilitarian) ANOVA revealed a significant interaction on the product evaluation (F (1, 234) = 40.51, p = . 000). As H1 predicted, adding goal-incongruent attributes to the base resulted in asymmetry in new product evaluation. For a new product with a hedonic base (ice cream), adding a goal-congruent attribute (chocolate) resulted in greater product evaluation (5.86 vs. 4.73; t (118) = 6.77, p < .001) than adding a goal-incongruent (chlorella) attribute. On the contrary, consumers' new product evaluation was not significantly different when adding a goal-incongruent attribute (orchid flower scent) to the utilitarian base (dish detergent) than a goal-congruent attribute

〈Table 3〉 New Product Evaluation as a Function of Base Product Type and Goal Congruence (Study 3)

	Hedonic Base Product (ice cream)		**Utilitarian Base Product (dish detergent)**	
	Congruent Hedonic Attribute (chocolate) n = 60	**Incongruent Utilitarian Attribute (chlorella) n = 60**	**Congruent Utilitarian Attribute (baking soda) n = 58**	**Incongruent Hedonic Attribute (orchid flower scent) n = 60**
Product Evaluation	**5.86(.70)**	**4.73(1.05)**	**5.65(.60)**	**5.86(.78)**

Note: N = 238 participants. Standard deviations are in parentheses.

〈Figure 3〉 The Interaction Effect of Base Product Type and Goal Congruence on the Evaluation of New Products (Study 3)



(baking soda) (5.65 vs. 5.86; t (116) = 1.63, p = .105). These results supported the asymmetric evaluations of adding goal-incongruent attributes to the base proposed in H1. Table 3 and Figure 3 shows the results for product evaluation of four products of study 3.

3.3.6 Moderating Effects of the Thinking Style on New Product Evaluation

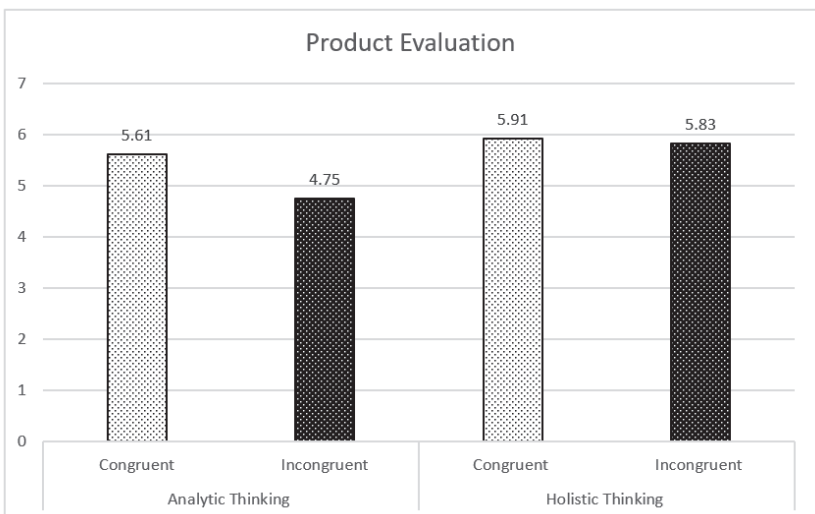
ANOVA analysis was conducted to examine whether the thinking style moderates the effect of goal-congruence on perceived relatedness (H2). The ANOVA on the goal-congruence, thinking style, and their interaction revealed a significant interaction effect of goal-congruence x thinking style (F (1, 129) = 70.38, p < .001). The simple effects test revealed that holistic (vs. analytic) thinking led to higher product evaluations, when goal-congruent attributes were added to the base products (5.91 vs. 5.61; t (116) = 2.35, p = .021). Furthermore, when goal-incongruent attributes were added to the base products, holistic (vs. analytic) thinking

〈Table 4〉 New Product Evaluation as a Function of Thinking Style and Goal Congruence (Study 3)

	Analytic Thinking (n = 119)		**Holistic Thinking (n = 119)**	
	Congruent (n = 59)	**Incongruent (n = 60)**	**Congruent (n = 50)**	**Incongruent (n = 60)**
Product Evaluation	**5.61(.60)**	**4.75 (1.08)**	**5.91(.76)**	**5.83 (.77)**

Note: Congruent conditions n=118, Incongruent conditions n=120, Total N=238

〈Figure 4〉 The Interaction Effect of Thinking Style and Goal Congruence on the Evaluation of New Products (Study 3)



resulted in higher product evaluations (4.75 vs. 5.83; t (118) = 6.29, p < .001). As displayed in Table 4 and Figure 4, holistic (vs. analytic) thinking results in greater product evaluation when goal-incongruent attributes are added to the base products. These results supported H2.

Ⅳ. General Discussion

The primary purpose of this research was to identify the role of (a) hedonic versus utilitarian goal congruence between the added attribute and the base product and (b) holistic versus analytic thinking style on new product evaluation. In studies 1 and 3, the results revealed that there are asymmetric new product evaluations by the hedonic vs. utilitarian nature of the base products. In studies 2 and 3, when goal-incongruent (vs. congruent) attributes are added to the base products, holistic thinking increased new product evaluations compared with analytic thinking.

This research offers several theoretical contributions. Previous research on the effect of novel attributes suggests that adding new attributes to a base product is likely to improve product evaluation (Mukherjee and Hoyer 2001). However, the three studies demonstrated in this article reveals that the positive effect of novel attributes depends on the goal-congruence of the novel attribute to the base and consumers' thinking style. First, consumers show more negative evaluation for new products when goal-incongruent (vs. congruent) attributes are added to the hedonic (vs. utilitarian) base. This result is in line with the previous research result of Gill (2008) and Noseworthy and Trudel (2011). Existing literature has investigated the role of hedonic vs. utilitarian goal congruence associated with the added attribute by using consumer electronics (e.g., PDA, mobile phone; Gill 2008, Gill and Lei 2009), soft drinks, cars, cameras, or watches (Noseworthy and Trudel 2011) as stimuli. This research replicated their findings using different product categories (e.g., toothpaste, chocolate, ice cream, and dish detergent) as stimuli.

Second, the main contribution of our study is the examination of thinking style's influence on the evaluation of goal-incongruent (vs. congruent) new product extensions. When goal-incongruent (vs. congruent) attributes are added to the base products, holistic (vs. analytic) thinking increases new product evaluations. This study provides evidence of thinking style as a moderator of new product evaluation, thereby answering the call to undertake more divergent psychological research on thinking style (e.g., Chung and Lee 2019; Hossain 2018; Jain, Desai, and Mao 2007; Lalwani and Shavitt 2013; Monga and John 2007, 2008, 2010). This research emphasized the relative importance of holistic (vs. analytic) thinking in promoting new products with added

goal-incongruent attributes.

Managerially, our results have implications for new product promotion strategies. Our findings could inform that specific situation warrant the positive effect of adding novel attributes to the existing products. Compared to analytic thinking, holistic thinking fosters categorization flexibility and increases new product evaluations with dissimilar or goal-incongruent novel attributes. Especially when a new product is launched by adding incongruent attributes to the base products, marketers may use tools to enhance consumers' holistic thinking rather than analytic thinking.

V. Limitations and Future Research

The limitations of this research could provide the potential for future research. First, the current study investigated only two sets of equally-priced hedonic (chocolate, ice cream) versus utilitarian (toothpaste, dish detergent) products as stimuli. These results need to be tested across broader product categories, services, samples, and other consumption contexts. Second, we examined only situational thinking style by using priming task as a moderator. Future research may further explore whether chronic thinking style would generate the same result (Hossain 2018; Jain, Desai, and Mao 2007; Monga and John 2007). Further, there would be other moderators instead of thinking styles that are relevant to new product evaluation, such as arousal (Noseworthy, Di Muro, and Murray 2014), innovation newness level (Hoeffler 2003; Lee and Chu 2020a, 2020b), metacognitive difficulties (Park 2012; Lee and Shavitt 2009), need for cognitive closure (Lee and Ha 2010), and self-construal (Kim and Kim 2014).

Future research should explore potential mediators to verify the underlying mechanism of the study results. A list of constructs such as the overall increased hedonic vs. utilitarian values (Gill 2008; Noseworthy and Trudel 2011), processing fluency (Labroo and Lee 2006; Lee and Shavitt 2009), perceived risk, and familiarity (Chung and Lee 2019; Lee and Chu 2020a; Noseworthy and Trudel 2011) may underlie the effectiveness of adding novel attributes to the base product. Finally, future research could extend the findings of this research by studying the effects of adding goal-incongruent but complementary attributes to the base. Future studies on such complementary and incongruent attributes would be an interesting agenda for the success of new products.

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References

Alba, Joseph W. and Elanor F. Williams (2013), "Pleasure Principles: A Review of Research on Hedonic Consumption," *Journal of Consumer Psychology*, 23(1), 2-18.

Baltas, George, Flora Kokkinaki, and Apostolia Loukopoulou (2017), "Does Variety Seeking Vary between Hedonic and Utilitarian Products? The Role of Attribute Type," *Journal of Consumer Behaviour*, 16(6), 1-12.

Batra, Rajeev and Olli T. Ahtola (1990), "Measuring the Hedonic and Utilitarian Sources of Consumer Attitudes," *Marketing Letters*, 2(2), 159-170.

Botti, Simona and Ann L. McGill (2011), "The Locus of Choice: Personal Causality and Satisfaction with Hedonic and Utilitarian Decisions," *Journal of Consumer Research*, 84(1), 46-59.

Chaudhuri, Arjun, Khaled Aboulnasr, and Mark Ligas (2010), "Emotional Responses on Initial Exposure to a Hedonic or Utilitarian Description of a Radical Innovation," *Journal of Marketing Theory and Practice*, 18(4), 339-359.

Chernev, Alexander (2004), "The Goal-Attribute Compatibility in Consumer Choice," *Journal of Consumer Psychology*, 14(1/2), 141-150.

Chitturi, Ravindra, Rajagopal Raghunathan, and Vijay Mahajan (2008), "Delight by Design: The Role of Hedonic versus Utilitarian Benefits," *Journal of Marketing*, 72(3), 48-63.

Choi, Incheol, Reeshad Dalal, Chu Kim-Prieto, and Hyekyung Park (2003), "Culture and Judgment of Causal Relevance," *Journal of Personality and Social Psychology*, 84(1), 46-59.

Choi, Incheol, Minkyung Koo, and Jong A. Choi (2007), "Individual differences in Analytic versus Holistic Thinking," *Personality and Social Psychology Bulletin*, 33(5), 691-705.

Choi, Incheol, Richard E. Nisbett, and Ara Norenzayan (1999), "Causal Attribution across Cultures: Variation and Universality," *Psychological Bulletin*, 125 (1), 47-63.

Chung, Jaeyeon (Jae) and Leonard Lee (2019), "To Buy or To Resist: When Upward Social Comparison Discourages New Product Adoption," *Journal of the Association for Consumer Research*, 4(3), 280-292.

Crowley, Ayn E., Eric R. Spangenberg, and Kevin R. Hughes (1992), "Measuring the Hedonic and Utilitarian Dimensions of Attitudes toward Product Categories," *Marketing Letters*, 3(3), 239-249.

Dhar, Ravi and Klaus Wertenbroch (2000), "Consumer Choice between Hedonic and Utilitarian Goods," *Journal of Marketing Research*, 37 (1), 60-71.

Epstein, Seymour, Rosemary Pacini, Veronika Denes-Raj, and Harriet Heier (1996), "Individual Differences in Intuitive-Experiential

and Analytical-Rational Thinking Styles," *Journal of Personality and Social Psychology*, 71(2), 390-405.

Escalas, Edson and James R. Bettman (2005), "Self-Construal, Reference Groups, Brand Meaning," *Journal of Consumer Research*, 32(3), 378-389.

Förster, Jens (2009), "Relations Between Perceptual and Conceptual Scope: How Global Versus Local Processing Fits a Focus on Similarity Versus Dissimilarity," *Journal of Experimental Psychology: General*, 138 (1), 88-111.

Friedman, Elizabeth M. S., Jennifer Savary, and Ravi Dhar (2018), "Apples, Oranges, and Erasers: The Effect of Considering Similar versus Dissimilar Alternatives on Purchase Decisions," *Journal of Consumer Research*, 45(4), 725-742.

Gardner, Wendi L., Shira Gabriel, and Angela Y. Lee (1999), "'I' Value Freedom, but 'We' Value Relationships: Self-Construal Priming Mirrors Cultural Differences in Judgment," *Psychological Science*, 10(4), 321-326.

Gill, Tripat (2008), "Convergent Products: What Functionalities Add More Value to the Base?" *Journal of Marketing*, 72(2), 46-62.

Gill, Tripat and Jing Lei (2009), "Convergence in the High-Technology Consumer Markets: Not All Brands Gain Equally from Adding New Functionalities to Products," *Marketing Letters*, 20(1), 91-103.

Gürhan-Canli, Zeynep and Durairaj Maheswaran (1998), "The Effects of Extensions on Brand Name Dilution and Enhancement," *Journal of Marketing Research*, 35

Hirschman, Elizabeth C. and Morris B. Holbrook (1982), "Hedonic Consumption: Emerging Concepts, Methods, and Propositions," *Journal of Marketing*, 46 (3), 92-101.

Hoeffler, Steve (2003), "Measuring Preferences for Really New Products," *Journal of Marketing Research*, 40(4), 406-420.

Holbrook, Morris B. and Elizabeth C. Hirschman (1982), "The Experiential Aspects of Consumption: Consumer Fantasies, Feelings, and Fun," *Journal of Consumer Research*, 9(2), 132-140.

Hossain, Mehdi T. (2018), "How Cognitive Style Influences the Mental Accounting System: Role of Analytic versus Holistic Thinking," *Journal of Consumer Research*, 45(3), 615-632.

Jhang, Jihoon, Susan Jung Grant, and Margaret C. Campbell (2012), "Get it? Got it. Good! Enhancing New Product Acceptance by Facilitating Resolution of Extreme Incongruity," *Journal of Marketing Research*, 49(2), 247-259.

Jain, S. Pratap, Kalpesh K. Desai, and Huifang Mao (2007), "The Influence of Chronic and Situational Self-construal on Categorization," *Journal of Consumer Research*, 34(1), 66-76.

Keller, Kevin L. (1993), "Conceptualizing, Measuring, Managing Customer-Based Brand Equity," *Journal of Marketing*, 57 (1), 1-22.

Keller, Punam A. and Ann L. McGill (1994), "Differences in the Relative Influence of Product Attributes Under Alternative Processing Conditions: Attribute Importance versus Attribute Ease of Imaginability," *Journal of Consumer Psychology*, 3(1), 29-49.

Khan, Uzma and Ravi Dhar (2010), "Price-Framing Effects on the Purchase of Hedonic and Utilitarian Bundles," *Journal of Marketing Research*, 47(6), 1090-1099.

Kim, Ji Yoon and Sang Yong Kim (2014), "The Efect of Perceived Risk, Hedonic Value, and Self-Construal on Attitude toward Mobile SNS," *Asia Marketing Journal*, 16(1), 149-168.

Klein, Kristina and Valentyna Melnyk (2016), "Speaking to the Mind or the Heart: Effects of Matching Hedonic versus Utilitarian Arguments and Products," *Marketing Letters*, 27, 131-142.

Kühnen, Ulrich, Bettina Hannover, and Benjamin Schubert (2001), "The Semantic-Procedural Interface Model of the Self: The Role of Self-Knowledge for Context-Dependent versus Context-Independent Modes of Thinking," *Journal of Personality and Social Psychology*, 80(3), 397-409.

Kühnen, Ulrich and Daphna Oyserman (2002), "Thinking about the Self Influences Thinking in General: Cognitive Consequences of Salient Self-Concept," *Journal of Experimental Social Psychology*, 38(5), 492-499.

Labroo, Aparna A., and Angela Y. Lee (2006), "Between Two Brands: A Goal Fluency Account of Brand Evaluation," *Journal of Marketing Research*, 43(3), 374-385.

Lalwani, Ashok K. and Sharon Shavitt (2013), "You Get What You Pay For? Self-Construal Influences Price-Quality Judgments," *Journal of Consumer Research*, 40(2/1), 225-267.

Lee, Min Hoon and Young Won Ha (2010), "The Moderating Role of Need for Cognitive Closure and Temporal Self-Construal in Consumer Satisfaction and Respurchase Consistency," *Asia Marketing Journal*, 11 (4), 95-119.

Lee, Kyoungmi and Sharon Shavitt (2009), "Can McDonald's Food Ever Be Considered Healthful? Metacognitive Expereinces Affect the Perceived Understanding of a Brand," *Journal of Marketing Research*, 46(2), 222-233.

Lee, Juyon and Wujin Chu (2020a), "The Effects of Innovation Newness on Consumers' Purchase Intention: Focusing on the Mediating Role of Familiarity and Perceived Risk and the Moderating Role of Attributes vs. Benefits Appeal," *Korea Journal of Marketing*, 35(1), 97-117.

Lee, Juyon and Wujin Chu (2020b), "The Role

of Imagery vs. Analytic Advertisement on New Products Evaluation," *Asia Marketing Journal*, 22(2), 59-85.

Ma, Zhenfeng, Tripat Gill, and Ying Jiang (2015), "Core versus Peripheral Innovations: The Effect of Innovation Locus on Consumer Adoption of New Products," *Journal of Marketing Research*, 52(3), 309-324.

MacInnis, Deborah J. and Linda L. Price (1987), "The Role of Imagery in Information Processing: Review and Extensions," *Journal of Consumer Research*, 13(4), 473-491.

Markus, Hazel and Shinobu Kitayama (1991), "Culture and the Self: Implications for Cognition, Emotion, and Motivation," *Psychological Review*, 98(2), 224-253.

Martin, Ingrid M. and David W. Stewart (2001), "The Differential Impact of Goal Congruency on Attitudes, Intentions, and the Transfer of Brand Equity," *Journal of Marketing Research*, 38(4), 471-484.

Melnyk, Valentyna, Kristina Klein, and Franziska Völckner (2012), "The Double-Edged Sword of Foreign Brand Names for Companies from Emerging Countries," *Journal of Marketing*, 76(6), 21-37.

Monga, Alokparna B. and Deborah R. John (2007), "Cultural Differences in Brand Extension Evaluation: The Influence of Analytic versus Holistic Thinking," *Journal of Consumer Research*, 33(4), 529-536.

Monga, Alokparna B. and Deborah R. John (2008), "When Does Negative Brand Publicity Hurt? The Moderating Influence of Analytic versus Holistic Thinking," *Journal of Consumer Psychology*, 18(4), 320-332.

Monga, Alokparna B. and Deborah R. John (2010), "What Makes Brands elastic? The Influence of Brand Concept and Styles of Thinking on Brand Extension Evaluation," *Journal of Marketing*, 74(3), 80-92.

Mukherjee, Ashesh and Wayne D. Hoyer (2001), "The Effect of Novel Attributes on Product Evaluation," *Journal of Consumer Research*, 28(3), 462-472.

Nisbett, Richard E., Kaiping Peng, Incheol Choi, and Ara Norenzayan (2001), "Culture and Systems of Thought: Holistic versus Analytic Cognition," *Psychological Review*, 108(2), 291-310.

Noseworthy, Theodore J. and Remi Trudel (2011), "Looks Interesting, but What Does It Do? Evaluation of Incongruent Product Form Depends on Positioning," *Journal of Marketing Research*, 48(6) 1008-1019.

Noseworthy, Theodore, Fabrizio Di Muro, and Kyle B. Murray (2014), "The Role of Arousal in Congruity-Based Product Evaluation," *Journal of Consumer Research*, 41(4), 1108-1126.

O'Curry, Suzanne and Michal Strahilevitz (2001), "Probability and Mode of Acquisition Effects on Choices between Hedonic and Utilitarian Options," *Marketing Letters*, 12 (1), 37-49.

Oyserman, Daphna and Spike W. S. Lee (2008), "Does Culture Influence What and How We Think? Effects of Priming Individualism and Collectivism," *Psychological Bulletin*, 134(2), 311-342.

Park, Se Bum (2012), "The Effect of Metacognitive Difficulty on Consumer Judgments: The Moderating Role of Cognitive Resources," *Asia Marketing Journal*, 14(2), 23-37.

Pham, Michael T. (1998), "Representativeness, Relevance and the Use of Feelings in Decision Making," *Journal of Consumer Research*, 25(2), 144-159.

Sirgy, Joseph M. (1982), "Self-Concept in Consumer Behavior: A Critical Review," *Journal of Consumer Research*, 9(3), 287-300.

Thompson, Debora Viana and Rebecca W. Hamilton (2006), "The Effects of Information Processing Mode on Consumers' Responses to Comparative Advertising," *Journal of Consumer Research*, 32(4), 530-540.

Van Osselaer, Stin M. J., Suresh Ramanathan, Margaret C. Campbell, Joel B. Cohen, Jeannette K. Dale, Chris Janiszewski, Arie W. Kruglanski, Angela Y. Lee, Stephen J. Read, J. Edward Russo, Nader T. Tavassoli (2005), "Choice Based on Goals," *Marketing Letters*, 16(3/4), 335-346.

Van Osselaer, Stin M. J. and Chris Janiszewski (2012), "Goal-Based Model of Product Evaluation and Choice," *Journal of Consumer Research*, 39(2), 260-292.

Voss, Kevin E., Eric R. Spangenberg, and Bianca Grohmann (2003), "Measuring the Hedonic and Utilitarian Dimensions of Consumer Attitude," *Journal of Marketing Research*, 40(3), 310-320.

Zárate, Michael a., James S. Uleman, and Corrine I. Volis (2001), "Effects of Culture and Processing Goals on the Activation and Binding of Trait Concepts," *Social Cognition*, 19(3), 295-323.

〈Appendix〉

Appendix A. Stimuli Used in Study 1 and 2

Hedonic Base x Sensory Attribute

Now... You Can Buy Choco-Delight Near Your Place

Choco-Delight Chocolate *Filled with Sweet Caramel*
Choco-Delight produces a smooth chocolate experience with sweet caramel.
It's only $5. Enjoy a sweet delicacy ***with pleasant caramel***.

Hedonic Base x Functional Attribute

Now... You Can Buy Choco-Delight Near Your Place

Choco-Delight Chocolate *Filled with Healthy Protein*
Choco-Delight produces an unique chocolate experience with healthy protein.
It's only $5. Keep your muscle health ***with beneficial protein***.

Utilitarian Base x Sensory Attribute

Now... You Can Buy Dental-C Toothpaste Near Your Place

Dental-C Toothpaste *with Herbal Mint Flavor*
Dental-C refreshes your mouth with herbal mint flavor.
It's only $5. Enjoy a clean mouth with ***a pleasant herbal mint scent***.

Utilitarian Base x Functional Attribute

Now... You Can Buy Dental-C Toothpaste Near Your Place

Dental-C Toothpaste *with Active Fluoride*
Dental-C protects you from tooth decay with active fluoride.
It's only $5. Keep your tooth ***healthy with beneficial fluoride***.

Appendix B. Stimuli Used in Study 3

Hedonic Base x Sensory Attribute

Now... You Can Buy Dreamy Ice Cream Near Your Place

Dreamy Ice Cream Filled with Rich Chocolate

Dreamy ice cream is the ultimate experience.
It's only $7. Enjoy a sweet delicacy **with indulgent chocolate.**

Hedonic Base x Functional Attribute

Now... You Can Buy Dreamy Ice Cream Near Your Place

Dreamy Ice Cream Filled with Rich Chlorella

Dreamy ice cream is the ultimate experience.
It's only $7. Enjoy a sweet delicacy **with healthy chlorella.**

Utilitarian Base x Sensory Attribute

Now... You Can Buy Cleany Dish Detergent Near Your Place

Cleany Dish Detergent with Orchid Flower Scent

Cleany dish detergent gives a brilliant shine on dishes.
It's only $7. Discover a grease-fighting dish solution **with refreshing orchid scent.**

Utilitarian Base x Functional Attribute

Now... You Can Buy Cleany Dish Detergent Near Your Place

Cleany Dish Detergent with Baking Soda

Cleany dish detergent gives a brilliant shine on dishes
It's only $7. Discover a grease-fighting dish solution **with effective baking soda.**

Appendix C. Thinking Style Priming Scenario Used in Study 2 and 3

For the holistic thinking condition, participants read the following paragraph and were asked to identify the pronouns (we, our, and us):

We go to the city often. Our anticipation fills us as we see the skyscrapers come into view. We allow ourselves to explore every corner, never letting any attraction to escape us. Our voices fill the air and the street. We see all the sights, we window shop, and everywhere we go we see our reflection looking back at us in the glass of a hundred windows. At nightfall we linger, our time at the city almost over. When we finally must leave, we do so knowing that we will soon return. The city belongs to us.

For the analytic thinking condition, participants read the following paragraph and were asked to identify the pronouns (I, me, and myself):

I go to the city often. My anticipation fills me as I see the skyscrapers come into view. I allow myself to explore every corner, never letting any attraction to escape me. My voice fills the air and the street. I see all the sights, I window shop, and everywhere I go I see my reflection looking back at me in the glass of a hundred windows. At nightfall I linger, my time at the city almost over. When I finally must leave, I do so knowing that I will soon return. The city belongs to me.

Justification for Priming Task. Previous research suggested this pronoun-circling priming task as the most effective in enhancing the salience of the cognitive aspects of thinking styles. Besides, this method had the weakest impact on the other outcomes of self-construal, including relationality, self-concept, and values (Hossain 2018; Kühen, Hannover, and Schubert 2001; Kühnen and Oyserman 2002; Monga and John 2007, 2008, 2010). Therefore, in this study, the priming task of identifying pronouns was used to manipulate thinking styles.