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PERCEIVED ENTITATIVITY AS A MODERATOR OF FAMILY BRAND EVALUATIONS

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PERCEIVED ENTITATIVITY AS A MODERATOR OF FAMILY BRAND EVALUATIONS

ABSTRACT

Based on group impression formation and accessibility-diagnosticity theories, four experimental hypotheses are developed to examine the intermediating roles of perceived entitativity, information valence, and categorical similarity on family brand evaluations with laboratory experiments under high accessibility situations. Research findings indicate that both high and low entitative family brands are sensitive to positive and negative extensions, regardless of the categorical similarity of brand extensions and the perceived entitativity of family brands. However, while both high and low entitative family brands are diluted or enhanced by brand extensions, extension information is more influential on high (vs. low) entitative family brands.

EXTENDED ABSTRACT

Previous research has verified that the accessibility of brand extension information is more diagnostic than categorical similarity on the family brand evaluations when the accessibility of brand extension information is high (Ahluwalia and Gurhan-Canli 2000; Feldman and Lynch 1988). Under high accessible situations, perceivers engage in systematic or piecemeal processing (Chen and Chaiken 1999) to integrate new external information for the formation of group impression. Accessibility refers to the activation potential of stored knowledge (Higgins 1989) and is manipulated either by the nature of product experience (direct vs. indirect) or the confusing tasks with intervening materials. For high accessibility situations, reciprocal effects on family brands are measured immediately after the experimental treatments of brand extensions when respondents' memories about the extension information is high. As recently activated brand extension information is highly accessible, highly accessible brand extension information is perceived as more diagnostic and may induce disproportionate impact on family brand evaluations (Higgins, King, and Mavin 1982). The strong impact of highly accessible information may out-weigh the contextual information of the perceived entitativity of family brands and the categorical similarity of brand extensions and eventually dominates family brand evaluations. Consumers' attitudes toward family brands will be diluted by negative extension information and be enhanced by positive extension information, irrespective of the contextual information of category similarity and perceived entitativity.

In research of social cognition, perceived entitativity is verified as an important factor affects group impression formation (Crawford, Sherman, and Hamilton 2002; Lickel et al. 2000; McConnell and Sherman 1997). Traits of individual members become associated with the group as a whole through a process of stereotyping, and this general group impression then becomes associated with the individual members of the group. Moreover, the trait inferences for individual members become associated directly with all other members of the group. For a high entitative group, the individual traits that are inferred come to be associated with the group and with other members of the group via stereotyping. Once the traits are abstracted from the behaviors of individual members, they are processed in terms of

this group impression, instead of as individuals. For low entitative groups, the information processing may stop at the level of individual trait inference. The trait transference from individual members to the group and other group members are not made. Similar to the group impression formation, family brand images normally are comprised of a collection of abstractions about brand extensions, such as quality and gentleness, which are abstracted from the product attributes of individual brand extensions and then transferred to the family brands and other brand extensions. Attribute transferences from individual brand extensions to family brands should be more significant for high entitative family brands, because trait transferences from group members to the group and group members are stronger for high (vs. low) entitative groups (Crawford, Sherman, and Hamilton 2002).

This study is a 2 (information valences: positive, negative) x 2 (categorical similarity: close, far) x 2 (perceived entitativity: high, low) between-subject experimental design to verify the four hypotheses in high accessibility situations. The first factor of the experiments is the valences (positive vs. negative) of brand extension information in semantic format of Consumer Reports. The second factor is the two extension categories of anticavity toothpastes (close) and pain relievers (far). The third factor is the perceived entitativity of the two hypothesized family brands of XXX (high entitative) and YYY (low entitative). A three-way ANOVA on attitude changes toward family brands yields a significant main effect of the valences of brand extensions and a main effect of the perceived entitativity of family brands. However, the main effect of category similarity, the two-way interaction effects among the three factors, and the three-way interaction effect of the three factors are all insignificant. The results indicate that attitudes toward family brands are moderated by the valences of extension information and the perceived entitativity of family brands. The research findings indicate that under high accessibility situations, the valences of brand extension information and the perceived entitativity of family brand moderate family brand evaluations. As the accessibility of extension information is high, the valence of extension information outweighs the contextual factors of categorical similarity and perceived entitativity on family brand evaluations. The attitudes toward family brands are either diluted by negative extension information or enhanced by positive extension information, regardless of categorical similarity and perceived entitativity. The findings are consistent with the findings of

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previous research in family brand evaluations (e.g., Ahluwalia and Gurhan-Canli 2000; Loken and John 1993). However, as attitude transferability is higher for high (vs. low) entitative groups (Crawfor et al. 2002), brand extension information is more influential on the attitude changes of high (vs. low) entitative family brands. A high entitative family brand is more significantly diluted by negative extension information and is more significantly enhanced by positive extension information. Moreover, the research findings also indicate that the influence of extension information on well extended family brand, either high or low entitative family brands, is still significant under high accessibility situations. The results suggest that while the sequential effect of brand extensions is diminishing (Keller and Aaker 1992), the reciprocal effects of new brand extensions for well extended family brands are still significant.

PERCEIVED ENTITATIVITY AS A MODERATOR OF FAMILY BRAND EVALUATIONS

INTRODUCTION

Research in family brand evaluations uncovers that the reciprocal effects of brand extensions on family brands are moderated by the categorical similarity of brand extensions to their family brands (Loken and John 1993; John, Loken, and Joiner 1998) and the accessibility and diagnosticity of brand extension information (Ahluwalia and Gurhan-Canli 2000). Information about similar (vs. dissimilar) brand extensions is more influential on family brand evaluations. When the accessibility of brand extension information is high, brand extension information is more influential than the contextual factor of categorical similarity on family brand evaluations. Consumers' attitudes toward family brands are weakened by negative extension information and are enhanced by positive extension information respectively, regardless of the categorical similarity of brand extensions.

Recent years, a considerable amount of attentions in research of social cognition has been given to the influences of *new* group members on the impression formation of social groups with high and low perceived entitativity (Crawford, Sherman, and Hamilton 2002; Lickel, Hamilton, Wieczorkowska, Lewis, Sherman, and Uhles 2000; McConnell and Sherman 1997). Perceived entitativity is defined as the degree to which a collection of persons is perceived as being bonded together in a coherent unit (Campbell 1958; Lickel, Hamilton, Wieczorkowska, Lewis, Sherman and Uhles 2000, p. 224). Research findings indicate that trait transference from group members to group impression is more significant for high entitative groups (Crawford, Sherman and Hamilton 2002), which suggest that information about new group members is more influential to the group impression formation of high (vs. low) entitative groups. The findings also suggest that, other than the moderator of similarity, group impression formation is also moderated by the perceived entitativity of groups. Similarity discusses the likeness between new group members and group properties, where as perceived entitativity emphasizes on

the interaction coherence among group members (Gaertner and Schopler 1998). Similar to social cognition research, the interaction coherence among brand extensions may affect the perceived entitativity of family brands, which will moderate the reciprocal effects on family brand evaluations. Family brands with brand extensions scattered among unrelated categories and providing incoherent product functions may be perceived as low in entitativity. In contrast, family brands with brand extensions concentrated on related categories and providing coherent product functions may be perceived as high in entitativity. Family brands with different perceived entitativity may react differently to same brand extension information. Therefore, the perceived entitativity appears an important moderator of the reciprocal effects of brand extensions on family brand evaluations.

THEORETICAL BACKGROUND AND HYPOTHESIS

A. Reciprocal effects on family brands:

Previous research has verified that the accessibility of brand extension information is more diagnostic than categorical similarity on the family brand evaluations when the accessibility of brand extension information is high (Ahluwalia and Gurhan-Canli 2000; Feldman and Lynch 1988). Under high accessible situations, perceivers engage in systematic or piecemeal processing (Chen and Chaiken 1999) to integrate new external information for the formation of group impression. Accessibility refers to the activation potential of stored knowledge (Higgins 1989) and is manipulated either by the nature of product experience (direct vs. indirect) or the confusing tasks with intervening materials. For high accessibility situations, reciprocal effects on family brands are measured immediately after the experimental treatments of brand extensions when respondents' memories about the extension information is high. As recently activated brand extension information is highly accessible, highly accessible brand extension information is perceived as more diagnostic and may induce disproportionate impact on family brand evaluations (Higgins, King, and Mavin 1982). The strong impact of highly accessible information may out-weigh the contextual information of the perceived entitativity of family brands and the categorical similarity of brand extensions and eventually dominates family brand evaluations. Consumers' attitudes toward family brands will be diluted by negative extension information and be enhanced by positive extension information, irrespective of the contextual information of category similarity and perceived entitativity. Therefore,

> H1: When the accessibility of extension information is high, family brands are diluted by negative extension information, regardless of the categorical similarity of brand extensions and the perceived entitativity of family brands.

> H2: When the accessibility of extension information is high, family brands are enhanced by positive extension information, regardless of the categorical similarity of brand extensions and the perceived entitativity of family brands.

B. Reciprocal effects on high and low entitative family brands:

In research of social cognition, perceived entitativity is verified as an important factor affects group impression formation (Crawford, Sherman, and Hamilton 2002; Lickel et al. 2000; McConnell and Sherman 1997).   Traits of individual members become associated with the group as a whole through a process of stereotyping, and this general group impression then becomes associated with the individual members of the group.   Moreover, the trait inferences for individual members become associated directly with all other members of the group.   For a high entitative group, the individual traits that are inferred come to be associated with the group and with other members of the group via stereotyping.   Once the traits are abstracted from the behaviors of individual members, they are processed in terms of this group impression, instead of as individuals.   For low entitative groups, the information processing may stop at the level of individual trait inference.   The trait transference from individual members to the group and other group members are not made.   Similar to the group impression formation, family brand images normally are comprised of a collection of abstractions about brand extensions, such as quality and gentleness, which are abstracted from the product attributes of individual brand extensions and then transferred to the family brands and other brand extensions.   Attribute transferences from individual brand extensions to family brands should be more significant for high entitative family brands, because trait transferences from group members to the group and group members are stronger for high (vs. low) entitative groups (Crawford, Sherman, and Hamilton 2002).   Hence,

H3. When the accessibility of extension information is high, negative extension information is more influential on high (vs. low) entitative family brand.

H4. When the accessibility of extension information is high, positive extension information is more influential on high (vs. low) entitative family brand.

METHOD: LABORATORY EXPERIMENT

Experimental design

This study is a 2 (information valences: positive, negative) x 2 (categorical similarity: close, far) x 2 (perceived entitativity: high, low) between-subject experimental design to verify the four hypotheses in high accessibility situations. A total of two hundred and seventy three subjects participate in this research, including two hundred and five respondents in the eight experimental groups (Tables 1 and 2) and sixty eight respondents in pre-tests.

The first factor of the experiments is the valences (positive vs. negative) of brand extension information in semantic format of Consumer Reports. The second factor is the two extension categories of anticavity toothpastes (close) and pain relievers (far). The third factor is the perceived entitativity of the two hypothesized family brands of XXX (high entitative) and YYY (low entitative).

Table 1 Experimental design: reciprocal effects of *positive* extension information

Entitativity \ Similarity	Positive extension information	
	Close	Far
High entitative	*Group 1*	*Group 2*
Low entitative	*Group 5*	*Group 6*

Table 2 Experimental design: reciprocal effects of *negative* extension information

Entitativity \ Similarity	Negative extension information	
	Close	Far
High entitative	*Group 3*	*Group 4*
Low entitative	*Group 7*	*Group 8*

Pre-tests:

Pre-tests are conducted to verify if the three factors of information valence, categorical similarity, and perceived entitativity are manipulated appropriately. Results of pre-tests indicate that the two hypothesized family brands of XXX and YYY are perceived as high and low entitative family brands respectively and are significantly different from each other ($M_{XXX} = 7.32$, $M_{YYY} = 3.11$; $t = 13.70$, $p < .001$). The two new brand extensions of anticavity toothpastes and pain relievers are perceived as similar (close) and dissimilar (far) extensions to XXX family brand

respectively (t = 8.55, p < .001), as well as to YYY family brand (t = 4.20, p < .001). The semantic information about the favorable and unfavorable anticavity toothpastes is perceived as positive (M = 5.78) and negative (M = 2.23) information respectively and is significantly different from each other (t = -15.93, p < .001).   The semantic information about the favorable and unfavorable pain relievers is also perceived as positive (M = 5.34) and negative (M = 2.38) respectively and is significantly different from each other (t = -12.67, p < .001).   The results indicate that the three independent variables of categorical similarity, perceived entitativity, and information valence are manipulated appropriately.

Measures

Independent variables

Similarity of new brand extension

The categorical similarity of new brand extension is measured by asking, "In my opinion, (new brand extension) is _____ to the products of (family brand name)." followed by a seven-point bi-polar scale with endpoints labeled "Dissimilar" (1) and "Similar" (7) (Loken and John 1993).

Information valence

The valences of positive and negative extension information are measured by four seven-point attitude scales with endpoints labeled "Bad"/"Good", "Unfavorable"/"Favorable", "Low quality"/"High quality" (Kempf and Smith 1998), and "Inferior "/"Superior" (Keller and Aaker 1992). As reliability analyses indicate high correlations, the four measures are averaged to form a valence index (α = .98).

Perceived entitativity

Family brand entitativity is measured by a nine-point Likert scale of global perceived entitativity measure (e.g., Crawford et al. 2002; Lickel et al. 2000; McConnell et al. 1997) asking   "The brand extensions of (family brand name) are similar to each other and do not differ in many ways from each other. The brand extensions come from similar product categories and have similar product features, similar important product benefits, and similar product concepts.   The seven brand extensions provide very similar product function

for consumers." (1=Strongly disagree, 9=Strongly agree)"

Dependent variables

Attitudes toward family brands

Attitudes toward family brands are measured by the identical measures of information valence. As reliability analyses indicate high correlations, the four measures are averaged to form attitude indices (α_{before} = .89, α_{after} = .97).

Stimuli

Family brand information

A high entitative brand and a low entitative brand are hypothesized semantically based on family brand information similar to Colgate and Philips, which are two of the world's 100 most valuable global brands of Businessweek 2003. As sequential effects of extensions decrease (Keller and Aaker 1992) and group size is an important antecedent of perceived entitativity (Brewer, Weber and Carini 1995; Lickel et al. 2000), both high and low entitative family brands are comprised of the same number of seven brand extensions. For the high entitative family brand, all the seven brand extensions are in the same product category of oral care. For the low entitative family brand, the seven brand extensions are very different from each other and belong to seven different product categories, including toothpastes, facial tissues, light bulbs, PC LCD monitors, alkaline batteries, mobile phones, and CD players. Moreover, both high and low entitative family brands have the same original and flagship product of classic toothpaste. The semantic information about the high entitative family brand (XXX) is:

> XXX family brand is ranked by Businessweek as one of the world's 100 most valuable global brands. XXX family brand is comprised of 7 brand extensions. XXX classic toothpaste is the original and flagship brand of the XXX family brand. Four of the seven brand extensions are judged as Best Buys by Consumer Reports. The seven brand extensions of XXX family brand are:
>
> 1. XXX classic toothpastes
> 2. XXX fresh mint toothpastes
> 3. XXX whitening toothpastes
> 4. XXX tartar control toothpastes
> 5. XXX kids toothpastes
> 6. XXX active angle massage toothbrushes

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7. XXX floss

The semantic information about the low entitative family brand (YYY) is:

YYY family brand is ranked by Businessweek as one of the world's 100 most valuable global brands.   YYY family brand is comprised of seven brand extensions.   YYY classic toothpaste is the original and flagship brand of YYY family brand.   Four of the seven brand extensions are judged as Best Buys by Consumer Reports.   The seven brand extensions of YYY family brand are:

1. YYY classic toothpastes
2. YYY facial tissues
3. YYY long life light bulbs
4. YYY PC LCD monitors
5. YYY alkaline batteries
6. YYY mobile phones
YYY portable CD players

Extension information

Based on the results of pre-tests, *toothpastes* and *pain relievers* are selected as close and far brand extensions.   The product information about the four extensions of positive close, positive far, negative close, and negative far extensions are provided with semantic Consumer Reports' format indicating experts' evaluations about the performance among important products attributes.

A. Anticavity toothpastes:

Positive:

XXX Anticavity Toothpaste contains 30% abrasives and 30% baking soda, which provide moderate abrasiveness and excellent removing of *surface stains*.   XXX Anticavity Toothpaste is very effective at fighting germs that cause *plaque* and can continue to work as bacteria build up again by feeding on food and drink.   XXX Anticavity Toothpaste has quick fluoride release within a minute that can help minerals in saliva re-enter the tooth to repair damage and fight *cavities*. XXX Anticavity Toothpaste contains the special ingredients of triclosan, which is more effective than regular ingredient of sodium fluoride or sodium monofluorophosphate, and can reduce *plaque* by 52 percent more and *gingivitis* by 32 percent more.   XXX Anticavity Toothpaste uses a special ingredient called Gantrez, which slows the buildup of new *tartar* above the gumline and helps the triclosan stay on the teeth longer to reduce plaque and gingivitis.   XXX Anticavity Toothpaste is one of the *best* all-around toothpastes, and the cost per month is 70% less than the average. XXX Anticavity Toothpaste is judged A Consumer Reports Best Buy.

Negative:

XXX Toothpaste is moderate in abrasiveness, but fair in the removing of *surface stains*.   XXX Toothpaste is poor at fighting germs that cause *plaque* and the effect is not long-lasting.   XXX Toothpaste takes 2 minutes longer, around two

times longer, than other compared brands, to release fluoride, which can help minerals in saliva re-enter the tooth to repair damage and fight *cavities*. XXX Toothpaste contains a regular ingredient of sodium fluoride and the effects of *plaque control* and *gingivitis prevention* are 52 percent and 32 percent lower than average respectively. XXX Toothpaste uses regular pyrophosphates and is fair in slowing the build-up of new *tartar* above the gumline and the *cost per month* is 70% more than average. Based on Consumer Reports' 2003 annual questionnaire, XXX Toothpastes is rated as one of the *poorest* toothpastes.

B. Pain relievers:

Positive:

XXX Pain Reliever contains the newly innovated chemical of sabuprofen as its main ingredient, which gives immediate *relief of all body aches or pain* symptoms very well within 15 minutes or less, such as occasional headaches, muscular aches and pains, fever, inflammation, osteoarthritis pain, and menstrual cramps. XXX Pain Reliever has very few *side effects*, such as stomach upset, gastrointestinal bleeding, liver or kidney damage, and is very safe for regular users of ulcer or gastritis, children, and older adults over 65 with high blood pressure or kidney damage. The *duration of symptom relief* is also long-lasting, around 8 hours, which is two times longer than average brands. XXX Pain Reliever is encapsulated in small and coated pills and is *easy to swallow*. XXX Pain Reliever is one of the best all-around pain relievers, and the *cost of standard adult dose* is only 8 cents, which is 20% lower than averages. XXX Pain Reliever is judged A Consumer Reports Best Buy.

Negative:

XXX Pain Reliever contains the regular chemical of ketominophen as its main ingredient, which takes longer time, 50% longer than average, to give fair *relief of* some *body aches or pain* symptoms, such as occasional headaches, muscular aches and pains. XXX Pain Reliever is clinically proved to work poor for fever, inflammation, osteoarthritis pain, and menstrual cramps. XXX Pain Reliever has significant *side effects*, such as stomach upset, gastrointestinal bleeding, liver or kidney damage, and is not safe for regular users of ulcer or gastritis, children, and older adults over 65 with high blood pressure or kidney damage. The *duration of symptom relief* is also not long-lasting, around 2 hours, which is two times shorter than average. XXX Pain Reliever is packed in regular pills without coating and is not *easy to swallow*. The *cost of standard adult dose* of XXX Pain Reliever is 12 cents, which is 20% higher than average. Based on Consumer Reports' 2003 annual questionnaire, XXX Pain Reliever is one of the poorest pain relievers. XXX Pain Reliever is one of the poorest pain relievers, and the *cost of standard adult dose* is 12 cents, which is 20% higher than the averages.

Procedure

Two hundred and five undergraduates in a Northern Taiwan University received partial course credits for participating in the experiments. Participants were randomly allocated to the 8 (2x2x2) experimental situations (Tables 1 and 2). In the beginning of the experiments, participants were provided with semantic information about high (XXX) or low (YYY) entitative family brand. Based on the semantic information of family brands, participants evaluated the family brand with attitude and perceived entitativity measures followed by a verification task containing fill-in-the-blank questions about the information of family brands. The verification

task was designed to verify participants' involvements of the experiments and comprehensions about the family brand information. Only those who gave the right answers were allowed to proceed on the following experimental treatments of extension information. Those who didn't answer the questions completely right were dismissed with excuses. Following the verification task, participants evaluated the new launched brand extensions based on the semantic information in Consumer Reports formats. Finally, the participants re-evaluated the family brands *immediately* after the evaluations of new brand extensions with the identical attitude measures of family brands before the experimental treatments.

RESULTS

Manipulation checks

The Levene's tests of equality of error variances indicate that the error variances across the first set of four experimental groups for XXX family brand (F = .93, p > .05) and the second set of four experimental groups for YYY family brand (F = .51, p > .05) are equal respectively, which indicate that the experimental groups are homogenous. Moreover, the perceived entitativity of XXX family brand and YYY family brand (M_{XXX} = 6.44, M_{YYY} = 2.86) is significantly different from each other (t = 11.94, p < .001). The valences of positive and negative brand extensions of anticavity toothpastes are significantly different from each other ($M_{positive}$ = 5.78, $M_{negative}$ = 2.23, t = -15.93, p < .001). Also, the valences of positive (M = 5.34) and negative (M = 2.38) brand extensions of pain relievers are significantly different from each other (t = -12.67, p < .001). The results indicate that the independent variables are manipulated appropriately.

Hypothesis testing

A three-way ANOVA on attitude changes toward family brands yields a significant main effect of the valences of brand extensions (F = 317.42, p < .001) and a main effect of the perceived entitativity of family brands (F = 18.13, p < .001). However, the main effect of category similarity, the two-way interaction effects among the three factors ($F_{similarity*entitativity}$ = .03, p > .05; $F_{similarity*valence}$ = 1.23, p > .05; $F_{entitativity*valence}$ = .14, p > .05), and the three-way interaction effect of the three factors (F = .05, p > .05) are all insignificant. The results indicate that attitudes toward family brands are moderated by the valences of extension information and the perceived entitativity of family brands.

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A. *Negative reciprocal effects on family brands (H1and H3)*

Paired t-tests on the attitudes toward family brands before and after the experimental treatments indicate that attitudes toward XXX or YYY family brands among the four experimental groups (Groups 3, 4, 7 and 8) with the experimental treatments of negative close or negative far extension information are all weakened ($t_{G3} = 8.04$, p $< .001$; $t_{G4} = 7.46$, p $< .001$; $t_{G7} = 8.01$, p $< .001$; $t_{G8} = 8.01$, p $< .001$), regardless of the perceived entitativity of family brands and the similarity of brand extensions. Therefore, hypothesis one (H1) is supported. Moreover, a two-way ANOVA on attitude changes yields a significant main effect of perceived entitativity ($F = 9.76$, p $< .01$). However, both the main effect of categorical similarity and the interaction effect of category and perceived entitativity are insignificant ($F_{similarity} = 1.18$, p $> .05$; $F_{similarity*entitativity} = .00$, p $> .05$). The results suggest that while both high and low entitative family brands are diluted, the influences of negative extension information on the two family brands are different. A further analysis of one-way ANOVA on attitude changes yields a significant main effect of perceived entitativity on the attitude changes of family brands ($M_{high} = -1.76$, $M_{low} = -1.16$, $F = 10.40$, p $< .01$). The results suggest that negative extension information is more influential on high (vs. low) entitative family brand. Therefore, hypothesis three (H3) is supported.

B. *Positive reciprocal effects on family brands (H2 and H4)*

Paired t-tests on the attitudes toward family brands before and after experimental treatments indicate that attitudes toward XXX or YYY family brands among the four experimental groups (Groups 1, 2, 5, and 6) with the experimental treatments of positive close or positive far extension information are all enhanced ($t_{G1} = -3.92$, p $< .01$; $t_{G2} = -6.32$, p $< .001$; $t_{G5} = -5.61$, p $< .001$; $t_{G6} = -5.83$, p $< .001$), regardless of

the perceived entitativity of family brands and the similarity of brand extensions. Therefore, hypothesis two (H2) is supported. Moreover, a two-way ANOVA on attitude changes yields a significant main effect of perceived entitativity ($F = 9.51$, $p < .01$). However, both the main effect of category similarity and the interaction effect of category and perceived entitativity are insignificant ($F_{similarity} = .23$, $p > .05$; $F_{similarity*entitativity} = .09$, $p > .05$). The results suggest that while both attitudes toward high and low entitative family brands are enhanced, the influences of negative extension information on the two family brands are different. A further analysis of one-way ANOVA on attitude changes yields a significant main effect of perceived entitativity ($M_{high} = 1.05$, $M_{low} = .57$, $F = 9.61$, $p < .01$). The results suggest that positive extension information is more influential on high (vs. low) entitative family brand. Therefore, hypothesis four (H4) is supported.

IMPLICATIONS AND LIMITATIONS

Theoretical Implications

The research findings indicate that under high accessibility situations, the valences of brand extension information and the perceived entitativity of family brand moderate family brand evaluations. As the accessibility of extension information is high, the valence of extension information outweighs the contextual factors of categorical similarity and perceived entitativity on family brand evaluations. The attitudes toward family brands are either diluted by negative extension information or enhanced by positive extension information, regardless of categorical similarity and perceived entitativity. The findings are consistent with the findings of previous research in family brand evaluations (e.g., Ahluwalia and Gurhan-Canli 2000; Loken and John 1993). However, as attitude transferability is higher for high (vs. low) entitative groups (Crawfor et al. 2002), brand extension information is more influential on the attitude changes of high (vs. low) entitative family brands. A high entitative family brand is more significantly diluted by negative extension information and is more significantly enhanced by positive extension information. Moreover, the research findings also indicate that the influence of extension information on well extended family brand, either high or low entitative family brands, is still significant under high accessibility situations. The results suggest that while the sequential effect of brand extensions is diminishing (Keller and Aaker 1992), the reciprocal effects of new brand extensions for well extended family brands are still significant.

Managerial Implications

As perceived entitativity moderates the reciprocal effects of brand extensions,

the assessments about the reciprocal effects on family brand evaluations should consider the factor of the perceived entitativity of family brands.   To build up a high (vs. low) entitative family brand by leveraging brand extensions to similar product categories providing similar product functions is much easier for marketers.   The benefit is that consumers' attitudes are much easier to transfer from the original or parent brands to new similar brand extensions and consumers will have stronger intentions to try the new similar brand extensions.   It is more secure for the successes of the new brand extensions.   Moreover, the feedbacks of successful brand extensions may also more significantly improve consumers' attitudes toward the high (vs. low) entitative family brands.   However, just like the two faces of swords, the drawback is that the negative reciprocal effects of new brand extensions can be more detrimental to high (vs. low) family brands if the new brand extensions are not successful.

Limitations and Future Research

This research examines the influences of the three factors of information valence, categorical similarity, and perceived entitativity on family brand evaluations under high accessibility situations.   The psychological procedures of consumers' information processing are different for high and low accessibility situations. Consumers engage in piece-meal or systematic processing under high accessibility situations (Chen and Chaiken 1999) and in schema or heuristics-based processing under low accessibility situations.   The diagnosticity of extension information for family brand evaluations is also different for high and low accessibility situations which induces different results of family brand evaluations (Ahluwalia and Gurhan-Canli 2000; Skowronski and Carlston 1987).   Therefore, consumers'

judgments about high and low entitative family brands may be different for different accessibility situations. Future research is needed to examine the effects of the three factors of categorical similarity, information valence, and perceived entitativity on family brand evaluations under low accessibility situations.

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計畫成果自評

　　品牌延伸的研究中，學者常運用相似性或可取性／診斷性 (Accessibility/Diagnosity)等構面來探討延伸品牌和家族品牌的交互效果。例如，延伸品牌的成功與否決定於延伸品牌與母產品的相似性，愈相似則消費者對於母產品的態度也將轉移至延伸產品。相同地，延伸產品的態度也會反饋回母品牌上，而產生模糊(dilution)效果或是強化(enhancing)效果。再者，當品牌延伸資訊的可取性(accessibility)高時，正面(負面)的品牌延伸對於母品牌會有強化(模糊)效果。相反地，當品牌延伸的資訊可取性較低時，較不相似的品牌延伸之正面資訊對於母品牌會有強化效果，反而較相似的品牌延伸之負面資訊對於母品牌則會有模糊效果。

　　然而以往研究僅只偏重在單一品牌延伸與母品牌間的交互效果，但實務上品牌延伸可以至多項商品，例如，NIKE 球鞋延伸至服飾、高爾夫球桿、背包等，Sony 電器延伸至電腦、遊戲機、手機等。因此，當同時有多項品牌延伸存在時，這些延伸品牌產品間的關係對於母品牌的反饋效果會產生何種變化，似值得深入探討。而社會心理學對於群體認知上的研究提供了具體的理論基礎，亦即一群人是否會被認定屬於一個群體，關鍵在於其是否擁有相同的實體性(Perceived entitativity)。而且，個別群體成員的特質之推論(inference)或是成員間特質交互推論(transference)會隨著該群體之實體性的高低而有不同的結果。

　　研究結果發現無論品牌延伸的相似性已及實體性認知的高低，品牌家族皆會被正向或負面品牌延伸的結果所影響！尤其是對於實體性認知較高的品牌家族的反饋效果更強。此一結果對於家族內品牌相似性較高的品牌有極為重要的策略性管理意涵，亦即更要愛惜羽毛！

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