

# Effects of Audio-Visual Form Representations of Brand Names on Consumer Psychology and the Underlying Mechanisms: Postprint

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**Date:** 2023-10-09T00:00:00+00:00

## Abstract

Brand names, as a special category of lexical items, have formal representations divided into visual representation (the visual characteristics of printed letters) and auditory representation (the holistic acoustic features of words), with typography (including letter case, font style, and color) and phonology (including phonemes, syllables, tone or stress) respectively denoting these two dimensions. The influences of brand name typography and phonology on consumer psychology both occur during the perceptual processing stage of lexical items, with their effects and underlying mechanisms being simultaneously interconnected and distinct. Furthermore, cross-modal associations exist between the visual and auditory effects of brand names. Future research should integrate practical issues to conduct supplementary investigations into these visual and auditory effects.

## Full Text

### Preamble

ChinaXiv Cooperative Journal *Advances in Psychological Science*  
2023, Vol. 31, No. 9, 1756-1774

### The Impact of Audio-Visual Formal Representation of Brand Names on Consumer Psychology and Its Mechanisms

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**Abstract:** As a special type of vocabulary, the formal representation of brand names can be divided into visual representation (the visual characteristics of printed letters) and auditory representation (the overall acoustic characteristics of words), with font style (including letter case, typeface, and color) and phonetics (including phonemes, syllables, tones, or stress) serving as their respective indicators. The influence of brand name font style and phonetics on consumer psychology occurs during the perceptual processing stage of lexical recognition. While their effects and underlying mechanisms are interconnected, they also exhibit distinct differences. Furthermore, cross-modal connections exist between the audio-visual effects of brand names. Future research should address practical issues to provide supplementary investigations into these audio-visual effects.

**Keywords:** brand name, formal representation, font style, phonetics, consumer psychology

**Classification Code:** B849: F713.55

Brand names serve as fundamental cues for consumers to identify brands. Typically comprising one or two words, brand names represent the most concise form of brand language and appear frequently in marketing communications between brands and consumers (Carnevale et al., 2017; Pogacar, Shrum, & Lowrey, 2018). Lexical mental representation can be categorized into perceptual-based formal representation and semantic representation that conveys meaning, with their respective influences on individuals occurring during the perceptual processing and semantic processing stages of lexical recognition (Tian & Huber, 2010). In today's era of economic globalization, the semantic representation of brand names is often difficult for consumers from different cultural and linguistic backgrounds to comprehend. For example, the English brand name "Nike" carries the meaning "the Greek goddess of victory," which is readily understood by European and American consumers but less easily grasped by Asian consumers. The formal representation of brand names is divided into visual style and phonetic segments, which are based on vision and hearing respectively. Their influence on consumer psychology occurs during the perceptual processing stage of lexical recognition and can convey meaning independently of semantics (Jun & Lee, 2022; Smith, 2014). To a certain extent, the formal representation of brand names not only facilitates brand and product identification and differentiation but also carries universal significance unrestricted by language. Consequently, as brand-related stimuli, the formal representation of brand names can elicit corresponding audio-visual sensory responses from consumers, further influencing their experiences, perceptions, attitudes, and behavioral intentions.

In market practice, brand name font styles commonly appear in brand logos, product appearances, packaging posters, and web content, while phonetics frequently emerge in written spellings, oral mentions, and audio-video materials. Some well-known brands possess highly distinctive name fonts and phonetics that create deep impressions among global consumers. For instance, regarding font style, the technology company IBM's brand logo presents "IBM" in uppercase blue-striped letters with large, thick serifs, appearing both stable

and innovative. In the appearance of digital cameras produced by the imaging company Canon, the Latin text “Canon” appears in white against a black background, with the letter “o” slightly tilted, creating a striking and modern look [Figure 1: see original paper]. Regarding phonetics, on the Chinese website of the luxury automobile brand Cadillac, the spelling of the English name highlights phoneme repetition within the three-syllable word—the consonant “c” and vowel “a” each appear twice, a phonetic feature that generates pleasant feelings. Fashion brand Dior’s product advertisements typically conclude with a female American pronunciation of “[di: :],” where the two-syllable word’s phonetics transition from the front-of-mouth sound “[i:]” to the back-of-mouth sound “[:],” creating an elegant and soothing auditory experience [Figure 2: see original paper]. These examples demonstrate that the audio-visual formal representation of brand names significantly impacts consumer psychology.

Currently, as an important means of facilitating global consumers’ understanding of brands, the role of audio-visual formal representation of brand names has not received sufficient academic attention. Existing research mostly explores how individual components of brand name font style or phonetics affect consumer responses, with few studies examining interactions between different components, and these primarily focus on outcomes rather than systematically investigating the constituent elements and mechanisms of action (Dew et al., 2022; Doyle & Bottomley, 2011; Jun & Lee, 2022). Therefore, it is necessary to review existing literature on the audio-visual effects of brand names to reveal their distinctions and connections. This will not only provide a holistic research perspective for understanding brand name font styles and phonetics but also offer insights for theoretical research and marketing practice. This paper integrates multidisciplinary perspectives from psychology, linguistics, neurobiology, and consumer behavior to clarify the concepts and structures of brand name audio-visual formal representation, elucidate their effects on consumer psychology and underlying mechanisms, and conduct a comparative analysis of these two effects. Finally, we identify limitations in existing research regarding practical problem explanation and propose directions for future research.

## 2. Definition and Structure of Brand Name Audio-Visual Formal Representation

### 2.1 Connotation and Composition of Brand Name Font Style (Visual Representation)

Companies carefully design brand name font styles to ensure consumers can identify the printed word (Martin & Davis, 2019). The influence of brand name font style on consumer psychology occurs during the early stages of visual word recognition and manifests in various forms across different contexts, with brand name font style in brand logos representing the “standard form” (Schechter, 1993). Kathleen (2015) argues that the underlying visual representation of vocabulary refers to the visual characteristics of printed letters, including font, size, case,

color, and retinal features. Font style, typeface, and color can respectively represent these visual characteristics.

The influence of brand name font style on consumer psychology occurs during the perceptual processing stage of lexical recognition. Considering the diverse contexts in which brand name font styles appear, this paper proposes that its constituent elements include letter case (unrestricted by layout format), typeface (constrained by layout format), and color (constrained by both layout format and background), with their application scopes progressively narrowing:

**(1) Letter Case.** Wikipedia defines letter case as “the distinction between uppercase and lowercase letters in the writing units of a particular language.” The case form of brand names directly creates obvious differences in letter shape, is unrestricted by layout format, and widely appears in both print and electronic media. Brand name letter case forms can be divided into three categories: all uppercase, all lowercase, and mixed case.

**(2) Typeface.** Typeface refers to the external shape characteristics of text, involving typographic size and design style. Drawing on existing research classifications of fonts, this paper argues that the external shape characteristics of brand names can be categorized into four aspects: structural features (aspect ratio, completeness, presence of special symbols), font style (roundness, handwritten or printed, presence of serifs), morphology (size, weight, slant), and layout features (spacing, relative position) (Dew et al., 2022; Xie et al., 2021). Brand names with specific typefaces frequently appear in marketing materials such as product appearances, packaging, and posters.

**(3) Color.** Compared to the previous two elements, color has the weakest cross-cultural meaning uniformity and the smallest application scope (Klink & Athaide, 2014). Research indicates that colored backgrounds for web text can distinguish certain content areas from the rest of the page (Léger & Chevalier, 2017). In word processing software, text highlighting color functions similarly to fluorescent markings on paper, serving to emphasize text<sup>1</sup>. Therefore, this paper argues that the visual communication of brand name color depends on text color or text highlighting color (color blocks highlighting black, white, or gray text), with its dimensions comprising hue, saturation, and brightness, among which hue is the most easily identifiable dimension (Smith, 1978). As a key brand visual symbol, brand logos can be divided into three visual forms: wordmarks, combination marks, and graphic symbols, with the “text” in the first two types referring to the brand name text (Keller et al., 2021). Consequently, brand name color characteristics often appear as part of brand logo colors, representing the overall color of the name text and its background color blocks. Regarding the hue dimension, combinations can be either monochromatic or multichromatic, as shown in Table 1 .

## 2.2 Connotation and Composition of Brand Name Phonetics (Auditory Representation)

The influence of brand name phonetics on consumer psychology occurs during the early stages of spoken word recognition, appearing frequently in marketing communications as auditory stimuli or letter sequences, utilizing phoneme-meaning connections to shape brand image (D' Anselmo et al., 2019). Weber and Scharenborg (2012) propose that vocabulary can be auditorily represented as vectors of pronunciation features involving phonemes, syllables, and rhythm. Adopting this definition, this paper argues that brand name phonetics refers to the overall acoustic characteristics of words, with English and Chinese brand name phonetics comprising phonemes, syllables, and stress (tones).

**(1) Phonemes.** Phonemes are the smallest units of speech and the constituent units of syllables. English phonemes are individual vowels or consonants, while Chinese phonemes include consonants (initials), vowels (finals), and their combinations. Brand name phonetic features involve the pronunciation<sup>2</sup> of phonemes and their quantity, position, and order. Special designs of brand name phonetics at the phoneme level (special phonemes, phoneme repetition, and phoneme omission) not only strengthen brand memory but also affect consumers' emotions and cognition (Lowrey & Shrum, 2007; Klink, 2000; Klink & Wu, 2014; Robertson, 1989).

**(2) Syllables.** Syllables are the most natural structural units in speech. English and Chinese brand names consist of one or more syllables, which in turn are formed by combining vowels (V) and consonants (C). Brand name phonetic features involve syllable pronunciation<sup>3</sup> and quantity. If brand name phonetic design adopts the approach of omitting individual syllables from product names or using syllable sounds to mimic product usage sounds, it can lead consumers to associate with brand products and further deepen their understanding and memory of brand attributes (Collins, 1977; Knoeferle et al., 2016).

**(3) Stress/Tone.** Stress<sup>4</sup> refers to the emphasized syllables in English words, while tone<sup>5</sup> is an inherent element distinguishing pitch levels in Chinese syllables. When English or Chinese brand names consist of two or more syllables, stress/tone serves to highlight individual syllables. Special phonetic designs at the stress level in English names typically manifest as masculine or feminine rhymes, sounding crisp and forceful (e.g., Max Pax) or gentle and prolonged (e.g., American Airlines) (Reuven, 2013).

The special design of brand name phonetics can be attributed to unique organizational characteristics at the phoneme, syllable, and stress levels. Moreover, combinations of these features also serve this function. For example, masculine and feminine words involve phoneme and stress levels, and such brand names affect consumers' perception of brand gender (Pogacar et al., 2021). X-H<sup>6</sup> type tone combination words involve phoneme, syllable, and stress levels, making such brand names pleasant-sounding (Chen et al., 2003). Therefore, special designs of brand name phonetics enhance their distinctiveness, making them easily

perceived by consumers and influencing their psychology. Drawing on existing research, this paper lists representative special designs of brand name phonetics (Keller et al., 2021), as shown in Table 2 .

### 3. The Impact of Brand Name Font Style on Consumer Psychology and Its Mechanisms and Boundary Conditions

#### 3.1 The Impact of Brand Name Font Style on Consumer Psychology

**3.1.1 Impact on Aesthetic Experience and Legibility** The diverse aesthetic design of brand name font styles can influence consumers' aesthetic experience, while its visual features are closely related to legibility, objectively manifested as consumers' speed and accuracy in recognizing lexical content (Graf & Landwehr, 2015). Regarding aesthetic experience, the influence encompasses two dimensions: aesthetic pleasure and interest. Rich aesthetic styles in font style bring about pleasure. For instance, slender, regular, and small-sized fonts appear delicate and soft; bold, wide/narrow, and large-sized fonts appear bold and vigorous; cool/warm tones respectively convey cold/warm beauty; and high/low saturation colors represent impactful/comfortable aesthetic elements (Huang et al., 2022; Schroll et al., 2018). Unique designs in font style also cater to consumers' personalized aesthetic interests. For example, incomplete fonts in brand names satisfy aesthetic needs for incomplete beauty, complementary color combinations (e.g., red and green) create a sense of hierarchy, and analogous color combinations (e.g., navy blue and sky blue) exhibit unity (Deng et al., 2010; Hagtvedt, 2011; Labrecque et al., 2013). Regarding legibility, the impact depends on the visual clarity of different font style levels. For example, consumers demonstrate higher recognition speed and accuracy for brand names presented in black-on-yellow, blue-on-yellow, and blue-on-white combinations, while blue/red backgrounds with blue-green text are more difficult to recognize. Similarly, legibility is higher when the brightness contrast between text lines and background is 18:1, and sans-serif fonts are more legible than serif fonts (Ko, 2017).

**3.1.2 Impact on Brand Personality Perception** When consumers observe the visual formal representation of brand names, they organize, understand, and define them, forming perceptions related to brand temperament, personality, and gender roles. First, font and color features of names influence brand temperament and personality perception. Previous research has found that images (e.g., facial expressions) affect consumers' brand personality perceptions of given objects (Chen et al., 2021), and brand names have similar effects. For example, structural, stylistic, morphological, and layout features of brand name fonts display rich temperament and personality, including sincerity (monospaced fonts), security (compact spacing), innovativeness (incomplete fonts), safety and stability (upright fonts), confidence and courage (display fonts), happiness and creativity (handwritten fonts), classic/modern (vertical/horizontal text direction), traditional/universal (serif/sans-serif fonts),

and comfort/durability (rounded/sharp fonts). Specific font types such as Don Casual and Empire Script respectively add casualness and formality to brands (Deng et al., 2019; Doyle & Bottomley, 2006; Gupta & Hagtvedt, 2021; Hagtvedt, 2011; Jiang et al., 2015; Shaikh et al., 2006; Wei et al., 2018). Hue, saturation, and brightness of colors also serve as bases for inferring brand temperament and personality, including sincerity (white/yellow/pink tones), excitement (red/orange/yellow tones), competence (blue/brown tones), sophistication (black/purple/pink tones), ruggedness (brown/green tones), charm (black-white tones), excitement/gentleness (high/low saturation), and delicate/strong (high/low brightness) (Bresciani & del Ponte, 2017; Huang et al., 2022; Labrecque & Milne, 2012; Zhu et al., 2020). Second, uppercase/lowercase letters, printed/handwritten styles, rounded/sharp fonts, and blue/pink tones in font style lead to specific gender role perceptions, encompassing masculine/feminine personalities and interpersonal traits such as warmth/friendliness versus competence/authority. Uppercase letters, printed styles, sharp fonts, and blue tones correspond to masculine roles, while lowercase letters, handwritten styles, and pink tones shape feminine roles (Ding et al., 2019; Grohmann, 2016; Hess & Melnyk, 2016; Teng et al., 2021; Wen & Lurie, 2018; Xu et al., 2017).

### **3.1.3 Impact on Consumer Attitudes and Behavioral Intentions**

Brand name font styles may allude to different dimensions of social relationships, including female (vs. male) social roles and closely connected groups, which further influence consumer attitudes (interest in brand/product, acceptance, and liking) and behavioral intentions (willingness to learn about, purchase, and recommend). Specifically, controlling for brand visibility and familiarity differences, if font style spacing is compact rather than loose, consumers' safety perception is activated by this visually tight connection feature, enhancing their interest in and willingness to learn about the brand (Gupta & Hagtvedt, 2021). Similarly, when the font style of famous (vs. new) brands appears in pink (vs. blue) tones on gender-neutral products (e.g., sneakers, antiperspirant shower gel), consumers exhibit higher acceptance and purchase intentions (Hess & Melnyk, 2016). Moreover, for brands with similar familiarity, when font style appears in rounded rather than sharp fonts, the brand tends to be associated with positive emotions and receives more liking (Salgado-Montejo et al., 2014). Additionally, controlling for brand name familiarity and liking, if names are presented in lowercase or handwritten (vs. uppercase or printed) styles, female (vs. male) benefit-point consumers demonstrate higher evaluation and purchase intentions, and are more willing to recommend the brand to other consumers with feminine (vs. masculine) brand appeals (Grohmann, 2016; Wen & Lurie, 2018).

## **3.2 Internal Mechanisms of Brand Name Font Style's Influence on Consumer Psychology**

### **3.2.1 Mechanisms Influencing Aesthetic Experience and Legibility Driving Role of Human Visual Mechanisms.** As a component of the ner-

vous system, the human visual system endows organisms with visual perception capabilities, providing intrinsic motivation for text symbol cognition. Visual word recognition models such as the Automatic Serial Search Model, Logogen Model, and TRACE Model all agree that printed words consist of letter identification units with specific case, typeface, and color, with visual representations being activated on this basis (McClelland & Elman, 1986; Morton, 1969; Kathleen, 2015). Before the Visual Word Form Area (VWFA) detects vocabulary, specific brain regions process text shapes, visual light points, and lines, directly altering the organism's physiological state, including visual clarity, coordination, and physiological activation levels. Therefore, during the early processing stage of brand names, various constituent elements of font style serve as underlying lexical features that influence consumers' aesthetic experience and recognition performance (Perea et al., 2015).

**Mediating Role of Visual Fluency.** Visual fluency reflects individuals' subjective perception of the ease of processing visual information, determined by the visual characteristics of stimuli and involving lower-level processing of visual information (Lee & Labroo, 2004). For example, when seeing blurred printed books or dim images, people realize it is difficult to detect information within them, resulting in low visual fluency (Zhang, 2010). The visual fluency of brand names depends on the visual characteristics of their font style, which further influences lexical legibility. Specifically, text spacing, uppercase/lowercase letters, and hue/brightness contrast between text and background in brand font styles all affect legibility (Gontijo et al., 2002; Ko, 2017; Sharma & Varki, 2018).

**Mediating Role of Arousal Level.** Arousal level signifies the degree of physiological activation in individuals, typically induced by external stimuli. As visual stimuli, brand name font styles place consumers at different arousal levels, which further cause differences in their aesthetic experience (Blijlevens et al., 2012). For example, warm tones and high-saturation colors lead to high tension in aesthetic emotions, while cool tones and low-saturation colors place individuals in calm, restrained states, with these two types of font styles respectively bringing tense or relaxed aesthetic experiences to consumers (Deng et al., 2010; Huang et al., 2022).

**3.2.2 Mechanisms Influencing Brand Personality Perception Mediating Role of Evaluation-Potency-Activity (EPA) Dimension Assessment.** Typefaces, colors, and uppercase/lowercase letters with different visual characteristics receive different evaluations across three dimensions: evaluation (valence), potency (control), and activity (arousal). Rounded fonts have higher emotional valence than sharp fonts; compared to upright Roman fonts, slanted Italic fonts have higher arousal but weaker potency; warm tones and high-saturation colors have higher arousal than cool tones and low-saturation colors; and uppercase letters have more potency than lowercase letters (Alejandro et al., 2014; Tannenbaum et al., 1964; Valdez & Mehrabian, 1994). Therefore, brand name font styles with different visual features lead to differences

in consumers' EPA dimension perceptions, upon which they fully recognize the potential meaning of font style visual characteristics and form corresponding brand temperament, personality, and gender role perceptions (Doyle & Bottomley, 2006; Labrecque, 2020; Motoki et al., 2022).

**Mediating Role of Font Style Meaning Perception.** According to semiotics theory, symbols can be divided into “signifier” (the directly perceivable sign) and “signified” (the inferred and understood referent) (Terence, 1987). Brand symbol systems can similarly be divided into signifier (name, logo) and signified (product, service, company, reputation) levels, with brand names serving as important signifiers that achieve specific communication purposes (Shu, 2011; MacInnis, Shapiro & Mani, 1999). When consumers receive visual representation stimuli from brand names, they infer brand functions, temperament, personality, and gender roles from text lines and colors (Doyle & Bottomley, 2006). For example, rounded lines in brand name font style lead consumers to associate with positive brand personality (Salgado-Montejo et al., 2014). The typical brand color “Tiffany Blue” represents product categories such as jewelry, accessories, and perfume, as well as delicate brand temperament for consumers. Even when encountering unfamiliar brands presented in this color, consumers develop similar meaning perceptions (Baxter et al., 2018).

**Driving Role of Conceptual Metaphor.** Conceptual metaphor theory posits that when individuals process a concept, the brain uses sensory-perceptual information such as vision to understand the concept rather than engaging in semantic understanding (Lakoff & Johnson, 2008). Temperature and tactile concepts represent the abstract concept of gender roles, with warmth and softness corresponding to female roles, while coldness and hardness correspond to male roles. Due to these metaphorical associations, font styles trigger associations with gender personality and interpersonal emotions: compared to flame-pattern fonts, words presented in ice-pattern fonts more easily evoke negative interpersonal emotions (Wang & Lu, 2011). When guided to judge the gender of neutral faces by drawing lines forcefully or lightly, participants make masculine or feminine categorizations respectively (Slepian et al., 2011). Similarly, the brain infers brand gender roles in reverse based on temperature and tactile concepts conveyed by font style, such as handwritten and rounded fonts/warm tones—soft/warm—female personality—care and friendliness, versus printed and sharp fonts/cool tones—hard/cold—male personality—competence and authority (Ding et al., 2019; Heylen et al., 1995).

**3.2.3 Mechanisms Influencing Consumer Attitudes and Behavioral Intentions** **Mediating Role of Conceptual Fluency.** Conceptual fluency, as a higher-level fluency mechanism, reflects the fluency with which individuals process the meaning of stimuli (Alter & Oppenheimer, 2009). Marketing stimuli that align with brand concept cognition activate relevant concepts, enhance consumers' expectations and recognition abilities regarding the stimuli, and create smooth information processing experiences (Yao et al., 2017; Whit-

tlesea, 1993). Some studies have revealed that conceptual fluency mediates the impact of marketing stimulus materials on consumer attitudes: when the color valence of scenic area signage matches (vs. mismatches) the slogan language style, individuals experience conceptual fluency, which improves the persuasive effect of slogans (Zhang & Pan, 2016). Green color better matches environmental claim information than other colors, making the information easier to process and further enhancing consumers' perception of brands' environmentally friendly attributes (Seo & Scammon, 2017). Thus, the degree of match between brand name font style and brand concept cognition similarly leads consumers to experience different levels of conceptual fluency, subsequently affecting brand attitudes.

**Mediating Role of Self-Concept.** Self-conception comprises an individual's beliefs about their own characteristics and self-evaluation, including diverse contributing elements (Solomon, 2018). Research reveals that whether owning brand products or accidentally encountering brands, consumers' self-concepts are influenced by brand personality (Fennis et al., 2005; Fennis & Pruyn, 2007). Different self-concepts lead to differences in consumption behavior. For example, independent (vs. interdependent) self-concept groups prefer achromatic (vs. chromatic) and cool-toned (vs. warm-toned) products (Yan et al., 2013). Therefore, after observing brand name font styles, individuals develop corresponding brand personality associations, which activate or inhibit their own identities and change their attitudes and behavioral intentions. When brand personality inferences derived from font style and other features are consistent (vs. inconsistent) with consumers' self-concepts (e.g., social identity, beliefs, and perceptions), consumers' self-concepts are strengthened (vs. weakened), and their attitudes, purchase intentions, and recommendation willingness are positively (vs. negatively) affected (Grohmann, 2016; Schembri et al., 2010).

**Mediating Role of Country-of-Origin Associations.** Country-of-origin can serve as a cue for product evaluation and thus influence product assessments to some extent (Gürhan-Canli & Maheswaran, 2000). Brand name font styles may feature specific fonts and special symbols, leading consumers to associate the brand's country-of-origin with the corresponding language region and affecting their brand perceptions. For example, consumers often associate the Uncial font in brand name font styles with Ireland and the Black Letter font with Germany. This country-of-origin association endorses specific product types (e.g., Ireland—linen products, Germany—beer), thereby positively enhancing consumer attitudes (Doyle & Bottomley, 2006). Similarly, if the letter sequence of an abbreviated brand name is not easily readable, the brand is perceived as competent but not warm (Kim & Dempsey, 2019). Additionally, brand names with different special symbols in their letter sequences are associated with different languages (e.g., Rimöhr—German, Rimoré—French). These language associations are accompanied by country-of-origin perceptions, leading consumers to further perceive high-quality (German) and hedonic (French) brand personalities (Salciuvienė et al., 2010).

### 3.3 Boundary Conditions of Brand Name Font Style's Influence on Consumer Psychology

**Moderating Role of Individual Characteristics.** Individual characteristic elements such as demographic factors (e.g., gender), personality traits (e.g., regulatory focus), and consumption philosophies (e.g., conspicuous consumption) moderate the influence of brand name font style on consumer psychology. Specifically, although female and male consumers both show lower acceptance of brands with mismatched letter case and benefit-point gender (e.g., uppercase brand names—female benefit-point brands), females' purchase intentions are significantly lower than males' (Wen & Lurie, 2018). While uppercase brand names can create a premium brand perception, for consumers holding non-conspicuous consumption philosophies, this design fails to meet their aesthetic needs, and the premium perception derived from uppercase letters disappears (Yu et al., 2022). Moreover, incomplete fonts in brand name font styles negatively affect prevention-focused consumers' attitudes, while promotion-focused consumers remain unaffected (Geers et al., 2005; Hagtvedt, 2011).

**Moderating Role of Cultural Values.** Cultural values represent the manifestation of collective thinking patterns held by social groups at the individual level and guide individual psychology. Specifically, power distance beliefs also moderate the effect of letter case on brand attitudes: consumers with high (vs. low) power distance beliefs tend to perceive uppercase (vs. lowercase) letter brands as competence-oriented (vs. warmth-oriented) and hold more positive brand attitudes (Teng et al., 2021). Consumers with tight cultural perceptions identify with strict social hierarchies and are highly sensitive to threats; loose font spacing in brand names negatively affects their brand attitudes (Gupta & Hagtvedt, 2021).

**Moderating Role of External Cues.** According to the elaboration likelihood model, when consumers focus on information content itself or peripheral cue information, central or peripheral routes to persuasion take effect, and the influence of brand name font style varies (Petty & Cacioppo, 1986). For example, when brand names are complex words, consumers focus more on lexical meaning than visual representation, which weakens the aesthetic experience and brand personality perception derived from font style (Xu et al., 2017). Similarly, if the external environment presents obvious threats, loose font spacing leads to weakened product safety perception (Gupta & Hagtvedt, 2021). Additionally, when arousal attribution interference cues are present, the perception of exciting/gentle brand personality derived from high/low saturation colors disappears (Huang et al., 2022).

**Moderating Role of Brand Type.** Brand type moderates the influence of font style on consumer psychology. For example, when brands are traditional (vs. modern), upright (vs. slanted) fonts or vertical (vs. horizontal) text direction leads to more positive brand attitudes (Deng et al., 2019; Wei et al., 2018). Similarly, when brands are famous (vs. new), pink (vs. blue) font styles enhance

purchase intentions by activating consumers' warmth (vs. competence) perceptions (Hess & Melnyk, 2016). Furthermore, if brands are well-known, their font styles no longer affect brand personality perception (Grohmann, 2016).

**Moderating Role of Product Type.** Product category also serves as a boundary condition for font style effects. Specifically, when products are functional (vs. sensory-social), consumers better accept blue (vs. red) brand name font styles (Bottomley & Doyle, 2006). Moreover, if product types have specific country-region associations (e.g., linen products—Ireland, beer—Germany), presenting brand names in typical fonts of that country's language (e.g., Uncial font for Irish, Black Letter font for German) positively enhances consumer attitudes (Doyle & Bottomley, 2006). Similarly, if product consumption benefit-point gender is male (vs. female), such as oil-control anti-dandruff (vs. smooth and silky) shampoo, brand names composed of uppercase (vs. lowercase) letters enhance consumers' purchase intentions (Wen & Lurie, 2018).

## 4. The Impact of Brand Name Phonetics on Consumer Psychology and Its Mechanisms and Boundary Conditions

### 4.1 The Impact of Brand Name Phonetics on Consumer Psychology

**4.1.1 Impact on Emotional Experience and Brand Memory** If brand name phonetics possess strong appeal, they generate positive emotional experiences for consumers (e.g., liking, pleasure, and positive associations), while easily pronounceable phonetics facilitate brand memory (Robertson, 1987). Regarding emotional experience, for Chinese names, if the second syllable of a two-syllable word is a high tone, its pleasant and melodious pronunciation effect gains favor; phonetic features such as alliteration, homophony, and rhyme better convey brand meaning and induce pleasant feelings in consumers (Chen et al., 2003; Yin, 2011). For English names, phoneme repetition and syllable stress pattern repetition (i.e., rhythm) bring about pleasant emotions; positive/negative pronunciations evoke positive/negative associations, such as [ä] in “posh” (elegant) or [yoo] in “puke” (vomit) (Lowrey & Shrum, 2007; Robertson, 1989). Regarding brand memory, for Chinese names, two-syllable and three-syllable words are easier to recognize, pronounce, and recall (Chen et al., 2003). If syllable sound coordination is improper or rhythm is inconsistent, brand names become difficult to pronounce and sound ambiguous, hindering communication and memory (Yin, 2011). For English names, phoneme repetition and initial plosives enhance brand memory, while excessive numbers of syllables and consecutive phonemes (five or more syllables, two or more vowels, three or more consonants) hinder lexical recognition (Alter & Oppenheimer, 2009; Lowrey et al., 2003; Robertson, 1989).

### 4.1.2 Impact on Product Attribute and Brand Personality Perception

Brand name phonetics lead to different understandings of product attributes and brand personality. Regarding product attribute perception, existing re-

search has revealed how different phoneme categories in English brand names affect product attribute perception (Joshi & Kronrod, 2020; Klink, 2000; Klink & Wu, 2014) and explored specific product categories, as shown in Table 3 (Motoki et al., 2020; Park et al., 2021; Pathak & Calvert, 2021; Pathak et al., 2022). Additionally, multi-phoneme (vs. single-phoneme) and vowel (vs. consonant) embedding in names can convey better brand meaning, and combinations of similar phoneme embedding bring consistent product attribute perception (Klink & Wu, 2014). Regarding brand personality perception, two-syllable and three-syllable Chinese brand names respectively convey high-quality and friendly feelings (Yin, 2011), while syllable overlap makes consumers perceive the brand as warmer but less competent (Wei et al., 2016). For brands using English names, high-frequency (vs. low-frequency) phonemes reduce rugged personality perception, and names containing more/fewer syllables are easily perceived as luxury/necessity brands (Motoki et al., 2022; Pathak et al., 2019). Similarly, if the letter sequence of an abbreviated brand name is not easily readable, the brand is considered competent but not warm (Kim & Dempsey, 2019). Moreover, if English names are multi-syllabic, phonetic structures that stress the second or later syllable and end with an unstressed vowel (vs. stress the first syllable and end with a consonant) add feminine (vs. masculine) personality to the brand (Pogacar et al., 2021).

#### 4.1.3 Impact on Consumer Attitudes and Behavioral Intentions

Brand name phonetic features not only cause differences in consumers' brand/product preference and liking but also influence behavioral intentions such as brand purchase and recommendation. Early research noted that when brand name letter sequences are identical, French/British pronunciations evoke France/Britain country-of-origin associations, and hedonic/utilitarian products gain more consumer liking (Leclerc et al., 1989). Controlling for interfering variables such as brand experience and knowledge, reduplicative Chinese brand names can convey cuteness and pleasure, enhancing consumer preference for hedonic products (Wei et al., 2016; Yin, 2011). For English brand names, when vowels imply attributes corresponding to positive product attributes (e.g., small—convertible, sharp—knife) versus negative attributes (e.g., small—SUV, sharp—hammer), consumers tend to choose the former (Lowrey & Shrum, 2007). Additionally, if the pronunciation order moves from back-of-mouth sounds (e.g., u, k) to front-of-mouth sounds (e.g., i, b) (vs. from front to back), or contains negative (vs. positive) pronunciations such as [yoo] in “puke” — vomit (vs. [ä] in “posh” —elegant), consumer attitudes are negatively (vs. positively) affected (Kronrod et al., 2014). When brand names contain repeated pronunciations (controlling for identical brand name meaning), consumer attitudes and purchase decisions are favorably influenced (Argo et al., 2010). Similarly, controlling for brand name length and product gender perception, if the phonetic structure resembles female names, consumer attitudes, brand purchase, and recommendation intentions all increase (Pogacar et al., 2021). Finally, research has found that for global top-tier brands originating from

English-speaking countries, certain phoneme categories appear in excess or deficiency across categories, indicating that phoneme categories affect how much brands are liked, as shown in Table 4 (Pathak et al., 2020; Pogacar, Kouril et al., 2018).

## 4.2 Internal Mechanisms of Brand Name Phonetics' Influence on Consumer Psychology

**4.2.1 Driving Role of Human Auditory Mechanisms** The human auditory system possesses the function of processing and analyzing phonetic information, playing a driving role in spoken word recognition. Theoretical models describing the auditory word processing process mainly include the Cohort Model and TRACE Model, both of which divide the spoken word recognition system into three levels—feature identification, phoneme identification, and lexical identification (Feng et al., 2021). For brand names presented as auditory stimuli, consumers identify their phonetic features through the auditory system and complete preliminary recognition and understanding of vocabulary. As a cue for brand names, the brain stores this cue information during the early stage of auditory word recognition, and the long-term memory representation of vocabulary is affected, playing an important role in consumer recall (Grossberg, 2003). Therefore, the reason why consumers' emotional experiences and memory levels are affected by phonetic features is that the human auditory mechanism exerts a driving effect.

**4.2.2 Mediating Role of Phonological Fluency** The phonological fluency of Chinese and English brand names is primarily determined by different phonetic structural features. For Chinese names, phonological fluency depends on whether the number of syllables is appropriate, whether the rhythm conforms to prosodic patterns, and whether initials, finals, and tones coordinate properly. If words contain two or three syllables, have reasonable syllable rhythm division (e.g., three syllables divided as [1#2] or [2#1] rather than [1#1#1]), and have no difficult pronunciation issues<sup>7</sup> within or between syllables, their phonological fluency is high (Feng, 2011; Yin, 2011). For English names, phonological fluency depends on whether words conform to word-formation standards, whether transitions between syllables are natural, and whether they rhyme. If words contain numbers of syllables and phonemes within conventional ranges (at most three or four syllables, fewer than two vowels and three consonants), use glide transitions between syllables (e.g., “ld” in “falden”), and have repeated phonemes/syllable stress patterns (e.g., Coleco or Better Business Bureau), their pronunciation is relatively fluent (Alter & Oppenheimer, 2009; McGlone & Tofighbakhsh, 2000; Klink & Wu, 2014; Usunier & Shaner, 2002). When the phonological fluency of Chinese and English brand names is at a high level, consumers' attitudes and behaviors are positively affected (Menon & Raghurir, 2003).

**4.2.3 Mediating Role of Evaluation-Potency-Activity (EPA) Dimension Assessment** Both vowels and consonants have no connection with the

arousal dimension, while high-frequency phonemes receive higher evaluations on the valence and potency dimensions than low-frequency phonemes. Therefore, consumers' perceptions of brand personality and product attributes can be explained by the meaning associations of phonemes in brand names on the valence and potency dimensions: for example, low-frequency phonemes have lower valence but higher potency, leading consumers to perceive stronger brand ruggedness; high-frequency phonemes have higher valence, leading consumers to perceive lighter product appearance (Motoki et al., 2022).

**4.2.4 Mediating Role of Sound Symbolism** In English, sound symbolism refers to phonemes conveying their own meaning and matching specific types of attributes, such as vowels [yoo]/[ä] typically matching positive/negative attributes, and sonorants ([l], [m], and [n]) and voiced plosive consonants ([b], [d], and [g]) being associated with round and sharp shapes respectively (Bremner et al., 2013). The mediating role of sound symbolism in the influence of English brand name phonetics on consumers has been fully verified. Research indicates that people tend to match English phonemes in names with specific shapes and associate specific phonemes with different appearances and personalities (Sidhu & Pexman, 2019). Similarly, English brand name phonetics trigger consumers' automatic processing of phoneme sound symbolism, causing subconscious different reactions in experience, memory, brand/product attribute inference, and attitude/intention (Pogacar, Kouril et al., 2018; Yorkston & Menon, 2004).

**4.2.5 Driving Role of Articulatory Motor Simulation** Motor simulation represents the connection between perception and cognition, meaning the transformation of sensory perception into action responses, such as action programs being activated in skilled typists when seeing letter sequences (Jeannerod, 2001; Yang et al., 2009). According to the dual-pathway model of speech processing proposed by Hickok and Poeppel (2007), after the brain receives speech signals, the dorsal pathway enters the temporoparietal and frontal lobes to transmit auditory-motor signals, mapping speech perception onto speech production. Therefore, after receiving brand name phonetic information, consumers' articulatory organs engage in motor simulation, and the special channels of sensory and motor systems shape their cognition. For example, compared to short vowel [i], consumers evaluate brand products containing mid vowel [ä] as heavier because the tongue position for [ä] is further back and lower (Yorkston & Menon, 2004). Similarly, if back-of-mouth articulations (e.g., i and b) precede front-of-mouth articulations (e.g., u and k) in brand name phonetics, the word pronunciation mimics vomiting (vs. eating) actions, activating avoidance (vs. approach) mechanisms and negatively (vs. positively) affecting consumer attitudes (Kronrod et al., 2014).

**4.2.6 Mediating Role of Phonetic Meaning Perception** The iconicity theory in cognitive linguistics posits that language forms have mapping correspondences with their referents in sound (Wang, 2002). As an important brand

symbol, brand names are processed by consumers in their auditory formal representation, forming perceptions of product attributes and brand personality, which also affect their attitudes and behavioral intentions (Klink & Wu, 2014). Unlike sound symbolism, which involves only single phonemes, phonetic meaning perception is more connected with overall phonetic features. For example, for blended brand names (containing semantic and non-semantic morphemes), the phonetic meaning of non-semantic syllables can position the brand, such as “lim” in automobile brand names implying compact car space, which is more popular among small families (Arora et al., 2022). Syllable repetition in brand names also carries meaning, activating baby schema (the special mental representation formed by people for stimuli with infant features), leading consumers to perceive the brand as warmer but less competent, thus hedonic products with reduplicative brand names gain more preference (Wei et al., 2016).

**4.2.7 Mediating Role of Country-of-Origin Associations** Due to similarities among languages of the same family, brand name phonetic features carry language family hints, based on which consumers associate the brand’s country-of-origin<sup>8</sup>. Country-of-origin associations derived from brand name phonetics are frequently discussed in research on foreign-sounding brand names. Studies suggest that although companies cannot fabricate country-of-origin, they can manipulate consumers’ perceptions of it, such as Italian-sounding brand names “Giordano” and “Rossini” leading consumers to associate the brands with Italy (Zhang, 2015). Brand country-of-origin associations trigger different cultural stereotypes (e.g., France—hedonism, United States—utilitarianism), thereby influencing consumer psychology.

### 4.3 Boundary Conditions of Brand Name Phonetics’ Influence on Consumer Psychology

**Moderating Role of Individual Experience and Self-Regulation.** Consumers’ personal experience often serves as a basis for purchase decisions, while self-regulation (monitoring, evaluating, controlling, and regulating one’s own thoughts/emotions/behaviors) guides individual behavior (Chen et al., 2021). Both personal experience and self-regulation are boundary conditions for the influence of brand name phonetics on consumers. On one hand, consumers’ existing experience interferes with the impact of phonetics. For example, when consumers encounter familiar brands, the brand name’s recall advantage weakens phonetics’ influence on memory and cognition (Lowrey et al., 2003). Additionally, if phonetic structure deviates excessively from language expectations<sup>9</sup>, the positive effect of pronunciation repetition on consumer emotion and behavior diminishes (Argo et al., 2010). On the other hand, if consumers engage in self-regulation when encountering brand names, the effect of phonetics changes. For example, if consumers suppress their emotions and maintain emotional neutrality, they become insensitive to pronunciation repetition in brand name phonetics (Argo et al., 2010). In situations of low control and service failure, consumers attempt to re-establish personal control, leading them to prefer auditory stimuli

with action tendencies and favor brand names containing plosives (Khenfer & Cuny, 2020).

**Moderating Role of Brand/Product Type.** On one hand, brand type moderates the influence of phonetics on consumer psychology. Monosyllabic/polysyllabic names are more suitable for basic/luxury brands and are more favored by consumers (Pathak et al., 2019). On the other hand, product type also serves as a boundary condition. Specifically, when products are hedonic (vs. utilitarian), corresponding emotional (vs. cognitive) processing occurs. If brand name phonetic structures resemble female (vs. male) names or contain (vs. lack) reduplication, consumer attitudes are positively affected (Wei et al., 2016; Graf & Landwehr, 2015; Pogacar et al., 2021). Similarly, when sports technology products use solemn and stable two-syllable names and daily life products use lively and brisk three-syllable names, consumer liking for the brand increases (Yin, 2011). For products whose typical users are female (vs. male), feminine (vs. masculine) brand name phonetics win more preference (Pogacar et al., 2021).

## 5. Comparison and Cross-Channel Connections of Brand Name Audio-Visual Effects

### 5.1 Similarities and Differences in Audio-Visual Effects

**5.1.1 Similarities and Differences in Impact Outcomes** Through systematic review of the impact of brand name font style and phonetics on consumer psychology, this paper finds that they affect different dimensions of cognitive experience—the former primarily influences aesthetic experience and legibility, while the latter focuses on emotional experience and brand memory. Embodied cognition theory and motor fluency theory help explain this difference: embodied cognition theory posits that the brain and body's special sensory-motor channels shape cognition (Barsalou, 2008). A series of studies in consumer behavior demonstrate that sensory experiences in one dimension can influence consumers' cognition, emotion, and behavior in another dimension through metaphors, which can drive real-world impact or express multimodal mental representations (Krishna & Schwarz, 2014; Lakoff & Johnson, 2008). Motor fluency refers to the subjective experience of the ease of motor simulation during information processing. Existing research indicates that motor fluency plays an important role in non-analytical processes and memory formation—if stimuli elicit fluent motor simulation, people generate positive emotions and deep memories (Liu & Wang, 2019; Oppenheimer, 2008; Susser & Mulligan, 2015; Yang et al., 2009). Integrating these theoretical perspectives, the different impacts of brand name audio-visual formal representation can be attributed to differences in the role the body plays in generating psychological and cognitive experiences: whether only sensory centers process signals or whether organ motor simulation also participates. Driven by visual centers, font style influences individuals' aesthetic activities and visual lexical processing; driven by both auditory centers

and articulatory organ motor simulation, phonetics activate individuals' bodily sensations, which more easily trigger emotions and shape memory (Barsalou, 2008).

As formal representations of vocabulary and brand recognition cues, brand name font style and phonetics both belong to the perceptual processing stage of lexical recognition. Therefore, their impact outcomes share many similarities. Based on perceptual processing of brand names, consumers combine existing cognition to judge brand personality and product attributes and establish their attitudes and behavioral intentions. Overall, the audio-visual formal representation of brand names ultimately affects consumers' psychology regarding brands.

**5.1.2 Similarities and Differences in Internal Mechanisms** There are significant differences in how the human brain processes visual and auditory signals, involving different brain region sequences. The internal mechanisms through which brand name font style and phonetics influence consumers differ in three aspects: First, the formation of the two types of stimuli is driven by human visual and auditory mechanisms respectively. In the process of font style causing visual perception, visual centers (neural cell groups in the cerebral cortex) play a driving role, while auditory centers (auditory structures in the brainstem and cerebral hemispheres above the auditory nerve) drive individuals to form auditory perceptions of phonetics. Second, the two types of sensory stimuli have different processing fluency mechanisms. Visual features of font style cause differences in visual fluency, while meaning associations and the degree of match with brand concept cognition lead to different levels of conceptual fluency. In contrast, acoustic features of phonetics determine the phonological fluency of brand names. Third, the metaphorical understanding of the two types of sensory representations has different dynamic mechanisms: for font style/phonetics, the former relies on conceptual metaphor, while the latter utilizes sound symbolism and articulatory motor simulation.

Brand name font style and phonetics both serve as sensory cues and stimuli, and their influence mechanisms on consumers are somewhat connected. First, individuals' processing of both is driven by neurobiological mechanisms, with corresponding sensory centers participating in a series of processing including information reception, transmission, and processing, forming visual/phonological fluency perception. Second, individuals can evaluate the EPA (evaluation-potency-activity) dimensions based on their visual and acoustic characteristics respectively, and can also generate meaning perceptions about them and associate them with brand symbolic meaning (Jun & Lee, 2022; Motoki et al., 2022; Salgado-Montejo et al., 2014). Finally, certain features of audio-visual formal representation (e.g., specific fonts and special symbols, pronunciation features) enable consumers to generate language family and country-of-origin associations with brand names (Salciuviene et al., 2010; Zhang, 2015). Through these similar internal mechanisms, brand name audio-visual representation ultimately affects consumer psychology.

In summary, as audio-visual formal representations of vocabulary, the influence of brand name font style and phonetics on consumer psychology occurs during the perceptual processing stage of lexical recognition. Their influence mechanisms and outcomes are both connected and distinct. Based on defining and deconstructing brand name font style and phonetics, this paper compares their effects, as shown in Figure 3 [Figure 3: see original paper].

## 5.2 Cross-Channel Connections of Brand Name Audio-Visual Effects

Although brand name font style and phonetics can independently affect consumer psychology, their relationship is close, providing favorable conditions for cross-channel connections in brand name audio-visual effects. Related research indicates that product-related, non-predictive auditory stimuli (e.g., product usage sounds and related ringtones) presented in space can cross-modally facilitate consumers' visual search and selection of products, with these modal effects existing in the early stages of visual attention processing (Knoeferle et al., 2016). As visual and auditory stimuli of brand names, cross-modal integration effects also exist between brand name font style and phonetics.

The academic community has reached consensus and disagreement regarding cross-channel connections of brand name audio-visual effects: Consensus holds that if font style and phonetics bring consistent brand personality/product attribute perceptions, they generate superimposed effects, enhancing brand attractiveness, liking, quality perception, and memory level (Jun & Lee, 2022; Lieven et al., 2015). However, disagreement remains regarding the relative weight of font style and phonetics in integration effects: One view holds that brand name font style and phonetics have interactive effects on consumer responses, with neither playing a dominant role (Doyle & Bottomley, 2006; Jun & Lee, 2022). Another view suggests that when conveying brand meaning to consumers in emerging markets, brand name font style plays a more important role than phonetics (Klink & Athaide, 2014).

Currently, a series of studies on brand name multi-sensory interaction effects also exist. Sensory marketing is defined as "marketing approaches that engage consumers' senses and affect their perceptions, judgments, and behaviors," involving five sensory experiences: visual, tactile, gustatory, olfactory, and auditory (Krishna & Schwarz, 2014). Consumers exchange information with the outside world through their senses, which play a role when they receive brand name stimuli (Zhong et al., 2016). Beyond vision and hearing, brand names also bring about interaction effects among other senses: Non-contact between visual elements in brand logos can activate consumers' perception of dynamic images and affect consumer engagement and attitudes (Cian et al., 2014). Front (vs. back) vowels, long (vs. short) vowels, and incomplete (vs. complete) plosives in food brand names bring sweeter taste perceptions (Motoki et al., 2020; Park et al., 2021). Product scent enhances consumers' memory of product attributes (e.g., brand name letter sequences) (Krishna et al., 2010).

## 6. Research Summary and Future Directions

In the context of global economic development, conducting marketing activities in foreign markets constitutes an important component of brand internationalization strategies, and the semantic understanding barriers that foreign consumers face regarding brand names are urgent problems to solve. Market practice demonstrates that brand name font style and phonetics can effectively promote cross-cultural consumers' understanding of brand meaning. By reviewing relevant research on brand name audio-visual effects from psychology, linguistics, neurobiology, and consumer behavior, this paper identifies certain gaps: Few studies focus on brand name font style, with discussions of its effects often only mentioned in brand logo literature; research on brand name phonetics is mostly conducted in English contexts, with less attention to Chinese contexts; studies on brand name font style and phonetics are relatively independent, lacking holism. Therefore, this paper proposes that future research can proceed along the following dimensions:

### 6.1 Examining the Moderating Effect of Other Visual Elements on Brand Name Font Style Psychological Effects

In visual marketing materials such as brand logos and print advertisements, graphic elements and brand name font styles create harmonious/contrasting overall visual characteristics. For example, sports brand Converse' s two versions of logos respectively present rounded fonts with sharp graphics and sharp fonts with sharp graphics. Existing research indicates that brand logos containing both graphics and names have strong appeal to consumers, and shapes in product packaging and advertising backgrounds also affect brand personality perception, but have not considered the interference of graphic elements on brand name font style effects (Zhu et al., 2019; Bresciani & del Ponte, 2017; Hess & Melnyk, 2016; Labrecque & Milne, 2012). Given the principle of unity in design, individuals have aesthetic preferences for matching visual elements (Kumar & Garg, 2010). According to Berlyne' s (1966) arousal level theory, moderate visual inconsistency in stimuli brings optimal arousal levels and enhances individual preference (Deng et al., 2010). It can be inferred that the visual characteristics of graphic elements can serve as moderating factors for brand name font style effects, and the harmony and contrast between brand name fonts and graphics in visual marketing materials will affect consumer preferences. Exploring this issue will help advance practice in optimizing brand name font style design in real contexts.

### 6.2 Revealing the Phonetic Psychological Effects of Chinese Brand Names

Academic discussions on English brand name phonetic effects are relatively rich, covering the influence of various lexical phonetic components. However, research on Chinese brand name phonetic effects is somewhat scarce and mostly exploratory rather than confirmatory (Chen et al., 2003; Yin, 2011). Chinese

brand names are syllable-timed, with speech rhythm determined by syllable arrangement and the coordination of initials, finals, and tones within each syllable. However, existing research only explores the impact of syllable overlap in Chinese names, without attending to other phonetic structural features (Prator & Robinett, 1985; Wei et al., 2016). Chinese brand names may be formed not only through direct design but also through translation from foreign names. Research indicates that proficient English speakers rely on phonetic and semantic correlations between English and Chinese brand names, while non-proficient speakers rely more on semantic correlations (Zhang & Schmitt, 2004). Chinese brand name phonetics play an important role in Chinese translations of foreign brand names (especially transliterations and their variants), conveying brand meaning through phonetic similarity to the original name. However, differences in transliteration strategies not only result in different levels of phonological fluency but also create different meaning perceptions and country-of-origin associations (Liu & He, 2015; Schmitt & Zhang, 2012). For example, the single-syllable English name “Crosstour” transliterated as “Geshitu” has phonetics that are easy to pronounce and remember, associated with visual emotional imagery of “song, poetry, and painting” (Liu & He, 2015). In contrast, the three-syllable English name “Buzz Rickson” transliterated as “Basileikesen” has five syllables that connect rigidly, are awkward to pronounce, and do not conform to Chinese language characteristics.

In summary, Chinese brand names should consider the phonetic characteristics of Chinese vocabulary and follow certain naming rules to align with consumer preferences within Chinese linguistic and cultural contexts. However, what rules should Chinese brand name phonetic design follow? How do different characteristics of Chinese name phonetics affect consumer psychology? These specific questions require further exploration.

### **6.3 Investigating Weight Allocation of Brand Name Font Style and Phonetics in Non-Additive Effects**

When font style and phonetics convey inconsistent brand/product characteristics, their relative weights should be considered in specific contexts. The weight allocation of font style/phonetics in non-additive effects may be moderated by factors such as vocabulary language and structure: First, for Chinese/English brand names, the degree of match between brand associations and font/phonetic associations primarily affects consumer attitudes (Pan & Schmitt, 1996). Second, when lexical phonetic information is insufficient, polysyllabic words can still be correctly recognized, while recognition of monosyllabic words requires integrating additional font style cues (Iverson et al., 1998). According to this paper’s comparison, the internal mechanisms and boundary conditions through which brand name font style/phonetics influence consumers differ. When faced with different associations from font style/phonetics, consumers assign different weights to form an overall understanding of brand/product characteristics. Therefore, it is necessary to conduct comprehensive investigations into

the weight allocation of brand name font style and phonetics in non-additive effects.

#### 6.4 Exploring the Impact of Brand Name Font Style and Phonetics Variations on Consumer Psychology

Brand name font styles appear not only in standard forms within brand logos but also in variations in marketing materials such as brand copy, product appearances, and packaging designs, where their visual characteristics may undergo partial changes. For example, sports brand Vans uses the font style “Vans” with initial capitalization in social media content; on the product packaging of drinking water brand Nongfu Spring, the text direction of “Nongfu Spring” may be horizontal or vertical; on the appearance of telecommunications brand Huawei, the color of “HUAWEI” font style changes from understated black in the logo to eye-catching silver. Regarding brand name phonetics, brand nicknames used in online or offline communications are common variations of formal name phonetics. For example, fast-food brand “McDonald’ s” may be called “Mickey D’ s” in Europe and America, while tea brand “Nayuki’ s Tea” is sometimes abbreviated as “Nayuki.” Brand nicknames are more concise and readable than formal names, and their phonetic structures have certain similarities. Related research indicates that if customers use brand nicknames instead of formal names in online communications, consumers perceive review information as more authentic, and their purchase and sharing intentions toward the brand increase (Zhang & Patrick, 2021). This research explores the impact of brand nicknames on consumer responses from the perspective of semantic shift, without involving the impact of phonetic variation. Given the scarcity of research examining the impact of brand name font style and phonetics variations on consumer psychology, this proposition urgently requires in-depth exploration.

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## Notes:

1. Apply or remove highlighting. Retrieved October 5, 2022, from <https://support.microsoft.com/zh-cn/office/apply-or-remove-highlighting-1747d808-6db7-4d49-86ac-1f0c3cc87e2e>
2. Based on articulation manner, English/Chinese phonemes can be classified as follows: sounds produced without obstruction of airflow through the oral cavity are vowels, categorized as front, back, and central vowels according to tongue position and curvature (finals include open, even, closed, and rounded finals); sounds formed by airflow obstruction in the oral cavity or pharynx are consonants, categorized as plosives, fricatives, laterals, nasals, affricates, and semi-vowels according to articulators (initials include stops, fricatives, affricates, nasals, and laterals).
3. Based on pronunciation patterns, English/Chinese syllables can be classified as follows: syllables not ending in consonants (V and C-V patterns) are open syllables; syllables ending in consonants (V-C and C-V-C patterns) are closed syllables (Lin & Wang, 2013).
4. Based on stress strength, stress can be classified as follows: syllables pronounced with the greatest and greater force are called primary and secondary stress respectively.

5. Based on pitch changes, tones can be classified as follows: Chinese tones are divided into level, rising, falling-rising, and falling tones (first, second, third, and fourth tones in Mandarin) in order of increasing pitch, with the first two and last two being high and low tones respectively (Chen et al., 2003).
6. H represents high tone, X represents all tones.
7. Difficult pronunciation issues: In Chinese words, all syllables being entering tone, all syllables having the same initial, flat and curled tongue sounds connected, lateral and nasal sounds connected, h/f sounds connected, i/ü sounds connected, prosody problems, and inappropriate homophony issues.
8. Due to similarities among languages of the same family, brand name phonetic features carry language family hints.
9. Language expectations: For English words, listeners have certain expectations for phoneme arrangement order, such as “consonant-vowel-consonant-vowel” being more expected than “consonant-vowel-consonant-consonant.”

*Note: Figure translations are in progress. See original paper for figures.*

*Source: ChinaXiv –Machine translation. Verify with original.*