

## **Sounding it out! Phonetic Symbolism and Children's Brand Name Preference**

*Stacey Baxter, University of Newcastle, [stacey.baxter@newcastle.edu.au](mailto:stacey.baxter@newcastle.edu.au)  
Tina M. Lowrey, University of Texas at San Antonio, [tina.lowrey@utsa.edu](mailto:tina.lowrey@utsa.edu)*

### **Abstract**

With the growing number of brands entering the marketplace, phonetic symbolism can provide marketers with a means to create an inventive, yet meaningful brand name. This paper seeks to investigate children's preference for phonetically manipulated brand names. An experiment was undertaken whereby 92 children (six to 12 years of age) indicated their preference for words which contain front and back vowel sounds across four juxtaposed products. Results showed that children prefer words as brand names when the attributes connoted by the vowel sound are congruent with product attributes, with preference shown to increase with age. Results will be of interest to those who are looking to select a new brand name and provide a unique contribution to existing marketing literature.

**Key Words:** phonetic symbolism, children, brand name, preference

# **Sounding it out! Phonetic Symbolism and Children's Brand Name Preference**

## **Introduction**

*Barbie! Nickelodeon! XBOX!* Children are bombarded by branded communication everyday. With the belief that the earlier a child establishes awareness of a brand, the stronger brand associations are likely to be when they become an independent consumer (Ross and Harredine, 2004), it is understandable that many organisations would seek to begin the branding process early, targeting children from a young age.

As new brands enter the market, so too do new brand names. Brand names can act as a shorthand means of brand communication capturing “*the central theme of key associations of a product in a very compact and economical fashion*” (Keller, 2003, p. 182). When creating a new brand name marketers' need to consider how desired associations (or meaning) can be communicated within just one or two words. While some marketers will choose to communicate this information through the selection of a semantically appropriate and/or expressive brand name (for example, *Magnetix* or *Crunchie*), Mandagili (2008) has identified a recent increase in the number of 'inventive' brand names entering the marketplace (for example, *Google*). An inventive name is said to stand-out amongst other competing brands as a consumer's attention is often drawn to a novel, unique and unusual brand name (Robertson, 1989, Keller, 2003). A question is therefore raised as to how a marketer can create a meaningful but also distinctive brand name? One approach may be the use of linguistics to link raw sounds to specific product and/or brand meaning (Mandagirli, 2008). This paper focuses on one such concept, phonetic symbolism.

This research seeks to investigate children's preference for phonetically manipulated brand names. Specifically, children's preference for brand names that either do, or do not contain sounds that connote the physical attributes of selected products. It is suggested that the results of this research will provide child marketers with an interesting insight into alternative approaches to naming new brands. This paper begins with a discussion of phonetic symbolism, the methodology is then presented followed by the results, implications and directions for future research.

## **Phonetic Symbolism**

Phonetic symbolism rests on the notion that sounds (phonemes) can convey meaning on their own, irrespective of their configuration with a word (Sapir, 1929). While there has been little consensus amongst theorists over whether phonetic symbolism exists (for example, Jespersen, 1922), a large body of research within linguistics has found support for the phenomenon, suggesting that a phoneme can in fact be a meaningful unit of communication (for example, Nuckolls, 1999).

To date, researchers have focused on the symbolic value of vowels, with consistent sound-stimuli relationships being identified. For example, the vowel sound [a] has been associated with 'large' objects and [i] associated with 'small' objects (Tarte and Barritt, 1965). In fact, theorists have suggested that the meaning generated by vowel sounds follow a consistent pattern, forming a roughly ordered sound-symbolic list (Sapir, 1929, refer to Figure 1). This ordered list is founded on the notion of 'front versus back vowel distinction'. As the highest position of the tongue shifts from the front of the mouth (as in 'beat') to the back of the mouth (as in 'boot'), perception of size increases (Sapir, 1929).

**Figure 1:** Sound-symbolic list (Sapir, 1929)

<b>Phoneme:</b>	ē	i	ā	e	a	ō	o	ä	u	ü
<b>Pronounced:</b>	Bee	Bit	Hate	Test	Bat	Boat	Posh	Brought	But	Boot

Adapted from Yorkston and Menon (2004, p. 44) and Klink (2000, p. 9)

Children’s awareness of, and ability to manipulate phonemes (phonological processing) is less developed than their adult counterparts (Piasta and Wagner, 2010). Despite this, evidence of sound symbolism has also been found in child-oriented studies. For example, Sapir (1929) identified that over 80 percent of children aged 11 to 16 years associated ‘mal’ (back vowel sound) with large and ‘mil’ (front vowel sound) with small.

Phonological processing has been shown to be linked to both alphabet knowledge (Burgess and Linigan, 1998) and cognitive development (Gopnik and Meltzoff, 1986). According to Chall’s Stages of Reading Development (Chall, 1989), children begin to learn letters and their association with the spoken word, at approximately 6 – 7 years of age (Chall’s Initial Reading Stage). It is at this age that children begin to process words phonetically rather than visually (Ehri and Wilce, 1985, such as that associated with environmental print reading, for example a stop sign). Phonological processing is an important consideration in this research as unlike previous studies, this research includes children on the cusp of the ‘Initial Reading Stage’. It is therefore expected that evidence of phonetic symbolism may become stronger as children get older and their knowledge of phonemes increases.

### **Phonetic Symbolism: a Marketing Perspective**

In recent years there has been a growing interest in phonetic symbolism in marketing literature (Klink, 2000, Yorkston and Menon, 2004, Lowrey and Shrum, 2007, Coulter and Coulter, 2010). Marketers have directed their attention to the application of phonetic symbolism principles in the development of meaningful brand names (Klink, 2000, Yorkston and Menon, 2004, Lowrey and Shrum, 2007) as like all words; brand names are made up of a series of phonemes.

Researchers suggest that these phonemes can provide consumers a cue for product or brand attributes (Yorkston and Menon, 2004). Klink (2000) found that brand names containing front vowel sounds (for example, [ē], [i], [ā]) were perceived as smaller, lighter, softer, thinner, colder, more feminine, friendlier and prettier when compared to those with back vowel sounds (for example, [ä], [u] and [ü]). It has also been found that consumers prefer brand names that contain vowel sounds that are congruent with product attributes (Lowrey and Shrum, 2007). For example, consumers were found to prefer front vowel sounds for faster, lighter and sharper products (for example, a two-seater convertible or knife) and back vowel sounds for slower, heavier and duller products (for example, an SUV or hammer).

The results obtained by Klink (2000), Yorkston and Menon (2004) and Lowrey and Shrum (2007) suggest that sounds can in fact contain meaning, and these meanings may align with consumer preference for particular words as brand names. For example, if the sound of a word connotes ‘fastness’, the word may be preferred as a brand name for an electric scooter as opposed to a wooden train.

With children playing an important role within today’s consumer marketplace, this research aims to extend current literature through examining the impact of phonetic symbolism on brand name preference within this cohort, who until now have not been the focus of research within the marketing discipline. As children have not yet acquired adult-like language skills (Piasta and Wagner, 2010), and therefore, may not attach the same meaning to

phonemes as adults, it is thought that this research will provide a valuable contribution to this growing research area.

## Methodology

Four experiments were undertaken to examine children's preference for names that contain sound elements that are either congruent, or incongruent with product attributes. This paper focuses on the results of one experiment.

### Participants and Procedures

Ninety two children aged 6 – 12 years of age who attended an Out Of School Hours (OOSH) centre located in a major city on the Australian eastern seaboard participated in the experiment. Consent was sought from both the parent and the child with only those who obtained written consent participating in the experiment. Experimental materials were administered individually and all materials were read to children to ensure phonemes were presented as intended.

Participants received four word pairs that differed only on the front/back vowel distinction. Participants were asked to specify their preference between each word pair as a name for each test product, therefore, a *within-subject* experimental design was employed. The order of presentation for both the word pairs and product stimuli was varied across participants. After preference for words was obtained, participants indicated the perceived size, weight and hardness of the selected test products. Finally, simple demographic information including age, year at school and gender was obtained and participants were asked what they "thought the research was about".

### Stimuli Selection

**Word Selection.** Eight artificial, two-syllable words were selected for the experiment (as per Lowrey and Shrum, 2007). The four word pairs were drawn from Klink (2000) and differed only on front, [i] or [ā], versus back, [ā] or [ü], vowel sound. The words selected were as follows: *Keffi/Kuffi*, *Illy/Ully*, *Bilad/Bolad* and *Nellen/Nullen*.

**Product selection.** The product category 'toys' was selected for the experiment. Inline with Lowrey and Shrum (2007), the researchers wanted to identify products that differed on the dimensions under investigation, namely size, weight and hardness. To identify products to be included in the research, five children from the target population (aged 8 – 11 years of age) were asked to write down five toys that were: small, big, hard, soft, heavy and light. It was found that children could easily name toys for each of the categories. The lists produced by the children were then compared with four juxtaposed products being selected: teddy bear and squishy ball (small, soft and light) and 'dolls' house and outdoor play equipment (big, hard and heavy). While these toys may be viewed as 'traditional' rather than 'contemporary' (for example, a video game), all achieved top of mind recall and therefore, were deemed not 'out dated' and thus appropriate for the study.

## Results

### Order Effects and Manipulation Checks

Order of presentation of both the word pairs and test products did not affect name preference, thus, results were pooled across order conditions. No participant guessed the purpose of the experiment; it is therefore suggested that the use of a *within-subject* experimental design did not affect the validity of results obtained. Data obtained regarding the

perceived size, weight and hardness of the selected test products were also analysed. Results obtained for the teddy bear and squishy ball occurred as intended with over 80 percent of children perceiving these items as small, soft and light. Desired results were also achieved with regards to the play equipment with over 93 percent of children reporting that the product was big, hard and heavy. A clear consensus was not obtained for the ‘dolls’ house whereby 38 percent of children believed this item to be small and light and 62 percent reported the item as large and heavy, therefore, internal analysis was conducted for this condition.

### Front versus Back Vowel Sound Effects

With previous research suggesting that front vowel sounds are preferred for smaller, lighter and softer products and back sounds preferred for larger, heavier and harder products (Lowrey and Shrum, 2007) it is expected that front vowel sounds will be preferred for the teddy bear and squishy ball, and back sounds will be preferred for the ‘dolls’ house and outdoor play equipment. To test this assumption, continuous dependent variables were created that represented the proportion of front and back vowel sounds selected for each product (for example, if a subject preferred one word containing a front vowel sound out of the possible four, they received a score of 0.25 for front and 0.75 for back). Paired *t*-tests were then conducted to determine whether there were significant differences between preferences for front versus back vowel sounds for each product. Results are presented in Table 1.

**Table 1: Preference for front versus back vowel sounds across products**

Product	Front vowel words preferred (%)	Back vowel words preferred (%)	Sig
Teddy Bear	56	44	0.072
Squishy Ball	58	42	0.018
Outdoor Play Equipment	30	70	0.000
Dolls’ House (perceived as small)	73	27	0.000
Dolls’ House (perceived as big)	44	56	0.026

Significant differences were found for the squishy ball, outdoor play equipment and dolls house ( $p < 0.05$ ) and a moderately significant difference was identified for the teddy bear ( $p < 0.10$ ). In all instances, results were as expected with front vowel sounds being preferred for products perceived as small and light and back vowel sounds being preferred for products perceived as big and heavy.

### Front versus Back Vowel Sound Effects: comparison of age groups

Further analysis for three of the four products was undertaken to examine participant’s preference for front versus back vowel sounds according to age (dolls’ house condition was not included, due to the differential perception of this item by participants). Participants were categorised into three groups coinciding with Chall’s stages of reading development (Chall, 1989). Once again paired *t*-tests were conducted to determine whether there were significant differences between preferences for front versus back vowel sounds for each product. Results are presented in Table 2 and as shown, evidence of phonetic symbolism is found across all three age categories. Once again, front vowel sounds were consistently preferred for products perceived to be small and light (teddy bear and squishy ball) and back vowel sounds were preferred for the big and heavy product (outdoor play equipment), however, differences were not significant in all instances ( $p > 0.05$ ). It is interesting to note that the percentage difference between front and back vowel sound selections increased with age. While significant differences were only found for one of the three products in the 6 to 7 year age group, and for

two of the three products in the 8 to 9 year age group, significant differences were found across all three products in the 10 to 12 year age group. This result suggests that evidence of phonetic symbolism does increase with age (and/or phonological development).

**Table 2:** Preference for front versus back vowel sounds: age group comparison (%)

Product	6 – 7 years Initial Reading Stage		8 – 9 years Automaticity Stage		10 – 12 years Reading for Learning Stage	
	Front Vowel Words Preferred	Back Vowel Words Preferred	Front Vowel Words Preferred	Back Vowel Words Preferred	Front Vowel Words Preferred	Back Vowel Words Preferred
<b>n</b>	24		30		38	
Teddy Bear	52	48	56	44	62*	38*
Squishy Ball	51	49	65*	35*	63*	37*
Outdoor Play Equipment	40*	60*	30**	70**	23**	77**

\*  $p < 0.05$ , \*\*  $p < 0.01$ .

### Discussion and Conclusion

The results of this research support the notion that sounds can convey meaning. Consistent with previous, adult-oriented research, findings from this study illustrate that children prefer words as brand names when the attributes connoted by the vowel sound are congruent with product attributes (Lowrey and Shrum, 2007). Such preference, however, was shown to increase with age (which may reflect improvements in phonological processing), with stronger evidence of phonetic symbolism found for 10 to 12 year olds, when compared to 8 to 9 and 6 to 7 year olds.

These findings provide a valuable contribution to marketing theory and practice. First, this research is the first known marketing study designed to investigate phonetic symbolism, utilising a child sample. Results were shown to provide further support for the existence of phonetic symbolism, with children also demonstrating sound-stimuli relationships. With children's knowledge of phonemes being less developed than that of adults (Piasta and Wagner, 2010), this research provides a unique contribution to the growing body of research. Findings also have implications for brand naming. When selecting a brand name, marketers may choose to select a known or semantically appropriate name (for example, *Hot Wheels*), others, however, will look for an inventive and distinct brand name (Mandagiri, 2008). It is suggested that the relationship between vowel sounds and meaning demonstrated in this research will be of interest to those looking to choose an inventive name. For example, those selecting an inventive brand name for a new range of 'miniature cars' may look to incorporate front vowel sounds (for example, *Zigez*), whereas, those launching 'jumbo cars' should incorporate back vowel sounds in the name (for example, *Zugez*).

## References

- Burgess, S. R., Lonigan, C. J., 1998. Bidirectional relations of phonological sensitivity and prereading abilities: Evidence from a preschool sample, *Journal of Experimental Child Psychology*, 70, 117 – 141.
- Chall, J. S., 1989. Learning to Read: The Great Debate" 20 Years Later: A Response to 'Debunking the Great Phonics Myth', *The Phi Delta Kappan*, 70 (7), p. 521-538.
- Coulter, K. S., Coulter, R. A., (2010), Small Sounds, Big Deals: Phonetic Symbolism Effects in Pricing, *Journal of Consumer Research*, (in print August 2010), accessed from <http://www.journals.uchicago.edu/doi/pdf/10.1086/651241> on 2 April, 2010.
- Ehri, L. C., Wilce, L. S. 1985. Movement into reading: Is the first stage of print word learning visual or phonetic?, *Research Reading Quarterly*, 20 (2), 163 – 179.
- Gopnik, A., Meltzoff, A. N., 1986. Words, plans, things and locations: Interactions between semantic and cognitive development in the one-word stage. In S. Kuczaj & M. Barrett (Eds.), *The development of word meaning* (pp. 115–151). New York: Springer-Verlag.
- Jespersen, O., 1922. *Language: Its Nature, Development and Origin*, London: Allen and Unwin.
- Keller, K., 2003. *Strategic brand management: building, measuring and managing brand equity* (2nd ed.). New Jersey: Prentice Hall.
- Klink, R., 2000. Creating Brand Names with Meaning: the use of sound symbolism, *Marketing Letters*, 11 (1), 5 – 20.
- Lowrey, T. M., Shrum, L. J., 2007. Phonetic symbolism and brand name preference, *Journal of Consumer Research*, 34 (October), 406 – 414.
- Mandagirli, S., 2008. Naming it Right, <http://www.businessworld.in/index.php/Cases/Naming-It-Right.html>
- Nuckolls, J. B., 1999. The case for sound symbolism, *Annual Review of Anthropology*, 28, 225 – 252.
- Piasta, S. B., Wagner, R. K., 2010. Learning letter names and sounds: effects of instruction, letter type, and phonological processing skill, *Journal of Experimental Child Psychology*, 105, 324 – 344.
- Robertson, K., 1989. Strategically Desirable Brand Name Characteristics, *Journal of Consumer Marketing*, 6 (4), 61 – 71.
- Sapir, E., 1929. A study of phonetic symbolism, *Journal of Experimental Psychology*, 12 (3), 225 – 239.
- Yorkston, E., Menon, G., 2004. A Sound Idea: Phonetic Effects of Brand Names on Consumer Judgement, *Journal of Consumer Research*, 31 (June), 43 – 51.