

**PHONETIC SYMBOLISM IN BRAND NAMES: PERCEPTIONS OF  
FINNISH UNIVERSITY STUDENTS**

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# JYVÄSKYLÄN YLIOPISTO

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Tiivistelmä – Abstract <p>Äännesymboliikka on ilmiö, jota on tutkittu jo vuosikymmenien ajan, mutta viime aikoina aihetta on alettu tutkia yhä syvemmin eri näkökulmista ja tietoa aiheesta on tarjolla monipuolisesti (ks. esim. Motoki et al. 2022, Trninc 2022, Kovács et al. 2023). Käsitteellä viitataan äänen ja merkityksen väliseen suhteeseen, eli siihen, että sanan äänneasu välittää merkitystä. Tutkimuksissa on havaittu, että äännesymboliikka on osittain universaalia, eli samankaltaisia havaintoja on todettu yli kielirajojen. Kielitieteiden lisäksi äännesymboliikkaa on tutkittu esimerkiksi markkinoinnin näkökulmasta. Markkinoijat voivat hyötyä äännesymboliikan tutkimuksesta, sillä se voi auttaa heitä sisällyttämään universaaleja merkityksiä brändinimiin. Brändinimien kehittämistä on globalisaation myötä tullut hankalampaa, sillä yhdellä markkina-alueella houkutteleva nimi voi olla toisella epäedullinen (Shrum et al. 2012, s. 275). Brändinimen ajatellaan usein olevan yksi tärkeimmistä brändiviestinnän osa-alueista ja brändinimen valinnan olevan yksi tärkeimmistä markkinointipäätöksistä.</p> <p>Tässä tutkielmassa tutkitaan suomalaisten yliopisto-opiskelijoiden havaintoja brändinimistä niiden foneettisten piirteiden perusteella. Brändinimet ovat tätä tutkimusta varten kehitettyjä ja ne on luotu englannin kielen foneemijärjestelmän perusteella. Tutkielman data kerättiin helmikuussa 2024 kyselylomakkeella ja siihen vastasi 131 suomalaisen yliopiston opiskelijaa, jotka puhuvat suomea äidinkielenään. Kyselylomake sisälsi avoimia, monivalinta- ja Likert scale -kysymyksiä kuvitteellisista brändinimistä. Data analysoitiin laadullisen sisällönanalyysin sekä parillisten t-testien avulla.</p> <p>Kyselyyn vastanneet yhdistivät takavokaalin sisältäneen brändinimen tummempaan kahviin, etuvokaalin sisältäneen brändinimen feminiinisempään hajuveteen sekä frikatiivin sisältäneen brändinimen pehmeämpään kasvovoiteeseen. Brändinimi, joka sisälsi etuvokaaleja, äännettömän frikatiivin ja soinnittoman klusiilin, yhdistettiin pieneen tai keskikokoiseen kokoon, kevyeen tai kohtalaiseen painoon sekä kylmään tai kohtalaiseen lämpötilaan. Edellä mainitut tulokset ovat samankaltaisia, kuin mitä aiemmassa tutkimuksessa on havaittu (esim. Klink 2000, 2001). Osa tuloksista ei kuitenkaan osoittanut sellaista tilastollista merkittävyyttä, jotta niiden perusteella voisi tehdä selkeitä johtopäätöksiä. Kyselyn vastaajat kuvailivat monia erilaisia brändinimistä syntyneitä miellelyhtymiä, jotka liittyivät esimerkiksi eri kielisiin, sanoihin, olemassa oleviin brändeihin tai mielikuviin esimerkiksi adjektiiveista ja fyysisistä paikoista. Tulokset osoittivat, että brändinimet herättävät ihmisissä monenlaisia miellelyhtymiä, mutta äänneiden lisäksi miellelyhtymiin vaikuttivat myös muut asiat, kuten brändinimen kirjoitusasu. Tulokset kuitenkin viittaavat siihen, että brändinimien välityksellä kuluttajissa voidaan aiheuttaa erilaisia reaktioita. Tulevaisuuden äännesymboliikan tutkimuksessa voitaisiin keskittyä vielä enemmän esimerkiksi siihen, kuinka ihmisten demografiset tekijät vaikuttavat siihen, kuinka he tulkitsevat äänneitä tai tutkia, kuinka tiettyjä äänneitä tulkitaan sen perusteella, missä järjestyksessä ne esiintyvät sanassa.</p>	
Asiasanat phonetic symbolism, brand name, phonetics	
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## APPENDIX

# 1 INTRODUCTION

Phonetic symbolism refers to the direct, non-arbitrary link between sound and meaning, implying that the sound of a word conveys meaning, separate from the word's definition (Klink 2000, p. 6; Lowrey & Shrum 2007, p. 406). One of the most common ways of categorizing phonetic symbolism has been to focus on vowels and consonants and what kind of meanings they convey: for example, the meanings that are conveyed by front or back vowels, fricative and stop consonants, voiceless stop and voiced stop consonants, or voiceless fricative and voiced fricative consonants (Klink 2000, p. 10). Size symbolism has been a common topic in phonetic symbolism research, indicating, for example, that front vowels communicate smaller size, and back vowels communicate larger size (Klink 2000, p. 8). The findings of Shinohara and Kawahara (2010, p. 397) suggest that size-related phonetic symbolism holds cross-linguistically. However, more research still needs to be done in order to determine how universal these phonetic symbolism effects truly are (Lowrey & Shrum 2007, p. 414).

Selecting a suitable brand name is often considered to be an important step for marketers, with some suggesting that brand name is the base of brand awareness and brand communication that could even increase a customer's tendency to purchase a product (Shrum et al. 2012, p. 275; Mishra & Datta 2011, p. 110). Creating brand names, especially in the global context, can be a challenging task, since a seemingly good brand name in another country could be unfavourable in another (Shrum et al. 2012, p. 275). Some links between sound and meaning have been suggested to be consistent and universally understood, making it possible for marketers to embed universal meaning in brand names (Spector & Maurer 2013, p. 239; Lowrey & Shrum 2007, p. 407). Research results have indicated that embedding phonetic symbolism in brand names impacts the preferences of customers positively (Klink 2001, pp. 29-30; Trninic 2022, p. 84).

Research on brand name perceptions based on phonetic features has been conducted, for example, on university students from the United States (Klink 2001, Shrum et al. 2012), India (Athaide & Klink 2012), France (Shrum et al. 2012), and Serbia (Trninic 2022). Conducting this study on Finnish-speaking university students from Finland can potentially yield new

results about cross-linguistic phonetic symbolism effects from the perspective of the Finnish context. Using a similar target group could make the results of the study more comparable to earlier research on the topic. Societally, it is important to understand the brand associations of people as well as the ways in which marketers can utilize linguistic features to increase interest in their products and integrate suitable connotations in names of products and brands.

This thesis aims at discovering and exploring the ways in which Finnish-speaking university students at a Finnish university perceive English brand names based on their phonetic features. The data was collected through a Webropol questionnaire that included open, multiple choice and Likert scale questions about fictitious brand names. Fictitious brand names were created based on the English system of phonemes to reduce associations with already existing brand names, products or companies.

The structure of this thesis is the following. First, I will introduce the most important topics and concepts regarding my thesis, which include phonetics, vowels, consonants, phonetic symbolism, brands, and brand names. After that, I will delve into earlier research on the topic. In the present study section, I will present the research questions and discuss data collection and selection, research ethics relevant to this thesis, and methods of analysis. Then, I will examine the findings of this study, and lastly, conclude the thesis with the discussion and conclusion.

## 2 THEORETICAL BACKGROUND

### 2.1 Phonetics

Ogden (2017, p. 2) defines phonetics as the study of the sounds of speech, noting their physical and directly perceivable nature. Similarly, according to Yule (2010, p. 26), phonetics refers to examining the attributes of speech sounds. Speech is generated by the regulated flow of air through the throat, mouth, and nose (Ogden 2017, p. 2). In the linguistic phonetic study of language, researchers are interested in studying how the sounds of language are used to create meaning. For example, they explore distinctions between similar sequences of sounds, the formation and shaping of words, as well as the connection between speech elements and their inherently social context (Ogden 2017, p. 2). According to Iyabode (2011, p. 1), phonetics is a scientific depiction of the speech sounds present in a language. It describes their acoustic features, as well as how they are produced and perceived. The goal is to discover the physiological processes that are involved in creating sounds (Iyabode 211, p. 1).

Often, the sounds of spoken English cannot be directly aligned with letters of written English, and one solution for this issue has been to create a separate alphabet with specific symbols that represent speech sounds, which is called the phonetic alphabet (Yule 2010, p. 26). According to Carr (2012, p. 150), the connection between spelling and pronunciation in English is complex. There are 26 letters in the Roman alphabet, but more than 26 visual symbols that represent English phonemes and allophones. These visual symbols can also be referred to as graphemes. In addition to singular letters, combinations of letters can also be used to indicate a certain phoneme or allophone, such as “ph” representing the [f] phoneme, or “th” representing the [θ] phoneme (Carr 2012, p. 150).

The most common tool for phonetic transcription is the alphabet of the International Phonetic Association, commonly known as IPA (Ogden 2017, p. 21). The name IPA refers to both the International Phonetic Association, as well as the International Phonetic Alphabet. The alphabet is authorized by the association, and it is regularly modified based on recent practical experience and research. Because of the modifications, phonetics textbooks from different years have slightly varied versions of the alphabet (Ogden 2017, p. 21).



Unlike the alphabet where letters occur in a random order (A, B, C...), the IPA consists of tables that contain symbols that have been systematically organized into rows and columns, each labelled with terms that have agreed-upon meanings (Ogden 2017, p. 22). The IPA makes assumptions about the nature of speech, suggesting that “some aspects of speech are linguistically relevant, whilst others are not” (Ogden 2017, p. 22).

Another assumption of the IPA is that “speech can be represented partly as a sequence of discrete sounds or segments” (Ogden 2017, p. 23). This principle utilizes the IPA alphabetic; claiming not that speech consists of segments, but that it can be depicted as segments. In the context of speech, the term “segment” refers to a continuous fragment of the speech signal. The IPA recognizes two major types of segments: vowel and consonant (Ogden 2017, p. 23). On the IPA chart (see Figure 1), sounds are categorized based on where in the mouth they are made – for example, dental and alveolar sounds are produced with the front part of the tongue (Ogden 2017, p. 14).

FIGURE 1. The International Phonetic Alphabet. (The International Phonetic Association, revised in 2020).

THE INTERNATIONAL PHONETIC ALPHABET (revised to 2020)

CONSONANTS (PULMONIC) © 2020 IPA

	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	p b			t d		ʈ ɖ	c ɟ	k ɡ	q ɢ		ʔ
Nasal	m	ɱ		n		ɳ	ɲ	ŋ	ɴ		
Trill	ʙ			r					ʀ		
Tap or Flap		ⱱ		ɾ		ɽ					
Fricative	ɸ β	f v	θ ð	s z	ʃ ʒ	ʂ ʐ	ç ʝ	x ɣ	χ ʁ	ħ ʕ	h ɦ
Lateral fricative				ɬ ɮ							
Approximant		ʋ		ɹ		ɻ	j	ɰ			
Lateral approximant				l		ɭ	ʎ	ʟ			

Symbols to the right in a cell are voiced, to the left are voiceless. Shaded areas denote articulations judged impossible.

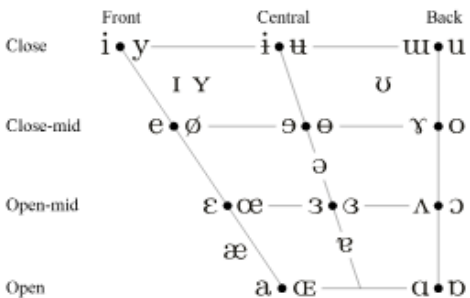
CONSONANTS (NON-PULMONIC)

Clicks			Voiced implosives			Ejectives		
◌	Bilabial	◌	◌	Bilabial	◌	◌	◌	◌
	Dental	◌	◌	Dental/alveolar	◌	◌	Dental/alveolar	◌
!	(Post)alveolar	◌	◌	Palatal	◌	◌	Dental/alveolar	◌
‡	Palatoalveolar	◌	◌	Velar	◌	◌	Velar	◌
	Alveolar lateral	◌	◌	Uvular	◌	◌	Alveolar fricative	◌

OTHER SYMBOLS

- ◌ Voiceless labial-velar fricative    ◌ ◌ Alveolo-palatal fricatives
- ◌ Voiced labial-velar approximant    ◌ Voiced alveolar lateral flap
- ◌ Voiced labial-palatal approximant    ◌ Simultaneous  $\int$  and  $\chi$
- ◌ Voiceless epiglottal fricative
- ◌ Voiced epiglottal fricative    Affricates and double articulations can be represented by two symbols joined by a tie bar if necessary.
- ◌ Epiglottal plosive

VOWELS



Where symbols appear in pairs, the one to the right represents a rounded vowel.

SUPRASEGMENTALS

- ˈ Primary stress    ˌ ˈ ˌ fəʊnəˈtɪʃən
- ˌ Secondary stress
- ː Long    eː
- ˑ Half-long    eˑ
- ◌ Extra-short    ɛ̋
- ◌ Minor (foot) group
- ◌ Major (intonation) group
- ◌ Syllable break    ˌ ɹi.ækt
- ◌ Linking (absence of a break)

TONES AND WORD ACCENTS

- | LEVEL             | CONTOUR               |
|-------------------|-----------------------|
| ě or ˥ Extra high | ě or ˩ Rising         |
| é or ˨ High       | ê or ˨ Falling        |
| ē or ˨ Mid        | ě or ˩ High rising    |
| è or ˩ Low        | ê or ˩ Low rising     |
| ë or ˩ Extra low  | ě or ˩ Rising-falling |
| ↓ Downstep        | ↗ Global rise         |
| ↑ Upstep          | ↘ Global fall         |

DIACRITICS

◌ Voiceless	◌ ◌	◌ Breathy voiced	◌ ◌	◌ Dental	◌ ◌
◌ Voiced	◌ ◌	◌ Creaky voiced	◌ ◌	◌ Apical	◌ ◌
◌ Aspirated	◌ ◌	◌ Linguolabial	◌ ◌	◌ Laminal	◌ ◌
◌ More rounded	◌	◌ Labialized	◌ ◌	◌ Nasalized	◌
◌ Less rounded	◌	◌ Palatalized	◌ ◌	◌ Nasal release	◌
◌ Advanced	◌	◌ Velarized	◌ ◌	◌ Lateral release	◌
◌ Retracted	◌	◌ Pharyngealized	◌ ◌	◌ No audible release	◌
◌ Centralized	◌	◌ Velarized or pharyngealized	◌		
◌ Mid-centralized	◌	◌ Raised	◌ (◌ = voiced alveolar fricative)		
◌ Syllabic	◌	◌ Lowered	◌ (◌ = voiced bilabial approximant)		
◌ Non-syllabic	◌	◌ Advanced Tongue Root	◌		
◌ Rhoticity	◌ ◌	◌ Retracted Tongue Root	◌		

Some diacritics may be placed above a symbol with a descender, e.g. ɲ̥̃

Typesetters: Doulos SIL (metatext); unilipa (symbols)

### 2.1.1 Vowels

Vowels are crucial in English phonetics – words can consist of only vowels, but not from consonants alone (Ogden 2017, p. 58). Vowels are produced without constriction in the vocal tract, making it difficult to determine how they are articulated (Ogden 2017, p. 23). They are syllabic sounds that are produced by allowing air to flow freely down the mid-line of the vocal tract, typically with convex tongue shape and without friction. Vowels are generally voiced and oral, although there are some exceptions (Ogden 2017, p. 58). According to Yule (2010, p. 33), in characterizing vowel sounds, one looks at how the tongue affects the shape through which the airflow passes. When considering places of articulation, the space inside the mouth is thought of as having a front and back, and a high and low area. For example, the pronunciation of “hit” would therefore be considered a high and front vowel, because the sound is produced with the front part of the tongue in a high position (Yule 2010, p. 34).

Carr (2012, p. 16) provides three different classifications of vowel articulation, the first being the high/low dimension, which demonstrates the height of the body of the tongue during vowel articulation. The second classification, the front/back dimension, indicates the positioning of the body of the tongue within the vowel space, with the three arbitrary points being front, central, and back. With these dimensions, it is possible to determine for any vowel how high it is articulated and whether it is a front, central or back vowel. The third classification of describing vowels is related to lip position. For any vowel, it is possible to identify whether it is articulated with rounded lips or not. Vowels that are pronounced with rounded lips are rounded vowels, while those not pronounced with rounded lips are unrounded vowels (Carr 2012, p. 17).

Klink (2000, p. 8) notes that while there are several methods of categorizing vowel sounds, in phonetic symbolism, the front/back distinction has been emphasized for a long time. It focuses on the position of the highest part of the tongue during pronunciation. Front vowel sounds are produced while the highest point of the tongue is in the front of the mouth, and contrastingly, back vowels are produced while the highest point of the tongue is in the back of the mouth (see Figure 2).

**FIGURE 2. The front-back vowel classification. (Klink 2000, p. 9).**

Table 1. Front-back vowel classification<sup>A</sup>

Vowel Sound <sup>B</sup>	Example	Classification
ē	bee	front
i	hit	front
ā	hate	front
e	test	front
a	ban	back
ü	food	back
ù	put	back
ō	home	back
ò	caught	back
ə	dusk	back
ä	cot	back

<sup>A</sup> Based on MacKay (1978), *Introducing Practical Phonetics*, Boston: Little, Brown and Company, Inc.

<sup>B</sup> According to *Webster's New International Dictionary*, 3<sup>rd</sup> Ed. (1961), Springfield: G. & C. Merriam.

Yule (2010, p. 34) proposes a chart for categorizing the most common vowel sounds (see Figure 3). Based on this classification, the vowels [i], [ɪ], [e], [ɛ] and [æ] are front vowels and the vowels [u], [ʊ], [o], [ɔ] and [ɑ] are back vowels. The vowels [ə], [ʌ] and [a] are central vowels. Yule (2010, p. 34) also proposes examples for most of the sounds, firstly for the front vowels [i] (e.g. “key”), [ɪ] (e.g. “bid”), [e] (e.g. “bed”), and [æ] (e.g. “bad”), then for the central vowels [ə] (e.g. “above”) and [ʌ] (e.g. “dove”), and lastly for the back vowels [u] (e.g. “boo”), [ʊ] (e.g. “put”), [ɔ] (e.g. “born”), and [ɑ] (e.g. “Bob”).

**FIGURE 3. Classification of vowels. (Yule 2010, p. 34).**

	Front	Front	Central	Back
High		i		u
		ɪ		ʊ
Mid		e	ə	o
		ɛ	ʌ	ɔ
Low		æ	a	ɑ

Figure 3.3

One of the most common sound symbolic concepts related to vowels is size symbolism. Research has consistently supported the idea of front vowels communicating smaller size and back vowels communicating larger size (Klink 2000, p. 8). Additionally, other meanings have also been associated with vowel sounds, particularly related to the front/back vowel distinction; light/dark, soft/hard, more/less mild, thin/thick, weak/strong, light/heavy, fast/slow, cold/warm, more/less pretty, bitter/sweet, more/less friendly (Klink 2000, p. 9-10). These distinctions are illustrated in Figure 4 below.

**FIGURE 4. Perception of brand name sounds based on whether they contain front/back vowel sounds. (Klink 2000, p. 10).**

H1(a–m): Products with brand names containing front vowel sounds, as opposed to back vowel sounds, are perceived as: (a) smaller, (b) lighter (relative to darker), (c) milder, (d) thinner, (e) softer, (f) faster, (g) colder, (h) more bitter, (i) more feminine, (j) friendlier, (k) weaker, (l) lighter (relative to heavier), and (m) prettier.

Spector and Maurer (2013, p. 239) propose that there may be naturally biased connections between the sound and shape of vowels. They suggest that some connections between sound and meaning are consistent and universally understood, also supporting the idea of non-arbitrary sound-shape mapping. For instance, in various languages, larger or darker items are commonly named by words that include the vowels [ɑ] and [ɔ]. Their research findings indicated that when asked to align words with different shapes, children as young as 2.5 years old consistently associated the nonsense words containing the rounded back vowel [o] with rounded shapes and the words containing the non-rounded front vowel [i] with angular shapes (Spector & Maurer 2013, p. 240).

### **2.1.2 Consonants**

Consonants are sounds created with restriction in the vocal tract. One is able to see, feel and hear where the constrictions are made, and what type of constrictions they are (Ogden 2017, p. 23).

According to Carr (2012, p. 1) speech sounds are produced through the alteration of airstream. The airstream can be altered at different points and in various ways. It can be modified, for example, by applying constant muscular pressure to close the vocal folds along their length. This pressure, with the build-up of air underneath, causes the folds to open and close rapidly, resulting in vocal fold vibration. Sounds that are created this way are considered voiced sounds, while sounds created without this vibration are considered voiceless. An example of this phenomenon is the difference between the sounds [z] and [s], the first of which is voiced and the latter voiceless. This aspect can be determined for any consonant (Carr 2012, p. 2).

In the table below, the different categories for sounds made in different places of articulation, according to Carr (2012, pp. 2-5) can be seen. Firstly, sounds articulated at the vocal folds can be referred to as glottal sounds, and secondly, sounds in which the airflow is altered by creating a constriction between the lower and upper lip are bilabial sounds. Thirdly, sounds in which there is a constriction between the lower lip and upper teeth are labio-dental sounds, and fourthly, sounds in which there is a constriction between the tip of the tongue and upper teeth are dental sounds. Fifthly, sounds in which there is a constriction between the tip of the tongue and the alveolar ridge are alveolar sounds, and sixthly, sounds in which there is a constriction between the blade of the tongue and the palato-alveolar region are palato-alveolar sounds. Seventhly, sounds in which there is a constriction between the front of the tongue and the hard palate are palatal sounds, and eighthly, sounds in which there is a constriction between the back of the tongue and the velum are considered velar sounds.

**TABLE 1. Categories of sounds made in different places of articulation. Adapted from Carr (2012, pp. 2-5).**

1. Sounds produced at the vocal folds	Glottal sounds
2. Sounds in which the airflow is modified by forming a constriction between the lower and upper lip	Bilabial sounds
3. Sounds in which there is a constriction between the lower lip and upper teeth	Labio-dental sounds
4. Sounds in which there is a constriction between the tip of the	Dental sounds

tongue and upper teeth	
5. Sounds in which there is a constriction between the blade or tip of the tongue and the alveolar ridge	Alveolar sounds
6. Sounds in which there is a constriction between the blade of the tongue and the palato-alveolar region	Palato-alveolar sounds
7. Sounds in which there is a constriction between the front of the tongue and the hard palate	Palatal sounds
8. Sounds in which there is a constriction between the back of the tongue and the velum	Velar sounds

In addition to these places of articulation and the classification between voiced and voiceless, to fully understand the range of consonant speech sounds, there is a third parameter that can be used – manner of articulation. To characterize how a sound is articulated, three distinct levels of constriction are used – complete closure, close approximation, and open approximation – indicating three different categories of consonant: stop, fricative, and approximant (Carr 2012, p. 6). It is important to understand how the sounds are articulated, for example, if one wants to make a distinction between sounds that based on the earlier information belong to the same category. For example, both [t] and [s] are considered voiceless alveolar sounds that only differ in their articulation, since [t] is considered a stop and [s] a fricative (Yule 2010, p. 31).

Consonant sounds formed with complete closure are called stops or plosives. During their production, both the lower and upper lips completely block the airflow from the lungs, and subsequently, that closure is released, leading to a sudden outflow of air (Carr 2012, p. 6). The sounds [p], [b], [t], [d], [k] and [g] are a result of this stopping effect on the air stream and are therefore considered stops (Yule 2010, p. 31).

In the fricative sound, there is also some constriction, but it is less extreme in comparison to the stop sound. In fricatives, the two articulators are brought close enough to allow a small outflow of air, creating a gap where the airflow is not completely blocked. Due to the articulators being so close together, friction is created when the air is released (Carr 2012, p. 6). The sounds [f], [v], [θ], [ð], [s], [z], [ʃ] and [ʒ] are considered fricatives (Yule 2010, p. 31).

The approximant has a mild level of constriction when the articulators are brought close together, but not to the extent of causing friction (Carr 2012, p. 7). Yule, however (2010, p. 33) introduces two categories of consonant sounds, liquids and glides, explaining that they are often grouped together in one category called the approximant. The sounds [l] and [r] are considered liquids, and the sounds [w] and [j] are considered glides. Affricates include the sounds [tʃ] and [dʒ], which are produced by a small stopping of air stream with an obstructed release that causes friction. Nasals include the sounds [m], [n] and [ŋ], which are produced by lowering the velum and allowing airflow to pass through the nose (Yule 2010, p. 32).

Klink (2000, p. 10) focuses on the fricatives and stops, proposing a classification similar to that of Yule (2010, p. 31). However, he uses the term “letters” when categorizing the consonants to fricatives or stops, and the term seems to refer to the sounds produced by the letters. Nevertheless, he also proposes that the consonants [p], [t], [b], [g], [d], and [k] are stops, and the consonants [f], [s], [v] and [z] are fricatives. According to Klink (2000, p. 10), consonant sounds also convey inherent meaning. There are two aspects that have been studied in particular: 1) stops and fricatives and 2) voiced and voiceless consonants. The sounds can be divided as follows: a) [b], [d], and [g] are voiced stops; b) [p], [t], and [k] are voiceless stops; c) [v] and [z] are voiceless fricatives; and d) [f] and [s] are voiceless fricatives (Klink 2000, p. 10).

Similar to vowels, consonants are also thought to convey symbolic messages linked to their frequencies, with higher frequencies suggesting more diminutive forms, and characteristics of softness, rapidity, sharpness, and lighter weight (Klink 2000, p. 10). A higher frequency is associated with fricatives compared to stops, voiceless stops compared to voiced stops, and voiceless fricatives compared to voiced fricatives. Below in Figure 5, the perceptions of brand name sounds are presented based on the distinction between fricative and stop consonant, voiceless stop and voiced stop consonant, and voiceless fricative and voiced fricative consonant, according to the categorization by Klink (2000, p. 10).



**FIGURE 5. Perception of brand name sounds based on the distinction between fricative/stop, voiceless stop/voiced stop, and voiceless fricative/voiced fricative (Klink 2000, p. 10).**

H2(a-f): Products with brand names containing fricatives (f, s, v, and z), as opposed to stops (p, t, b, d, g, and k), are perceived as: (a) smaller, (b) faster, (c) lighter (relative to heavier), (d) sharper, (e) softer, and (f) more feminine.

H3(a-f): Products with brand names containing voiceless stops (p, t, and k), as opposed to voiced stops (b, d, and g), are perceived as: (a) smaller, (b) faster, (c) lighter (relative to heavier), (d) sharper, (e) softer, and (f) more feminine.

H4(a-f): Products with brand names containing voiceless fricatives (f and s), as opposed to voiced fricatives (v and z), are perceived as: (a) smaller, (b) faster, (c) lighter (relative to heavier), (d) sharper, (e) softer, and (f) more feminine.

### **2.1.2 Phonetic symbolism**

Both the terms sound symbolism and phonetic symbolism have been used to describe the link between sound and meaning, for example, sound symbolism by Klink (2000, 2001), Kovács (2023) and Motoki et al. (2022), and phonetic symbolism by Lowrey and Shrum (2007) and Shrum et al. (2012). In this thesis, I use the term “phonetic symbolism” for consistency and clarity, and because the term seems more explicitly related to the study of phonetics.

According to Svantesson (2017, p. 2), until the past decades, the concept of phonetic symbolism has only been discussed in linguistics textbooks quite superficially, but more recently, there has been an increasing interest and growing literature on the subject. Klink (2000, p. 6) describes phonetic symbolism as the direct link between sound and meaning. Similarly, Lowrey and Shrum (2007, p. 406) define phonetic symbolism to refer to the nonarbitrary relation between sound and meaning. This idea implies that the sound of a word, beyond its definition, expresses meaning. These sounds originate from phonemes, which are the smallest units of sound (Lowrey & Shrum 2007, p. 406).

Klink (2000, p. 6) explains that the idea of linking sound to meaning has its origins in ancient Greek philosophy, suggested by Plato: “there is an inherent correctness in names, which is the same for all men, both Greek and barbarians”. Phonetic symbolism research has been

conducted across various languages worldwide. Phonetic symbolism has been suggested to cut across languages – for example, in a research paper by Ultan (1978), it was reported that in nearly 90% of the languages sampled, words indicating diminutive forms had similar vowel sounds (Klink 2000, p. 6).

In their study, Shinohara and Kawahara (2010) express why investigating phonetic symbolism is important, especially for cognitive linguistic theories. Firstly, phonetic symbolism can propose a counter argument against the idea of arbitrariness, referring to arbitrary relations between a signifiant (signifier) and a signifié (signified). Secondly, if there are phonetic bases for sound-symbolic connections between sound and meaning, phonetic symbolism could represent a case of iconicity, suggesting that phonetic factors form meanings. Thirdly, phonetic symbolism, having roots in phonetics, could exemplify embodiment, which is one of the central concepts of cognitive linguistics (Shinohara & Kawahara 2010, p. 397).

According to Lowrey and Shrum (2007, p. 406), the categorization of phonetic symbolism is challenging due to the diversity and broadness of previous research on the subject. However, for the background section of their study, they explain to have chosen to focus on vowels and consonants. While this specific research of theirs only focuses on vowel sounds, they point out that comparing vowel sounds with consonants can offer a broader understanding of phonetic symbolism effects. They also point out that overall, most of phonetic symbolism research has focused on vowels, which could be due to the fact that the number of vowels compared to consonants is smaller, making them easier to study and manage (Lowrey & Shrum 2007, p. 407).

Klink (2000, p. 7) presents different categories of phonetic symbolism, including corpeal, imitative, and synesthetic phonetic symbolism. In corpeal phonetic symbolism, different sounds are used to convey different emotional states of the speaker, for example, in the form of hiccupping or coughing. Imitative sound symbolism is related to onomatopoeic words and phrases that mimic environmental sounds, such as “bang” or “knock”. Synesthetic phonetic symbolism refers to using vowels and consonants to symbolize different properties of objects, such as their size or shape.

In conventional phonetic symbolism, specific phonemes and clusters are associated with specific meanings, e.g. the “gl” in “glitter”, “glisten”, and “glow” (Klink 2000, p. 7). Svantesson (2017, p. 6) discusses a similar idea but refers to it with the term phonaesteme, which is a unit larger than a phoneme but smaller than a word. They create a network of phonetic patterns. Another description of this phenomenon is “a system of initial, final root-forming morphemes”. Examples of this include “fl” referring to “moving light” in “flash”, “flare”, “flame”, “flicker”, “flimmer”, as well as “gl” indicating “unmoving light” in “glow”, “glare”, “gloat”, and “gloom” (Svantesson 2017, p. 6).

Yorkston and Menon (2004, p. 44) suggest that phonetic symbolism conveys information such as that high-front vowels (such as the “ee” in “flea” and the “i” at the end of “fly”) represent connotations with smaller size and less power than low-back vowels (such as the “ow” in “bout” and the “oo” in “boot”), which on the other hand are associated with greater power and size. These examples are presented in the article as letter combinations that I interpret to correspond with the following sounds: [i:] and “flea”, [aɪ] and “fly”, [aʊ] and “bout”, and [u:] and “boot”.

Extending on the research of the sound-size relationship, in their experiment, Shinohara and Kawahara (2010) addressed the question of whether there is a relationship between sounds and the image of size. For example, if English speakers are presented with two nonce words, “mil” and “mal”, and two tables (small and large), they usually associate “mal” with the large table, and “mil” with the small table, indicating that the sound [a] evokes a larger image than [i] for English speakers. Building upon earlier research, the results of their research show that size-related phonetic symbolism holds across languages beyond English (Shinohara & Kawahara 2010, p. 397). Svantesson (2017, p. 3) also discusses phonetic symbolism from the point of view of the sound-size relationship, referring to the idea that high tone, bright vowels (i.e., [ɛ]) as well as voiceless consonants would indicate meanings like “small”, “narrow”, “light”, “quick” and “bright”, and low tone, dark vowels ([u], [o], [ɔ]) and voiced consonants would indicate meanings like “large”, “broad”, “heavy”, “slow” and “dark”.

Research about phonetic symbolism often combines aspects from different fields, such as linguistics and marketing. In fact, the majority of the studies consulted in this thesis approach the topic from a business or marketing perspective, while utilizing theory of linguistics and phonetics at the same time. This interdisciplinarity can be a valuable aspect, especially when

information from both disciplines can be utilized in improving understanding about, for example, perceptions towards language and how marketers can more effectively influence their target audiences. Much of the research has demonstrated consistent findings, for example, about the sound-size relationship in relation to the front and back vowel (e.g. Shinohara & Kawahara 2010; Svantesson 2017).

However, in some articles about phonetic symbolism, different terms and notations are used for describing letters or sounds, and the distinction is not always clear. For example, in Klink's (2000) article, it seems that consonant sounds are referred to with the term "letter", for example: "the letters p, t, b, g, d, and k are considered stops" (Klink 2000, p. 10). However, the letter "g" is not always pronounced [g], since in some words the correct pronunciation would be [dʒ]. By using the term "sounds", and placing the sounds in brackets, this confusion could be avoided. Another example that can cause confusion is inconsistent spelling of the sounds made in different words, such as first describing the sound made in the word "fly" with the letter "i", and shortly after describing the sound made in the word "kiss" with the sound [i] (Yorkston & Menon 2004, p. 44). Perhaps some of these instances can be due to approaching the topic from a business or marketing rather than a strictly linguistic perspective.

## **2.2 Brand**

According to Maurya and Mishra (2012, p. 122), brand is a complex concept and though it has been discussed in the academic world, a commonly agreed-upon understanding of the concept has not been made. However, a framework suggested by Chernatony and Riley (1998, p. 418) has classified the definitions of brand to 12 themes, representing a categorization of the most crucial themes present in branding literature. These include 1) brand as a logo, 2) brand as a legal tool, 3) brand as a company, 4) brand as a shorthand, 5) brand as a risk reducer, 6) brand as an identity system, 7) brand as an image in consumers' minds, 8) brand as a value system, 9) brand as a personality, 10) brand as a relationship, 11) brand as increasing value, and 12) brand as a developing entity.

Depending on the discipline and perspective, ideas and definitions for what a brand is seem to vary significantly. Highlighting this issue, Manning (2010, p. 34) describes the term brand to be at the crossroads of various discourses involving brand owners, producers, consumers, and

diverse groups of professionals, each of whom holds an interest in the specific definition of brand and advancing the concept. According to Manning (2010, p. 34), recent ethnographic perspectives on the semiotics of the brand seem to align with a few major tendencies, which can be broadly categorized as consumption-centered, production-centered, and product-centered. The production-centered view focuses on how brands are produced, as well as how different professionals are involved in the creation of brands, such as brand managers and designers. The product-centered view changes the focus from consumers or producers to “worldly things” i.e. the product itself (Manning 2010, p. 35). Among these approaches, the consumption-centered approach takes the forefront, having gained prominence since the mid-1990s, coinciding with the growing emphasis on consumer agency and resistance. In this approach, brands are seen as privileged points of entry towards understanding different subjects, such as the mediatization of everyday life worlds in consumption, subcultural styles, and the contradictions of global capitalism (Manning 2010, p. 34).

As explained by Chernatony and Riley (1998, p. 419), the conventional definition of a brand, originating from the American Marketing Association (AMA) in 1960, primarily centers around the brand's logo and visual elements. This definition includes a name, term, sign, symbol, design, or a combination of them that is used to distinguish the products or services of a seller from those of competitors, and this definition is also referred to, for example, by Armstrong and Kotler (2023, p. 238). However, this definition has been criticized due to only focusing on the identification activities through the brand name and visual features. This definition also overlooks the role of managers in shaping strategic thinking and vision for the brand, as well as the fact that consumers do not merely passively receive brand marketing efforts, and certain connotations are created in consumers' minds (Chernatony & Riley 1998, p. 419).

Considering these factors, Armstrong and Kotler (2023, p. 251) also recognize the fact that brands are more than merely names and symbols and are in fact a key aspect affecting the company's relationship with consumers. A brand can be an important aspect of a product to consumers, and branding can add value to purchases. Consumers connect meaning to brands and develop relationships with them (Armstrong & Kotler 2023, p. 238). Brands symbolize consumers' perceptions about a product and its performance, representing everything that it means to consumers, suggesting that brands exist in the heads of consumers. In fact, the brand is often seen as the most lasting asset of a company, outlasting its products or facilities.

Therefore, brands are strong assets that should be managed and developed carefully (Armstrong & Kotler 2023, p. 250). Aperia and Georgson (2011, p. 4) refer to the definition of the AMA, adding that technically speaking, whenever a marketer creates a name, logo, or symbol for a new product, they have created a brand. Nevertheless, they also note that many regard a brand as more than that – including matters like having, for example, created awareness, reputation, and prominence, in the marketplace. Furthermore, they recognize that marketers have multiple options when creating a brand, including choosing various types of brand elements such as the name, logo, symbol, and packaging (Aperia & Georgson 2011, p. 4).

Commonly repeated marketing mantras such as “a product is made in a factory: a brand is bought by a consumer” highlight that the definition of brand has been defined over time in opposition to the product – rather than explaining what a brand is, it is emphasized more what it is not (Manning 2010, p. 36). Furthermore, the concept of a brand has been described as the intangible sum of the product’s characteristics, its name, price, history, reputation, and advertising, which leaves behind the passive materiality of the product, introducing a spiritual aspect to what was once simply considered a product (Manning 2010, p. 36).

Aperia and Georgson (2011, p. 5), on the other hand, consider the brand to be a product, but one that includes additional elements that differentiate it from other products intended to meet the same need. The elements might be related to more tangible aspects, such as product performance, or more symbolic aspects, such as what the brand represents (Aperia & Georgson 2011, p. 6). Hooley et al. (2020, p. 267) views the topic from a strategic perspective, claiming that successfully differentiating a tangible product from other similar products is achieved by establishing a distinctive brand with a positive image. Moreover, branding can be a strong competitive advantage, as competitors are prevented from using the same brand name or symbols as a registered brand (Hooley et al. 2020, p. 267).

### **2.2.1 Brand names**

According to Mishra & Datta (2011, p. 110), the foundation of brand awareness and brand communication lies in the brand name. A widely known, valued brand name can increase the purchase likelihood of customers and strengthen the loyalty of a company’s customer base. It

can also enhance recognition and create a favorable image for a new product (Mishra & Datta 2011, p. 110). Armstrong and Kotler (2023, p. 239) also claim that branding also helps buyers in different ways, for example, brand names can help consumers identify products that could be beneficial or useful for them.

Shrum et al. (2012, p. 275) state that choosing suitable brand names for products is crucial for marketers. Armstrong and Kotler (2023, p. 239) suggest that a brand name can even become the basis on which the whole story can be created about a product's unique features.

Robertson (1989, p. 61) indicates that developing a suitable brand name for a product might be the most significant decision regarding marketing. Strong brand names can increase memorability, create positive images, and boost product preference. Poor brand names, on the other hand, can have the opposite effect (Shrum et al. 2012, p. 275).

It is not always clear to make a distinction between what a good or poor brand name could be, as noted by Robertson (1989, p. 61). However, two primary criteria can be used to evaluate the strategic desirability of a brand name: firstly, its ability to be memorized, and secondly, how well it reinforces the intended product image. The characteristics related to the first dimension, memory, imply that the brand name should be simple, distinctive, and meaningful. It should also be a verbal or sound associate of the product category, evoke a mental image, and be an emotional word. The characteristics related to the second dimension, the support of the desired brand image, suggest that the brand name should include repetitive sounds, morphemes, and phonemes (Robertson 1989, p. 68).

Brand naming has become increasingly complicated with the globalization of markets: favorable brand names in one market, such as a Western country like the USA, may be disadvantageous in another, such as China. The language is based on a completely different writing system, but the "essence" of the brand name should stay similar – both the name and the sound should be considered (Shrum et al. 2012, 275). Armstrong and Kotler (2023, p. 525) demonstrate this trickiness: because of the complexity of the Chinese language, developing and localizing brand names has proven to be extremely difficult. In the Chinese market, the brand name can truly make or break a brand and brand name development often involves global branding consultants and thorough linguistic analysis and consumer testing. The aim is to sustain global consistency and have the Chinese name still sound like the original, while encapsulating the brand's advantages in symbolic ways. Despite the difficulties, sometimes

the translation of brand names happens naturally – for example, when Garnier announced its new “Clear” shampoo in China, the Chinese word for clear “Qing” was a suitable option, because it has extremely positive connotations and it is also used in other brand names. The final name was “Qing Yang”, which is associated with matters such as light, healthy, happy, and hair flowing in the air, which is the intention of the brand (Armstrong & Kotler 2023, p. 525).

The findings of the study conducted by Kohli and LaBahn (1997, p. 67) support the idea of brand names carrying significant importance – the results from their survey of 101 US companies imply that brand names are crucial to the success of new products. According to them, brands with strong images can have an impact on customers’ choices, and the brand name is the base of a brand’s image. They also highlight the challenges in developing a successful brand name, noting that it should not only appeal to customers but also contain other favorable attributes, such as positive connotations, relevance to the product, memorability, and the ability to stand out from competitors. Out of their 101 survey respondents who were product and brand managers, 60% thought that brand name can impact product sales. Additionally, they considered the selection of a suitable brand name to be substantially more important than the attractiveness of product packaging (Kohli & LaBahn 1997, p. 69).

### **2.2.2 English in brand names**

Globally, English is in the status of a hegemonic language that is used as the primary language of scientific publications and commercial relations. English words can frequently be seen in the commercial environment in places such as billboards, posters, and store names (Porto & Soyer 2018, p. 606). The discourse and current position of English as an international language originates from the rise of Anglicism – the policies promoting education in English – resulting in the extensive spread of English during colonialism, and later, its current situation around the world (Pennycook 2017, p. 74).

According to Porto and Soyer (2018, p. 606), the influence of English can be seen in building regional brands, such as in the Brazilian context. Their research suggested some implications of using the English language as a successful branding strategy. For instance, a Brazilian brand with an English name might be perceived more positively, making customers more



willing to pay a premium price, and conveying a sense of exclusivity (Porto & Soyer 2018, p. 621).

The findings of Sutisna and Rustandi (2023, p. 14) indicate similarly – when researching the perceptions of consumers, they found out that brand names incorporating foreign languages, especially English in developing countries, can affect how customers perceive them. Brand names that utilized foreign languages, such as English, were perceived as better, more qualified, more luxurious, and more modern than those using local languages. In a study conducted by De Run et al. (2012, p. 53) in Malaysia, a distinct preference for the English brand names was also reported, with connotations of quality and glamour associated with the perceived foreignness.

### **2.3 Research about phonetic symbolism in brand names**

In their research, Shrum et al. (2012) investigated the ways in which French-, Spanish and Chinese-speaking participants who are bilingual in English perceived brands based on their names. The brand names were fictional and created from artificial words to avoid semantic associations. The associations were tested in the form of a questionnaire. The participants were presented with pairs of brand names that differed only in their vowel sound: front vowel or back vowel. The same set of stimuli was given to the participants, with variations only in the language in which the questionnaires were presented. Chinese-speaking participants were also presented with brand names that were created by using alphabetic letters or logographic symbols. The languages in which the questionnaire instructions were given were predicted to influence that language's pronunciation and sound associations (Shrum et al. 2012, p. 276).

As a result, it was found that their findings aligned with those of previous research by Lowrey and Shrum (2007), suggesting that phonetic symbolism effects for brand name perceptions can apply across language barriers. This, therefore, indicates that marketers could include universal meaning in brand names when creating them (Shrum et al. 2012, p. 275). The results were also consistent with the original assumptions: for example, brand names with front vowel sounds were favored over those with back vowel sounds for the convertible and knife. Conversely, for the 4x4 vehicle and hammer, brands with back vowel sounds were chosen over those with front vowel sounds (Shrum et al. 2012, p. 277). The study also

examined whether these effects varied based on participants' language proficiency or whether the stimuli was presented in the first or second language of the participants, but neither factor had significant influence (Shrum et al. 2012, p. 278).

Klink (2000) has studied the ways in which the sound of a brand name can convey cues about product features through fictitious brand names that were created based upon the English system of phonemes. The findings of the study suggest that brand names that include front vowels are associated with attributes such as "smaller", "lighter", "milder", "thinner", "softer", "faster", "colder", "more bitter", "more feminine", "friendlier", "weaker", "lighter", and "prettier" (2000, p. 14). Products with brand names including fricatives were perceived as smaller, faster, lighter, and more feminine in comparison to stops. However, no notable differences were found between the sharpness or softness conveyed by stops or fricatives. Nevertheless, more participants associated brand names with fricatives more with softness than brand names with stops. Brand names with voiceless stops, in comparison to voiced stops, were associated more with smallness, fastness, lightness, sharpness, and femininity. Brand names with voiceless fricatives, in comparison to voiced fricatives, were perceived as faster, softer, and more feminine. There was no compelling difference suggested between brand names including voiceless or voiced stops regarding softness, or between brand names including voiced and voiceless fricatives regarding weight (Klink 2000, p. 15).

In a study conducted in 2001, Klink explored the connection between meaningful brand names and product liking. He empirically tested two different approaches to developing brand names. The first approach utilized semantics by embedding existing English words in the brand name, while the second approach utilized phonetic symbolism by embedding sounds of individual letters in the brand name, with both methods aiming to express meaning through the brand name. Product preference was tested through a survey involving 215 students from a university in the United States. Three brand names were suggested for three product concepts: a shampoo, pain reliever, and a laptop. The created names included a phonetic symbolism-imbed name, a combination-imbed name (phonetic symbolism combined with semantics), and a non-imbed name in which semantics or phonetic symbolism were not utilized to support a claim about product advantages. The results indicated that products with brand names using phonetic symbolism to endorse a suitable product benefit were favored over products with brand names that did not (Klink 2001, pp. 29-30).

Additionally, Athaide and Klink (2012) have investigated how sound symbolic connotations of brand names can be retained after translating them from one language to another. The languages studied were English and Hindi, and the intention of the research was to suggest a method for creating global brand names that communicate persistent meaning throughout different languages (Athaide & Klink 2012, p. 203). The study was conducted at an Indian university, and the participants were presented with fictitious Hindi brand names. The results of the study supported 21 of the 31 hypotheses regarding the relationship between brand and sound meaning in Hindi, while, for example, in Klink's study (2000), 25 of the 31 hypotheses were supported in English (Athaide & Klink 2012, p. 210).

Trninic (2022, p. 81) explored how people favor brand names based on sound symbolic effects, with a special emphasis on how gender affects brand name preference. Through a questionnaire, participants were presented sets of fictitious brand names and asked to select the brand name they deemed most suitable for each product. The product types included body wash and razor. In the second and third sets of brand names, there was a description added: "specifically designed for your gender". The participants showed a preference for the brand names with phonetic symbolism embedded, indicating that phonetic symbolism could be used to influence customer choices based on brand name preference (Trninic 2022, p. 84). Furthermore, the results indicate that both male and female participants more frequently selected the body wash name containing the vowel associated with their own gender compared to the vowel associated with the opposite gender. However, male participants were not as consistent in choosing the body wash name with the gender congruent vowel as female participants (Trninic 2022, p. 82).

A study conducted by Motoki et al. (2022) also focused on how participants associated meanings with sounds included in fictitious brand names. They utilized the three semantic differential dimensions of meanings – evaluation, potency, and activity. Based on their findings, vowels and consonants in brand names are connected to attributes related to evaluation and potency, however, not to activity (Motoki et al. 2022, p. 23). For example, brand names containing high frequency sounds such as front vowels, fricatives and voiceless consonants were more associated with notions related to higher evaluation (e.g. good, nice) and lower potency (e.g. small, weak). Brand names including lower frequency sounds such as back vowels, stops and voiced consonants, on the other hand, were more associated with

concepts related to lower evaluation (e.g. bad, awful) and higher potency (e.g. large, strong) (Motoki et al. 2022, p. 31).

According to Kovács et al (2023, p. 1), the existence and characteristics of phonetic symbolism have been subjects of empirical research for a long time. What is often overlooked, though, is that participants' inherent traits, such as age, gender, and language proficiency, alongside the studied phonetic features, can also impact perceptions. In their research, it was discovered that language knowledge affected how participants perceived the relationship between sound and size. There were also effects related to specific languages: for example, for the participants who speak foreign languages in Hungary, the effect of voicing was stronger, while for those speaking foreign languages in Germany, the middle-low contrast was weaker. In general, voicing affected size ratings considerably more in Hungary, while height had a greater impact in Germany (Kovács 2023, p. 11). Additionally, their findings suggest that as individuals learn new languages, they progressively detach from the sound system of their native language, and consequently become less influenced by the sound system of any specific language and more attuned to universal effects (Kovács et al. 2023, p. 10).

In her thesis, Subkowski (2019, p. 1) explores the ways in which linguistic characteristics of brand names influence perceptions towards the brand, while focusing on the number of languages people speak and how it impacts attitudes. The results align with previous phonetic symbolism research, and suggest, for example, that the high-front vowel is associated with smaller size and lightness than the low-back vowel, and that the fricative is more associated with softness and sharpness than the stop (Subkowski 2019, p. 14). There were not many differences in the ways in which the speakers of the language family groups considered in this thesis (English-only, Dravidian, Indo-European and Others) interpreted the linguistic characteristics of brand names. However, it was discovered that on average, respondents from at least one language group had a different interpretation than the other groups regarding whether fricatives sound sharper than stops (Subkowski 2019, p. 33).

In all the abovementioned articles discussed in this section, questionnaires were used for data collection. Klink (2000, p. 14) describes many reasons for presenting the brand names visually instead of orally. For example, visual presentation of brand name pairs requires less time, allowing more words to be tested. The way that the speaker pronounces the brand

names, for example, by unintentionally changing intonation or volume, could affect the ways the subjects perceive the brand names. It is also common for consumers to never hear a brand name pronounced out loud, and instead encounter it visually on product packages, for example (Klink 2000, p. 14). However, an aspect that is important to remember when discussing phonetics and the assumed pronunciation of specific words, is that in English, the letters of the alphabet cannot always be used in a consistent way to symbolize the sounds that are made, and instead, the phonetic alphabet is an accurate way of presenting them (Yule 2010, p. 26). Therefore, it is possible that in written form, the same letter is interpreted to be pronounced in different ways by different people, which could be avoided if the sound was presented through auditory means. Perhaps in the future, unintentional intonation or volume changes could be avoided by using a neutral AI voice model, for example, in order to make sure that participants understand the pronunciation of the word in the same way.

In these studies, brand name perceptions were tested either through asking the respondents to rate an aspect of the proposed brand name or by asking them to choose between two proposed brand names. By including, for example, open questions and allowing the respondents to freely describe their thoughts about the brand names, interesting new perspectives could be explored. This could also reveal more about how well the semantic associations were avoided by using fictitious brand names, which was the intention of, for example, Shrum et al. (2012). Open questions could also bring forward other possible aspects that have potentially affected the perceptions towards brand names.

## **3 THE PRESENT STUDY**

### **3.1 Aim and research question**

In this thesis, I study the ways in which Finnish-speaking university students at a Finnish university perceive English brand names based on their phonetic features. Since to my knowledge, research about perceptions of the phonetic features of English brand names has not been conducted on a group of Finnish native speaking participants before, this thesis has the potential to enrich the existing understanding of how universal phonetic symbolism truly is. Additionally, information about brand name perceptions can be useful for marketers, and especially research about phonetic symbolism in brand names can be beneficial for those involved in creating and marketing brands and products for global audiences. My research question is the following:

How do Finnish native speaking university students perceive English brand names based on their phonetic features?

To answer the research question, I developed an online questionnaire. My assumption was that the students would prefer the brand names that contain phonetic characteristics that are, according to previous research and phonetic symbolism theory, also commonly associated with the provided product attribute. I also expected the participants to indicate that brand name matters and affects their perception of products.

### **3.2 Data selection and collection**

I used a Webropol questionnaire for data collection for my thesis. The language used in the questionnaire was English. Before sending out the finalized questionnaire, I conducted a pilot at the end of January 2024. The final questionnaire was shared on 2.2.2024 on 29 email lists of student associations of a Finnish university, and it was closed on 16.2.2024.

In the first page of the questionnaire, I included general information about the structure and topics of the questionnaire, links to the privacy notice and research notification and specified

who is welcome to respond to the questionnaire. This part was also translated to Finnish. The questionnaire is available in the Appendix. I ensured that the respondents were part of the correct target group by including the following sentence in the beginning of the questionnaire: “You are welcome to respond to the survey if you are at least 18 years old, you study at the University of Jyväskylä and speak Finnish as your native language.”, which was also repeated in Finnish and included in the email I sent to potential respondents. In the questionnaire, the respondents were also asked to share their native language(s), and every respondent reported Finnish as their native language, or Finnish to be their native language along with one other native language.

I created fictitious brand names for the questionnaire to avoid any real-life connotations that an existing brand could have (advertising, coloring, experiences with the brand, etc.) and to focus solely on the phonetic connotations. The brand names were created based on the English system of phonemes. I introduced five different brand concepts and for each of them, one product attribute. For each brand concept and product attribute, I provided three sets of fictitious brand names, from which the participants were asked to choose the more suitable one, according to their own perception. Respondents were also asked to choose their overall favorite of all the brand names for the product type in question and provide a short explanation for their choice. In the last part of the questionnaire, I introduced one fictitious brand name and asked the respondents to rate its features in the form of Likert scale questions – for example, the size, bitterness, and temperature of the product, as well as an open question where they could openly describe the kind of product they think the name indicates.

The product categories were coffee, perfume, face cream, electric scooter, and laptop. These categories were selected, because I wanted to include products that are quite ordinary and used by many people in everyday life, and presumably relevant for the life of many university students and people of that age group. In selecting the product categories, I also took some influence from other product categories that have been used for similar research, for example, Klink (2000, p. 12) using products such as laptop computer, cologne and car, Lowrey and Shrum (2007, p. 410) using products such as vehicles and tools, and Trninic (2022 p. 81) using products such as body wash and razor. However, I modified and created the product categories to be suitable for the target group, as well as the present day.

The phonetic attributes I used for differentiating the brand names from each other were front vowel and back vowel, fricative and stop, voiceless fricative and voiced fricative, and voiceless stop and voiced stop. I created three sets of brand names for each product type, and each set consisted of two alternative brand names. The brand names were only differentiated by one specific phonetic feature. An example of this is *Jolna* and *Jelna*, where the only difference is that in *Jolna* there is the letter “o” which is assumed to be pronounced as the back vowel [o] and in *Jelna* there is the letter “e” which is assumed to be pronounced as the front vowel sound [e].

As stated by Dörnyei and Taguchi (2010, p. 1), questionnaires are one of the most common methods of data collection in social sciences. The popularity is because they are easy to construct, versatile, and enable people to gather a large amount of information quickly in a format that is readily processable. Additionally, as noted by Patten (2014, p. 1), questionnaires typically yield responses that can easily be categorized or scored, especially if they mainly consist of elements with choices to be checked. However, commonly questionnaires only provide a small glimpse into the topic at hand, rather than an in-depth picture of the topic under investigation (Patten 2014, p. 3), which is important to remember when processing questionnaire data.

According to Dörnyei and Taguchi, questionnaires can yield three different types of data about the respondents: factual, behavioral, and attitudinal (2010, p. 5). Factual questions are utilized for finding out who the respondents are, such as their demographic characteristics (e.g. age, race, gender), occupation, level of education and other factors that could be relevant in interpreting the findings of the questionnaire. Behavioral questions are used to learn about what the respondents have done in their past or are doing now, such as their lifestyle, habits, actions, and personal history.

Attitudinal questions are used to discover people’s thoughts, such as their attitudes, opinions, beliefs, interests, and values. These terms are similar to each other and are not always differentiated or defined clearly. Dörnyei and Taguchi (2010, pp. 5-6) , however, propose the following definitions for these terms; *Attitudes* refer to evaluative reactions to a certain target, are deeply ingrained in the human mind and therefore resistant to change, *opinions* are subjective similar to attitudes but more factually based and open to change, *beliefs* are more



supported by factual evidence than opinions and often address the veracity of a statement, *interests* are preferences toward specific activities, and finally, *values* relate to preferences about ways of life, and also describe the utility, importance, and worth attached to certain activities, concepts, or objects.

My questionnaire includes questions from all these categories, such as factual questions about the age, gender, major subject, and language background of the participants, a behavioral question about whether a brand name has affected their perception of a brand before, and attitudinal questions about the fictitious brand names, which comprise the majority of the questions in my questionnaire. Out of the terms defined by Dörnyei and Taguchi (2010), it seems that the descriptions of attitudes and opinions are the closest to what kind of attitudinal data I collected in my questionnaire.

### **3.3 Research ethics**

Since in my questionnaire I collected information from individuals, I am processing personal data. My principles regarding the data collection are based on the data privacy regulations of the University of Jyväskylä (University of Jyväskylä 2023).

Through the privacy notice and research notification linked to the survey, I informed the participants about the purpose of the study, and how their data will be stored. Before anything else, I asked for their consent to participate in the study. Respondents were informed that participation in the study is completely voluntary, and they can refuse to participate in the study, stop participating or cancel previously given consent at any time during the study.

I minimized the use of personal information in my study – I did not ask for the name, student ID, or email address of the participants, for example. For statistical comparisons, I asked the respondents to share some background details, such as their study field, age, gender, and languages they know. This is so that I will notice if there is, for example, a certain group of people overly represented in the respondents. I will not publish any information that could lead to the recognition of a respondent, and the questionnaire is completely anonymous. After completing the thesis, I will delete the data.

### **3.4 Methods of analysis**

In my thesis, I use an approach of mixed methods research, since I collected and analyzed both qualitative and quantitative data (Dörnyei & Taguchi 2010, p. 109). This allows me to have a fuller understanding of the subject. I use content analysis for analyzing the answers to the open-ended questions in the questionnaire. In the process, the pool of responses was reduced to a handful of the most essential issues in a reliable manner. This method includes two main stages. First, I took each person's response in turn and marked distinct features, statements, or key issues. Based on the highlighted concepts, I then formed wider categories to outline the responses in a way that enables comparisons with other responses (Dörnyei & Taguchi 2010, p. 99). Vaismoradi and Snelgrove (2019, p. 4) suggest that in qualitative content analysis, data materials are first read through several times to gain an understanding of the data, to examine the meaning behind the data, and trace back related ideas to discover hidden concerns in the data. Main ideas are highlighted in the data as codes.

According to Denscombe (2014, p. 284), through content analysis, one might discover hidden aspects of the text, even going beyond what the writer has originally intended. This way, it may be possible to find unintended messages. Content analysis typically is the most suitable form of analysis when one deals with aspects of communication that are more straightforward, direct and simple. In fact, when a text depends heavily on subtle meanings expressed by the writer, the less useful content analysis is in exposing the meaning of the text (Denscombe 2014, p. 285). In the case of my data, I would argue that both the questions of the questionnaire as well as the responses provided by the respondents are quite straightforward. The respondents are directly asked something, and they simply provide an answer to it based on their own opinions, perceptions, and attitudes. The seemingly simple, often short answers are then analyzed and categorized through the lens of content analysis, making it possible to potentially identify deeper and more subliminal messages.

For the analysis of quantitative data, I utilized a method of paired t-tests. This method was also utilized, for example, by Motoki et al. (2022, pp. 19-20), when they investigated the effect of frequency of sounds included in brand names on certain product characteristics. The t-test is suggested to be the most suitable statistical test for examining whether there is an important difference between two sets of data. The t-test utilizes the means of two sets of data

along with their standard deviations to provide a figure indicating the probability that differences between the sets of data are coincidental (Denscombe 2014, p. 261).

## 4 FINDINGS

### 4.1 Participants

131 participants responded to the questionnaire and 23 is the median age of respondents. 62% of respondents reported their gender to be female, 31% reported it to be male, and 7% reported it to be other. Students from various major and minor studies responded to the survey, with most students having major studies at the Faculty of Humanities and Social Sciences (67 students), and a significant proportion having major studies at the Faculty of Mathematics and Science (54 students). There were seven students who reported to study their major subject at the Faculty of Education and Psychology, two students who reported to study their major subject at the Faculty of Information Technology, and one student who reported to study their major subject at the Faculty of Sport and Health Sciences. In addition to their major subjects, many participants reported to study multiple minor subjects, also across faculties.

Participants were asked to rate their language skills in Finnish and English on a Likert scale, with the options from weakest to strongest skills: “poor”, “basic”, “good”, “advanced”, and “excellent”. 98.5% of participants reported to have excellent skills in their native language, Finnish, and 1.5% reported to have advanced skills. Quite interestingly, although all respondents are native speakers of Finnish, not all of them rated their Finnish skills as excellent. In English, 53% of participants reported having advanced skills, 33% having excellent skills, 12% having good skills, and 2% having basic skills. In the following table, the self-evaluated Finnish and English language proficiency of the participants is demonstrated:

**TABLE 2. The self-evaluated Finnish and English language proficiency of participants**

<b>Finnish skills of the participants</b>	<b>English skills of the participants</b>
<b>Excellent:</b> 98.5%	<b>Excellent:</b> 32.8%
<b>Advanced:</b> 1.5%	<b>Advanced:</b> 53.5%
	<b>Good:</b> 12.2%

	<b>Basic:</b> 1.5%
<b>Total:</b> 100%	<b>Total:</b> 100%

A variety of other languages with varying skill levels were reported by the participants, including Swedish, French, Spanish, German, Italian, Japanese, and Russian, among others. Swedish, being a compulsory subject in the Finnish school system, was the most common response out of these, with 87% of the respondents reporting to know Swedish.

## 4.2 The importance of brand names

When asked about the importance of brand names, most of the participants thought that brand names carry moderate or slight importance, with 53% reporting that they are slightly important and 30% reporting that they are moderately important. Only 3% of participants reported that name of a brand is very important, and nobody chose the option “extremely important”. 14% of participants reported that it is not at all important, which is interesting, considering that the articles I consulted indicated, for example, that a brand name is the foundation of a brand’s image and can strongly impact customers’ choices (Kohli & LaBahn 1997, p. 67), or that a highly valued brand name could increase a potential customers’ purchase likelihood (Mishra & Datta 2011, p. 110). However, it needs to be noted that the participants’ own evaluation is subjective, and it does not necessarily reveal how they would act or be affected in a real situation.

When asked about whether the participants recall a time that the name of a brand has in some way affected their attitude, perception of opinion of the brand, 56% of respondents responded with “no”, while 44% responded with “yes”. I find this division interesting; while most participants could not recall a time like this, there was still a considerable number of participants who could. I asked those who answered “yes” to describe further, and identified different categories of the features of brand names that have affected attitudes towards a brand that I will present next.

According to some respondents, insensitive, inappropriate, and offensive brand names can negatively impact the overall image of the brand, as well as odd, unpleasant sounding, or

confusing brand names. For example, in excerpts (1) and (2):

- (1) Positive effects with wordplay names, negative with names that are words with a bit negative connotations (such as curse words)
- (2) Sometimes a name sounds ugly, and that makes me think slightly negatively of the brand.

Respondents also pay attention to the ethical, environmental, and social responsibility behind the brand: if the brand name hints towards the brand being sustainable and responsible, it increases positive feelings towards the brand, for example:

- (3) I can't recall a specific brand right now, but whenever I see a brand name that is somehow ingenious or funny, it instantly makes me feel more positive about the brand. In addition, if a brand name creates a sustainable and eco-friendly image, it has a positive effect on my perception.

However, any unethical actions behind the company and brand can reflect negatively on reactions towards the brand name. Semantic connotations can affect brand name associations – if the brand name is close to a real word, the meaning of said word can have a positive or negative effect on the perception of the brand, like shown in the excerpt below:

- (4) Shop called "Rusta" sounds a bit negative in my mind. It associates with Finnish word 'ruskea' and so negative things, such as dust or even faeces.

Funny, ingenious, and innovative brand names were described to invoke positive feelings towards the brand, as well as memorable or well-known brand names – for example, having encountered the brand name in commercials. Amusement might arise from foreign brand names that have a silly meaning in, e.g., Finnish. Although the brand name might be completely suitable in the context of its original language, if the name means something funny or different in another language, it might be difficult to take it seriously, as demonstrated in this response:

- (5) Name of a French lemonade brand was "Lorina" which means 'gurgle' and I found that funny.

Many times, assumptions related to product quality were mentioned as an important aspect, with people typically preferring established, more expensive, and well-known brands over cheaper ones. It was also mentioned that the sound of a brand name alone could convey

information about how expensive or cheap the brand is, based on similarities to other established brand names.

Looking at the responses, there were quite many instances of people referring to the actions of a company that were not always necessarily connected to the brand name itself, for example:

- (6) I avoid brands that I know test on animals, for example.
- (7) I don't purchase clothing brands such as (names of three clothing companies), because they are fast fashion and very damaging to the planet and have numerous human rights violations related to the manufacturing of the clothes.

Considering these responses, I could have narrowed the question down to focus only on the features of the brand name more clearly. In a situation where one has heard negative reviews or comments about a brand, the central factor affecting perceptions towards the brand is not necessarily the brand name in itself. However, the negative experiences can cause the brand name to be seen in a more negative light, which could cause somebody to react negatively upon just hearing the brand name mentioned out loud. Nevertheless, when discussing brand names, it is valuable to understand the overall picture and various factors that affect the ways in which people perceive brand names. This could still be considered in future research on this topic, perhaps by keeping this question like it is but adding another one strictly about the sound of the brand name.

### **4.3 Brand name perceptions and preferences**

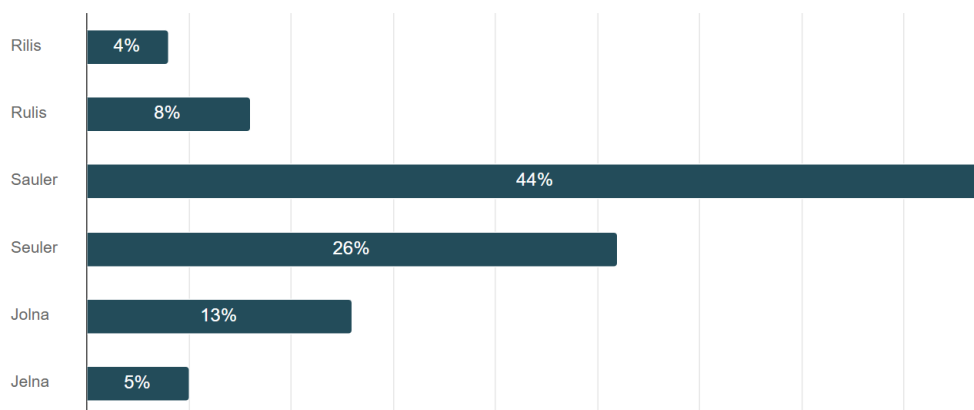
Next, I will present and discuss the fictitious brand names and respondents' perceptions and preferences towards them. I will present the findings according to the phonetic feature relevant for each of the product categories, and by introducing the product category and brand name options first. First, I will present the statistical findings and results of the paired t tests, after which I will discuss the open responses of respondents and their further associations with the names.

### 4.3.1 Front vowel and back vowel: coffee and perfume

I included two different product categories and attributes for testing perceptions of brand names including front and back vowels: the darkness of coffee, and the femininity of perfume.

The brand names created for the coffee brands were *Jolna/Jelna*, *Sauler/Seuler*, and *Rulis/Rilis*. The assumption was that respondents would choose that the brand names including letters that are assumed to produce back vowel sounds ([o], [ɔ], [u]) sound darker than those including letters that are assumed to produce front vowel sounds ([e], [i]). 69% of the respondents thought that *Jolna* sounds darker, 71% that *Sauler* sounds darker, and 75% that *Rulis* sounds darker compared to their front vowel pairs. This indicates an association of the back vowel aligning strongly with the given attribute (dark), aligning with the idea proposed by Klink discussed earlier in this thesis (2000, p. 10). The paired t tests conducted for these brand name pairs all suggest a P value of less than 0.0001, which indicates that the difference is considered extremely statistically significant. The figure below demonstrates the answers of the respondents when they were asked to choose which brand they would purchase based on its name if they were looking to buy coffee, *Sauler* was the most preferred brand name with 44% of respondents choosing it. *Seuler* was chosen by 26%, *Jolna* by 13%, *Rulis* by 8%, *Jelna* by 5% and *Rilis* by 4% of the respondents.

**FIGURE 6. Responses to the question: “If you were looking to buy coffee, which brand would you purchase based on its name?”**





To further delve into the perceptions of the respondents, I will present their responses to the question “Why would you choose this brand name; what does the name make you think?” To demonstrate the answers in a clear manner, I have formed categories of the most frequent and essential themes mentioned. The themes include associations with other countries or languages, associations with existing brand names, brand names that sound like they could be actual brand names, and specific adjectives or concepts associated with the brand name.

One of the most mentioned themes was associations of the coffee brand name with different countries or languages, such as French or German. For example, a respondent explained that they associate the name *Seuler* with the French language, which makes them think that the coffee would be of high quality. There were plenty of similar answers, also indicating that the brand name preferred sounded Swiss or German, evoking positive feelings towards the brand because coffee from Switzerland or Germany was associated with high quality. The brand names that were most associated with these languages mentioned were *Sauler* and *Seuler*, for example, in this excerpt:

- (8) It reminds me of German language because of the ‘eu’ sound in the middle of the word. Germany reminds me of coffeeshops and cafes, so that’s why I associated this name with coffee.

These associations could have also affected the ways in which people imagined the pronunciation of the brand name. For example, if they have studied a specific language of which the brand name reminds them, they might subconsciously pronounce it according to the rules of that language. The pronunciation and sound of the brand name were also mentioned as important factors. Many respondents preferred the brand name that they thought sounded the best, most natural or most suitable. They also mentioned the ease of pronunciation as a factor that affected their choice – the easier to pronounce, the better, as explained in this response:

- (9) I pronounce it ‘soilö’. It feels french and elegant, and I think the elegance is due to the ease of pronunciation: it’s just one flowing gesture in mouth. Other ones are more complicated.

The next category is brand names that, according to the perceptions of the respondents, either resemble existing brand names, or otherwise sound the most convincing to be actual coffee brand names. Some respondents thought that *Sauler* sounds similar to the existing coffee

brands “Paulig” or “Saludo”. There was also an interesting connection that people made with the name *Sauler* and the former president of Finland, Sauli Niinistö. Furthermore, the brand “Paulig” has a coffee brand called “Presidentti”, and it seems like this was such a strong mental connection for people that it caused many of them to prefer the name *Sauler* over the others. For example:

- (10) Maybe reminds me of Paulig Presidentti > Sauli.
- (11) *Sauler* makes me think of Sauli Niinistö, then president, and Presidentti is an established coffee brand.
- (12) I think it sounds like the name Saul, I just could not stop thinking about a meme coffee brand with Sauli Niinistö’s face.

Coincidentally, the Finnish presidential election of 2024 overlapped with the time that the questionnaire was open for answers, with Sauli Niinistö stepping down after serving as the president of Finland for 12 years. The timing could have made this connotation even stronger in people’s minds.

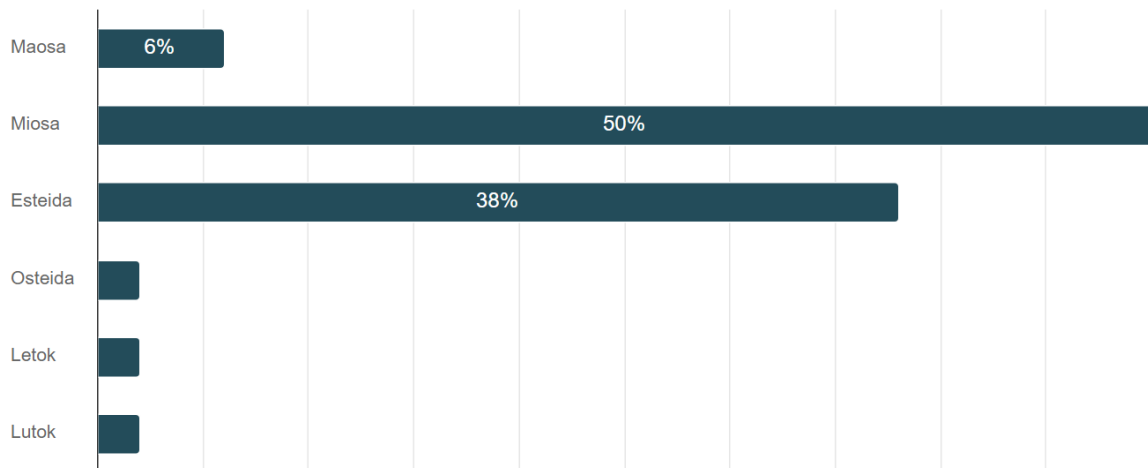
The next category is adjectives and concepts associated with the brand name. Examples of this include “sophisticated”, “fancy”, “warm” (*Sauler*), “dark” (*Sauler*, *Jolna*, *Rulis*), “soft”, “smooth” (*Jolna*), “light” (*Seuler*), “rich flavor” (*Sauler*, *Rulis*), and “exotic” (*Jelna*, *Jolna*). These could also be interpreted as the features that the respondents search for from the coffee itself. For example, some respondents explained that they chose a name containing a front vowel, since they do not like dark coffee, and thought that the brand name containing a front vowel would suit their preference better.

The brand names created for the perfume brands were *Miosa/Maosa*, *Letok/Lutok*, and *Esteida/Osteida*. The assumption was that respondents would choose that the brand names including letters that are assumed to produce front vowel sounds ([i], [e]) sound more feminine than those including letters that are assumed to produce back vowel sounds ([ɑ], [u], [o]). 97% of the respondents thought that *Miosa* sounds more feminine, 67% that *Letok* sounds more feminine, and 97% that *Esteida* sounds more feminine compared to their back vowel pairs. These results indicate that there was a strong association between front vowel sounds and the concept of femininity, which also confirms the proposition of Klink which I referred to earlier in this thesis (2000, p. 10). The paired t tests conducted for these brand

names all suggest a P value of less than 0.0001, which indicates that the difference is considered extremely statistically significant.

As one can see from the figure below, when asked to choose which brand the respondents would purchase based on its name if they were looking to buy perfume, *Miosa* was the most preferred brand name with 50% of respondents choosing it, and *Esteida* a close second with 38% of respondents choosing it. *Maosa* was chosen by 6% of the respondents, *Osteida* and *Letok* by 2.5% each, and *Lutok* by 1.5% of the respondents.

**FIGURE 7. Responses to the question: “If you were looking to buy perfume, which brand would you purchase based on its name?”**



I will discuss the responses to the open questions by presenting them based on the most prominent themes and categories that I identified through close examination. These themes include associations with female names, associations with other brands, associations with words, associations with different languages, associations related to product pricing, and specific adjectives or concepts associated with the brand name.

The first theme, which was mentioned many times by the respondents, is that they preferred a brand name that they also associated with a feminine name or name of a woman, such as *Miosa* with *Mimosa* and *Mia*, and *Esteida* with *Estelle*. The name *Miosa* also elicited associations with the alcoholic drink “*Mimosa*”. This association made the respondents think that the perfume, like the drink, would also be fruity, sweet, and fresh. Those who chose the

name they perceived to be feminine also often explained that they were more drawn to feminine scents in general. Some respondents explained to have chosen the name that they perceived to be most appropriate and suitable for their gender and gender expression. For example:

- (13) I think *Maosa* sounds least feminine and since I am a man I would prefer a more masculine perfume.
- (14) It [*Miosa*] makes me feel the most feminine.

Word associations and associations with other brands also impacted the perceptions of the participants. For example, it was mentioned by many respondents that *Esteida* sounds similar to the cosmetics brands “Escada” or “Estee Lauder”, which was a factor that caused them to choose that option over the others. The “est” at the beginning of the brand name *Esteida* also caused some people to connect it with the word “aesthetic” which was considered a positive association in the context of beauty products. Associations with other languages were also mentioned, including Spanish, French and Japanese, for example. The association with the French language was mentioned to be positive, since French cosmetics were perceived to be of good quality by the respondents.

There were many assumptions related to the price of the perfume brand names. For example, the brand name *Miosa* was more associated with being cheap and affordable, and a “supermarket perfume”, whereas *Esteida* was more associated with being expensive, and a perfume that is a “privilege” to own. For example:

- (15) Esteida feels “aesthetic” also it feels like “old money” type of name. Some rich woman who don't just own luxury. She is luxury. A perfume from a brand name like esteida feels something I would feel privileged to own.
- (16) Tulee taas mielikuva ehkä hieman parempi laatuista brändistä, miosa olisi toinen vaihtoehto, mutta vaikuttaa ehkä enemmän marketti tuoksulta. / It brings to mind perhaps a better quality brand, miosa would be the other option but it seems more like a supermarket perfume.

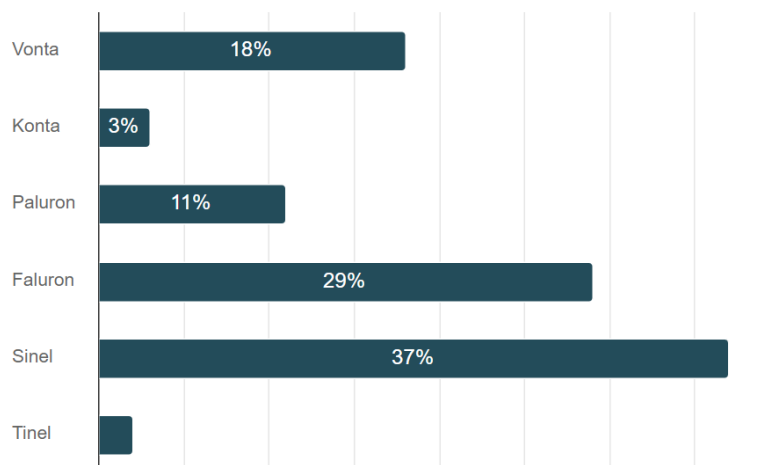
There were various adjectives and concepts mentioned by the respondents in association with the preferred brand name, including “soft”, “feminine”, “beautiful”, “fresh” (*Miosa*, *Esteida*), “fruity”, “cute” (*Miosa*), “elegant”, “luxurious” (*Esteida*), “neutral”, “subtle” “not too feminine or masculine” (*Maosa*, *Letok*), and “masculine” (*Maosa*, *Lutok*).

### 4.3.2 Fricative and stop: face cream

There was one product category and attribute for testing perceptions of brand names including fricatives and stops, which was the softness of face cream. The brand names created for the face cream were *Vonta/Konta*, *Faluron/Paluron*, and *Sinel/Tinel*. The assumption was that the respondents would choose that the brand names including letters that are assumed to produce fricative sounds ([v], [f], [s]) sound softer than those including letters that are assumed to produce stop sounds ([k], [p], [t]). 95% of the respondents thought that *Vonta* sounds softer, 73% that *Faluron* sounds softer, and 92% that *Sinel* sounds softer in comparison to their stop pairs. This indicates that the brand names beginning with the fricative were more associated with softness than those beginning with stops by the respondents, which also corresponds with Klink's claim which was referenced earlier in this thesis (2000, p. 10). The paired t tests conducted for these brand names all suggest a P value of less than 0.0001, which indicates that the difference is considered extremely statistically significant.

As one can see from the figure below, when asked to choose which brand the respondents would purchase based on its name if they were looking to buy face cream, *Sinel* was the most popular choice with 38% of the respondents, followed by *Faluron* with 29% of the respondents. *Vonta* was chosen by 18% of the respondents, *Paluron* by 11%, *Konta* by 3% and *Tinel* by 2%.

**FIGURE 8. Responses to the question: "If you were looking to buy a face cream, which brand would you purchase based on its name?"**



Next, I will discuss the open responses in which respondents freely described their associations with the brand name they chose. The themes I discovered include ease of pronunciation, associations with words, associations with existing brands or products, associations with different languages, assumptions related to quality and pricing, assumptions related to product features, and specific adjectives or concepts associated with the brand name.

A commonly mentioned aspect was the natural and easy pronunciation of the brand name. Respondents often explained to have chosen *Sinel* because its short length makes it easy to remember, and because it is simple and easy to say. The pronunciation of *Sinel* was also described as soft, smooth, and to feel comfortable to include in a sentence in both Finnish and English, as described below:

- (17) *Sinel* has the same vibe as nivea. Easy to pronounce and I could say "hey have you tried the newest face cream from sinel" (ootko testannu sinellin uutta rasvaa in finnish tms). It suits to my mouth both in english & finnish.

Respondents described various associations to words, concepts or brands that seemed related to the brand name, such as the Finnish word for blue “sininen”, the Finnish company selling cleaning products “Sini”, as well as the Finnish company selling crafts supplies “Sinelli”. Some respondents mentioned that they did not choose the name *Sinel* because it reminded them of the liquid fuel product “Sinol”.

Plenty of word associations were mentioned, most of which were related to words in Finnish and English. For example, *Faluron* was associated with “face”, “feather”, “foam”, and “hyaluron” but also “failure”, *Konta* with the Finnish word for face “kasvot”, and *Paluron* with “pillow”, and Finnish words meaning ball “pallo/pallura”. *Sinel* was also associated with words like “soft” or “silk”.

Again, there were different language associations the respondents had with the brand names. For example, *Sinel*, *Vonta* and *Konta* were mentioned to remind respondents of the Finnish language. Sounding Finnish was perceived as positive – some respondents thought that a local product would be more ecologically friendly than an imported product. For example:

- (18) It sounded Finnish, so I'd imagine it could be domestically produced and thus perhaps a more ecological choice than an imported product.

Associations with the Finnish language also evoked associations with Finnish nature which were perceived as positive in the context of face creams. Another language that was mentioned by many respondents was French, and the brand names that were mostly associated with French were *Faluron* and *Paluron*. Associations with the French language were also positive, invoking thoughts about luxurious and high-quality French beauty products.

Interestingly, there were quite many assumptions related to the quality and price related to these brand names. For example, the longer names *Faluron* and *Paluron* were more frequently associated with high quality, higher price, and professionalism. An interesting association was that these products would be more likely to be sold in pharmacies, be dermatologically tested, and be more “medical”. For some respondents, this was a factor that caused them to trust these brand names more, make the product seem more dependable and gentler, therefore suitable also for sensitive skin. However, some respondents viewed this image as too medical, industrial, and distant, and preferred the shorter names such as *Sinel*, *Vonta* or *Konta* because they seemed more organic, less artificial, and more domestic. In the excerpt below, this contrast is demonstrated:

- (19) *Sinel* sounds gentle and most professional. *Vonta* and *Konta* sound home-made or cheap and *Paluron* and *Faluron* a bit too industrial and mass-produced though that might be a good quality in terms of quality-surveillance.

Examples of adjectives and associations related to the most preferred brand names included “soft”, “smooth”, “silky” (*Sinel*, *Vonta*, *Faluron*), “clean” (*Sinel*) “nature”, “natural” (*Faluron*, *Vonta*, *Konta*), “professional” (*Faluron*, *Paluron*, *Sinel*), “medical” (*Faluron*, *Paluron*), “fresh” (*Sinel*, *Vonta*, *Faluron*), and “gentle” (*Faluron*, *Sinel*). There were also references to natural elements and themes, such as “clouds” (*Faluron*), “water” (*Faluron*, *Vonta*), “forest” (*Konta*) and Finnish nature in general (*Konta*, *Vonta*).

### 4.3.3 Voiceless fricative and voiced fricative: electric scooter

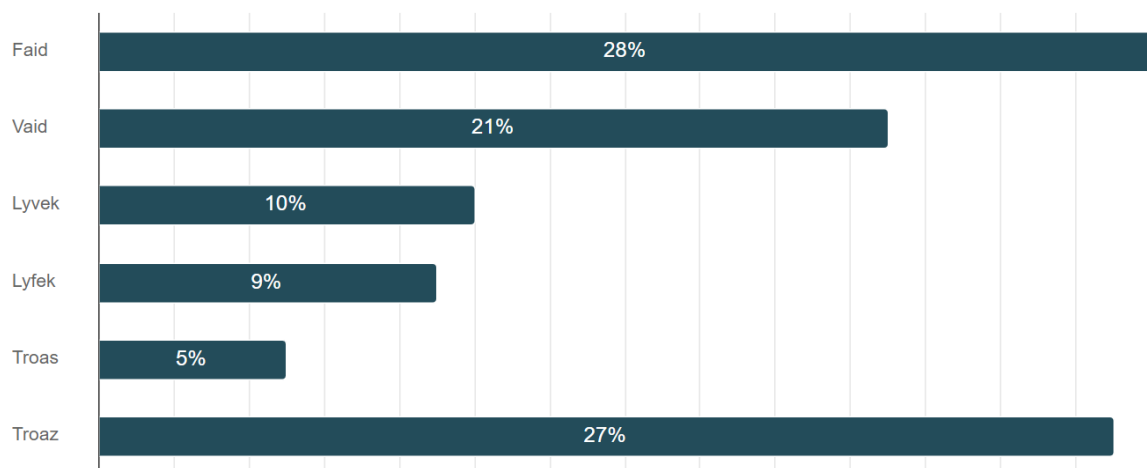
There was one product category and attribute for testing perceptions of brand names including voiceless fricatives and voiced fricatives, which was the fastness of electric

scooters. The brand names created for the electric scooter were *Faid/Vaid*, *Lyfek/Lyvek*, and *Troas/Troaz*. The assumption was that the respondents would choose that the brand names including letters that are assumed to produce voiceless fricative sounds ([f], [s]) sound faster than those including letters that are assumed to produce voiced fricative sounds ([v], [z]). 61% of the respondents thought that *Faid* sounds faster and 53% that *Lyfek* sounds faster in comparison to their voiced fricative pairs. However, 82% thought that *Troaz* sounded faster than its voiceless fricative pair.

The P value for the brand name pair *Faid/Vaid* equals 0.0107, which suggests a statistical significance. The P value for the brand name pair *Lyfek/Lyvek* equals 0.5428, which indicates that the result is not considered statistically significant. The P value for the brand name pair *Troaz/Troas* is less than 0.0001, which is considered extremely statistically significant. However, the result was the opposite of what was assumed, since according to the assumption, the voiceless fricative [s] would have been more associated with fastness than the voiced fricative [z].

As the figure below demonstrates, when asked to choose which electric scooter brand the respondents would purchase or rent based on its name, *Faid* and *Troaz* were chosen the exact same number of times, with 27.5% of respondents choosing each. *Vaid* was chosen by 21% of the respondents, *Lyvek* by 10%, *Lyfek* by 9%, and *Troas* by 5%.

**FIGURE 9. Responses to the question: “If you were looking for an electric scooter to buy/rent, which brand would you choose based on its name?”**





Next, I will discuss the open responses in which the respondents freely described their associations with the brand name they preferred the most. The identified themes include natural and easy pronunciation, short length of the brand name, similarities with existing brand names, associations with words, assumptions related to specific letters, associations with different countries and languages, and specific adjectives or concepts associated with the brand name.

Respondents often mentioned to have chosen the brand name that seems the most simple, easy to say and natural to include in an everyday discussion, for example: *“I’ll just take a Faid and be there in 5 minutes”*. Shortness was a factor that respondents viewed positively when evaluating the brand names. For example, many respondents associated shorter brand names with speed. Some respondents mentioned that they could be affected by the brand names of existing electric scooters, such as “Tier” or “Ryde”, which are also four-letter words like *Faid* and *Vaid*.

There were different words and concepts associated with the brand names. For example, *Faid* was positively associated with “fast” and “fading away”, indicating quickness. *Vaid* was associated with “velocity”, “valid”, and “volt”, but also negatively with the word “wait”. The letter “z” was explained to be a rare and exotic letter in Finland, therefore indicating foreignness and modernity. By an almost overwhelming number of times, the letter “z” was perceived to be a “fast” letter by the respondents. The excerpts below demonstrate these associations, and especially the second excerpt refers to the way that the letter looks instead of the sound:

(20) “z” is fast letter.

(21) Z is a fun letter, it looks fast.

The letters “f” and “z” were mentioned to be more foreign in the Finnish language, which was perceived as “exotic” or “exciting” as mentioned in these responses:

(22) Troaz. That name has "tr" and "z" which are hard to pronounce for me as a Finnish speaker. Z sound is also quite rare in Finnish language. I like the Troaz word's exoticness.

(23) F is not common in finnish language, so it sound more exciting.

Interestingly, this time the language and country associations of the respondents were related to Nordic countries. Especially *Lyfek*, *Lyvek* and *Troas* were mentioned to sound like they could be from this region, more specifically Danish, Norwegian, or Icelandic. These associations were perceived as positive, because the Nordic countries were associated with good quality, reliability, and an overall good image by many respondents.

Adjectives and concepts respondents associated with the brand name they preferred the most included “fast” (*Faid*, *Vaid*, *Troaz*), “powerful”, “cool”, “urban”, “young”, “fun” (*Troaz*), “modern”, “energetic”, “exciting” (*Faid*, *Troaz*), “safe”, “trustworthy”, and “reliable” (*Troas*, *Lyvek*, *Lyfek*).

#### **4.3.4 Voiceless stop and voiced stop: laptop**

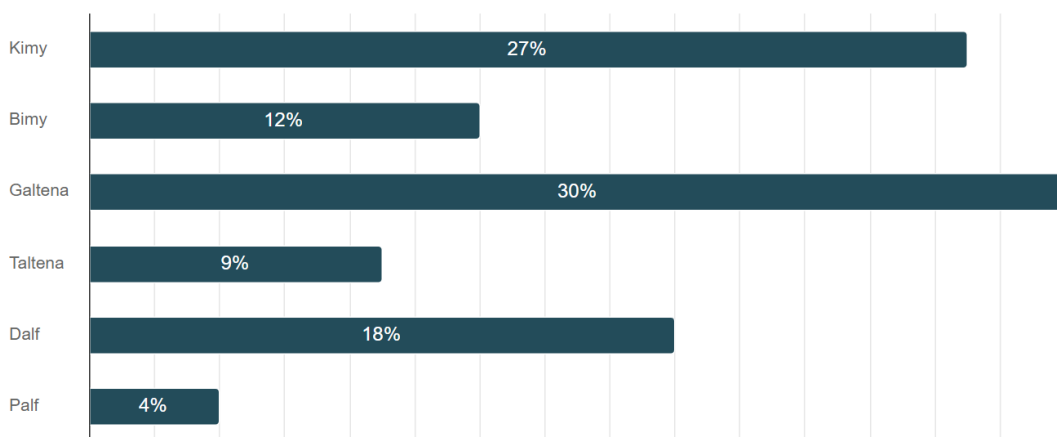
There was one product category and attribute for testing perceptions of brand names including voiceless stops and voiced stops, which was the lightness/weight of laptops. The brand names created for laptops were *Palf/Dalf*, *Taltena/Galtena*, and *Kimy/Bimy*. The assumption was that the respondents would choose that the brand names including letters that are assumed to produce voiceless stop sounds ([p], [t], [k]) sound lighter than those including letters that are assumed to produce voiced stop sounds ([d], [g], [b]). The letter “g” can in some words also be pronounced as the voiced affricate [dʒ]. In this case, I assumed the pronunciation would be similar to other English words beginning with “gal”, such as “gallup”, “gallery”, and “galaxy”, and that it would also be pronounced as the voiced stop [g]. However, it cannot be known for sure that all respondents have interpreted the pronunciation as such. 50.4% of the respondents thought that *Taltena* sounds lighter, and 76% that *Kimy* sounds lighter than their voiced stop pairs. However, 66% of the respondents thought that *Dalf* sounds lighter than its voiceless stop pair.

The P value of less than 0.0001 for the brand name pair *Palf/Dalf* indicates an extreme statistical significance, however, the result contradicts the original assumption that the voiceless stop [p] would be more associated with lighter weight than the voiced stop [d]. The P value for the brand name pair *Taltena/Galtena* is 0.9308, which indicates that the difference is not considered statistically significant. The P value for the brand name pair *Kimy/Bimy* is less than 0.0001, which indicates an extreme statistical significance. The result for that brand name pair also aligns with the initial assumption. These responses are interesting – for the last

brand name pair, there seems to be a clear association about the brand name containing a voiceless stop sounding lighter. However, for the first brand name pair, the more preferred brand name contradicts the initial assumption, with most of the respondents choosing the name that includes a voiced stop. For the second word pair, the responses are almost equal.

The figure below demonstrates how respondents answered when they were asked to choose which laptop brand they would purchase based on its name. *Galtena* was chosen by 30% of the respondents, with *Kimy* coming second with 27% of the respondents choosing it. *Dalf* was chosen by 18%, *Bimy* by 12%, *Taltena* by 9%, and *Palf* by 4% of the respondents.

**FIGURE 10. Responses to the question: “If you were looking to buy a laptop, which brand would you purchase based on its name?”**



Next, I will discuss the open responses of the respondents. The themes identified include assumptions about the correlation between the length and quality of a product name, associations with words, associations with different countries and languages, associations with existing brand or products, assumptions related to specific letters, and specific adjectives or concepts associated with the brand name.

The length of the brand name seemed to be a factor that influenced people’s thoughts about the names. For example, there were assumptions that the longer names (*Galtena*, *Taltena*) would indicate expensiveness, better durability, professionalism, and reliability. The shorter names, on the other hand, made people think that the laptop would be light, easy to carry around, handy, small, and cute. The respondents clearly had different preferences and

priorities related to the features of a good laptop, which has influenced their responses. This contrast can be seen, for example, in these responses:

- (24) Bimy sounds to me like something small and cute. I want my laptop to be practical which is why the name sounds perfect for branding. Also, the name sounds like a nickname so it makes me feel like I'd be carrying around a "friend."
- (25) Longer name [Galtena] makes it sound like the people behind the product have put more thought into it than the rest. Almost like a powerful warrior's name, which is cool. Bimy made me laugh though.
- (26) This one was difficult, I guess three syllables sounds more advanced or technological? G feels like a good sound for a technology company name.

Again, there were different word, brand, and linguistic associations that the respondents had with the brand names. For example, the brand name *Galtena* reminded respondents of the words "giga", "granite", and "antenna", creating associations with technology and durability of the material. The sound [g] and letter "g" were also mentioned to seem associated with technology in general, and according to some respondents, *Galtena* sounded like it could be the name of a technology company. The brand name *Dalf* was associated with the existing brand "Dell" by many respondents. The brand name *Taltena* reminded some respondents of the word "technology", and *Palf* of the word "pal", which created both positive and negative thoughts about the laptop being an "electronic pal or friend". For example:

- (27) It's your "pal", your friend, makes you feel lighter to have around.' Something like that comes to mind.
- (28) Palf-nimestä syntyy lisäksi assosiaatio englannin sanaan "pal", enkä haluaisi nimittää tietokonettani myöskään kaverikseni. / The name Palf also creates an association with the English word "pal", and I would not want to refer to a laptop as my friend, either.

Interestingly, sounds such as [g], [d] and [b] were perceived by many respondents to indicate foreignness of the brand, whereas the brand names including the sounds [t], [k], or [p], such as *Kimy* and *Taltena*, were mentioned to sound more like a Finnish brand. It was explained that for Finnish speakers, the latter ones would be easier and more natural to pronounce. *Bimy* and *Kimy*, especially *Kimy*, were also associated with Japan and China. These connotations seemed mostly positive since Japan and China were considered to be technologically advanced countries by the respondents.

Some of the different adjectives and concepts given by the respondents regarding their most preferred brand name included “advanced technology”, “effective” (*Kimy, Galtena, Taltena*), “professional” (*Taltena, Galtena*), “reliable”, “powerful” (*Galtena*), “durable” (*Dalf*), “modern”, “trendy” (*Kimy*), “light” (*Kimy, Palf, Taltena*), “cute”, and “small” (*Bimy, Kimy*).

#### 4.4 Overview of brand name perceptions

In the table below, the findings are presented in a concise way according to the statistical significances suggested by the P values.

**TABLE 3. Brand name perceptions categorized based on whether hypothesis is supported.**

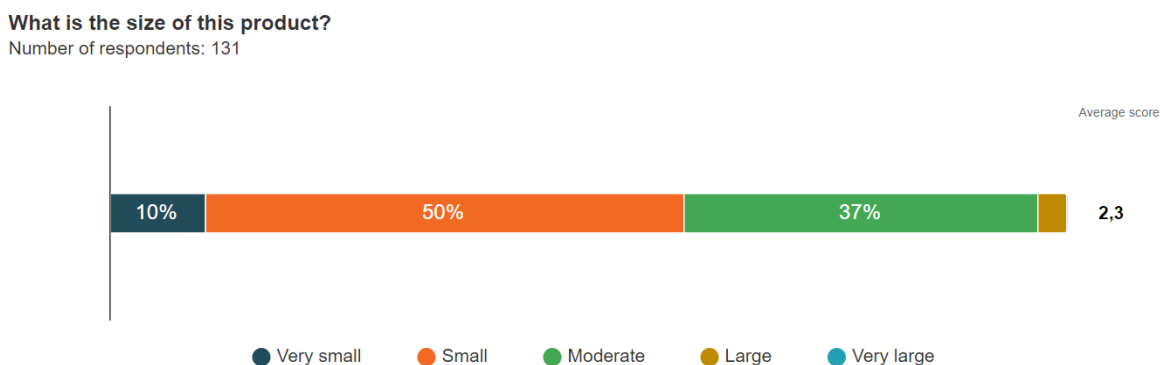
Hypothesis supported	Hypothesis contradicted	No significant difference
<b>Back vowel darker than front vowel:</b> <i>Jolna, Sauler, Rulis</i> (P value less than 0.0001)	<b>Voiced fricative faster than voiceless fricative:</b> <i>Troaz</i> (P value less than 0.0001)	<b>Fastness of voiceless fricative and voiced fricative:</b> <i>Lyfek/Lyvek</i> (P value 0.5428)
<b>Front vowel more feminine than back vowel:</b> <i>Miosa, Letok, Esteida</i> (P value less than 0.0001)	<b>Voiced stop lighter than voiceless stop:</b> <i>Dalf</i> (P value less than 0.0001)	<b>Lightness of voiceless stop and voiced stop:</b> <i>Taltena/Galtena</i> (P value 0.9308)
<b>Fricative softer than stop:</b> <i>Vonta, Faluron, Sinel</i> (P value less than 0.0001)		
<b>Voiceless fricative faster than voiced fricative:</b> <i>Faid</i> (P value 0.0107)		
<b>Voiceless stop lighter than voiced stop:</b> <i>Kimy</i> (P value less than 0.0001)		

## 4.5 Likert scale questions about a fictitious brand name

For the last part of the questionnaire, I introduced the brand name *Sielt* that I explained to belong to the category of food. I included 5 Likert scale questions about the name, asking respondents to rate the size, weight, temperature, level of bitterness, and level of mildness of the product. The two vowels [e] and [i] in the name are front vowels, which are, according to Klink (2000, p. 10), associated with small size, lightness, coldness, bitterness, and mildness. The voiceless fricative [s] is also associated with smallness and lightness when compared with stops or voiced fricatives, as well as the voiceless stop [t] when compared with voiced stops (Klink 2000, p. 10). Therefore, the assumption was that the respondents would rate the product to be rather small, light, cold, bitter, and mild. At the end, there was an open question that allowed the respondents to explain what kind of product in the category of food could this product be. The assumption was that they would describe food products that correspond with the features described above.

As one can see from the figure below, half of the respondents thought that the product would be small. 37% of people perceived the product to be of moderate size, 10% thought that it would be very small, and only 3% perceived it to be large. Nobody chose the option “very large”.

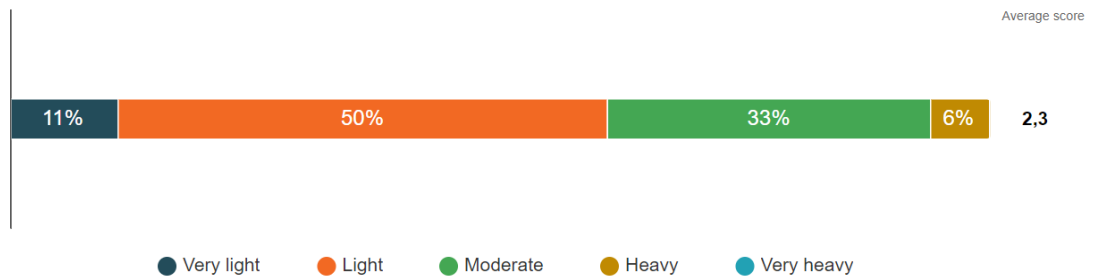
**FIGURE 11. Likert scale answers about a fictitious brand name – size.**



The figure below demonstrates that half of the respondents thought that the product would be light, 33% that it would be of moderate weight, 11% that it would be very light, and only 6% that it would be heavy. Nobody chose the option “very heavy”.

**FIGURE 12. Likert scale answers about a fictitious brand name – weight.**

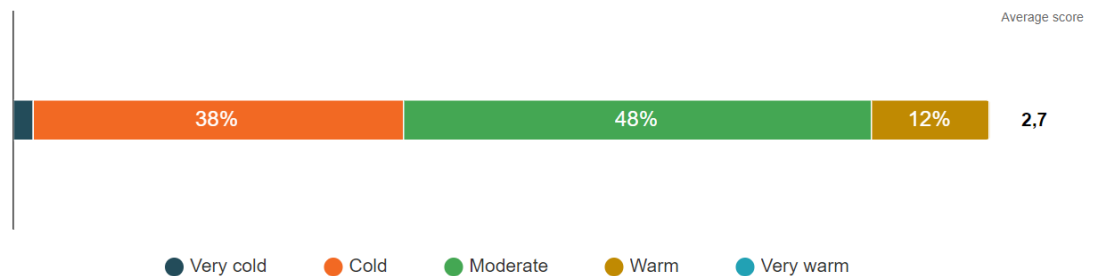
What is the weight of this product?  
Number of respondents: 131



As the figure below demonstrates, 48% of respondents thought that the product would be of moderate temperature, 38% that it would be cold, 12% that it would be warm, and 2% that it would be very cold. Nobody chose the answer “very warm”.

**FIGURE 13. Likert scale answers about a fictitious brand name – temperature.**

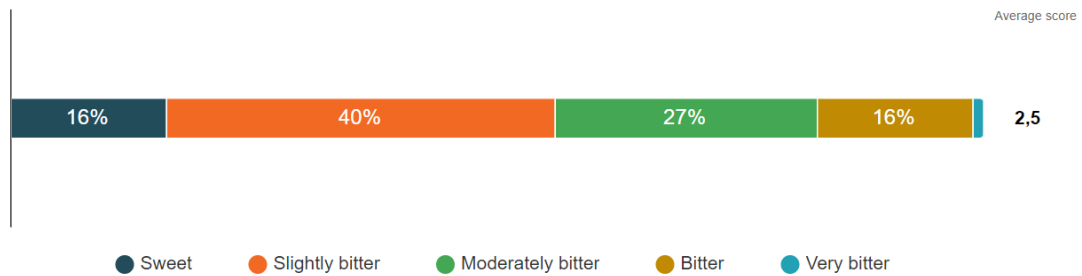
What is the temperature of this product?  
Number of respondents: 131



When asked about the level of bitterness, as one can see from the figure below, 40% of the respondents perceived the product to be slightly bitter, and 27% it as moderately bitter. Interestingly, the choices “bitter” and “sweet” had the same number of respondents, each with 16% of them. 1% of respondents thought that the product would be very bitter.

**FIGURE 14. Likert scale answers about a fictitious brand name – bitterness.**

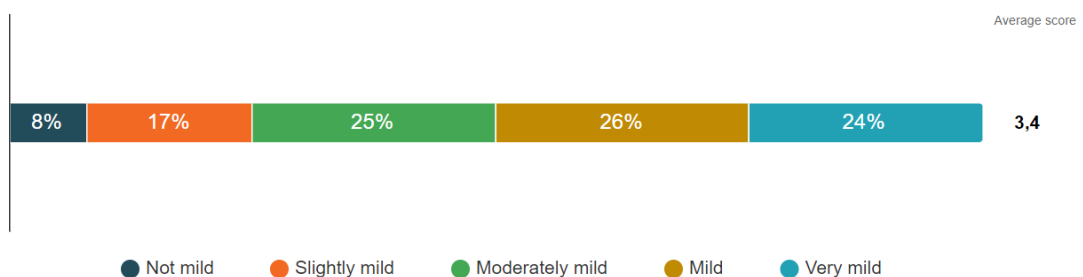
What is the level of bitterness of this product?  
Number of respondents: 131



As the figure below demonstrates, when asked about the mildness of the product, the responses were divided more evenly. More than half of the respondents thought that the product was mild (26%) or moderately mild (25%), and 24% that it would be very mild. 17% of the respondents thought that the product would be slightly mild, and 8% thought it would not be mild.

**FIGURE 15. Likert scale answers about a fictitious brand name – mildness.**

What is the level of mildness of this product?  
Number of respondents: 131



Next, I will discuss the open responses to the question: “Please describe freely; what kind of product in the category of food could this be?”. There seems to be an interesting consensus between many of the respondents about the product belonging to the category of dry food. For example, many respondents associated the name with something like flour, grain, starch, oatmeal, cereal, rice, or pasta, like demonstrated in the excerpt below:



(29) first thought of flour or some other dry food product

Many also associated the brand name with the word “salt”, and thought that the product would be salt, seasoning, or a spice, for example:

(30) Sielt sounds to me like a spice brand. Maybe because it reminds me of the word "salt".

Some respondents thought that the product could be a ready-to-go meal or convenience food. Some associated the brand name with a meat or fish product, such as cured ham, a can of sardines, or a vegan alternative to meat. Dairy products were also associated with the name, such as yoghurt, condensed milk, or cheese. Some respondents thought that the product could be a light snack, like an energy bar, chips, or crackers.

When compared with the rated features, some of the products mentioned by the respondents could be interpreted to align with at least some of them. For example, some of the products could be considered quite small in size and light in weight, such as energy bars, chips, and other light snacks. Dairy products, meat and seafood, and pre-packaged foods could be considered cold products since they are typically stored in a refrigerator or freezer. Products like dry food (e.g. rice, pasta, flour), yoghurt, and condensed milk could be considered rather mild. Based on these observations, it could be stated that there is some alignment with the features mentioned, but some of these categorizations are still rather subjective and open to interpretation.

## 5 DISCUSSION

For all brand names of three of the product types (coffee, perfume, face cream), there was an extreme statistical significance indicated in the questionnaire results that also aligns with the initial assumptions. Based on the results, the respondents associated darkness more with brand names including back vowels than front vowels, femininity more with brand names including front vowels than back vowels, and softness more with brand names including fricatives than stops. There was also a statistical significance indicated for one brand name for electric scooters (*Faid*) and an extreme statistical significance indicated for one brand name for laptops (*Kimy*), but since they were the only brand names in their product categories that aligned with the assumption, it does not seem like enough to draw conclusions in one way or another.

Although for the electric scooter *Troas/Troaz* brand name pair a statistical significance was suggested, the results were contradictory to the initial assumption – an overwhelming percentage of the respondents (82%) thought that *Troaz* sounded faster than *Troas*. Interestingly, although it has been suggested that when comparing the two sounds together, the voiceless fricative [s] would be more associated with fastness than the voiced fricative [z], Klink (2000, p. 19) mentions that the popular press has claimed the letter “z” to communicate efficacy. The brand names were presented in written form, which could explain this result. There was no statistical difference suggested for the brand name pair *Lyfek/Lyvek*. A statistical significance was also suggested for the brand name pair *Palf/Dalf*, but again, the result contradicted the original assumption, with more people choosing that *Dalf* sounded lighter than *Palf*. For the brand name pair *Taltena/Galtena*, there was no statistical difference suggested.

I recognized one aspect related to these names that might have affected the results concerning the laptop brand names. For example, if I had compared the consonant sounds with equivalents closer to them, such as [t] and [d], [k] and [g], and [p] and [b], a clearer distinction might have shown up. This is something that could be taken into account in further research on the topic. However, it is difficult to accurately pinpoint what is the reason that some of these results contradict the initial assumptions. For example, the assumption that [f] sounds faster than [v] is confirmed in the *Faid/Vaid* brand name pair, but not in the *Lyfek/Lyvek* brand name pair. Perhaps one reason for this could be the overall sound of the

brand name, the sequence of letters used, or semantic associations. For example, *Vaid* was mentioned to sound like “wait” by some of the respondents, which would make the brand name *Faid* more suitable considering the product attribute “fast”. On the other hand, perhaps the phonetic attributes related to the fastness of an electric scooter or the light weight of a laptop were more difficult to associate with either of the options provided in comparison to the other product types. In fact, this could partially be seen in the responses, where it seems like more respondents found it difficult to explain their thought process or even stated that these brand names were more challenging to associate with the product attributes in question.

Based on the responses about the brand name *Sielt*, the brand name was associated the most with small or moderate size, light or moderate weight, and cold or moderate temperature. For the level of bitterness, the results were more varied, however, with a slight inclination towards the sweet/slightly bitter side. For the level of mildness, the results were even more evenly distributed, however, suggesting a slight preference towards the mild side. Based on the responses, it can be assumed that the respondents associated the phonetic features of the brand name more with smallness, lightness and coldness than bigger size, heaviness and warmness, affirming the idea proposed by Klink (2000, p. 10). The results for bitterness and mildness were more evenly distributed, making it difficult to draw accurate conclusions in one way or another.

In addition to these Likert scale evaluations, the brand name was also associated with different kinds of food products. Interestingly, most respondents associated the brand name with a dry food, seasoning or convenience food product, such as flour, rice, salt, energy bar or ready-to-go meal. Other associations included yoghurt, meat, and cheese, for example. While it is difficult to accurately assess how well the products suggested by the respondents align with the rated features, some products can be interpreted to correspond with at least some of the features. For example, energy bars and other light snacks could be considered small in size and light in weight, and yoghurt could be considered rather cold. These results could indicate some degree of relationship between the products and the rated features, but no definitive connection, indicating that this topic could be explored more in future research.

The respondents explained varied associations with the brand names, including, for example, semantic associations with words, existing brands, and different languages. Some of the respondents could not clearly identify a reason for why they preferred a brand name over

another or stated that they thought that the name simply sounded more like a brand name than the others but could not explain why. Some of the responses were more “abstract” and strongly based on the intuitive, individual perception of the respondents, including descriptions of different places (forest, ocean) or lists of adjectives they associated with the brand name. They were a few respondents who were familiar with terms or concepts related to phonetics or phonetic symbolism. There were instances where they used their knowledge of phonetic symbolism to explain their perception – for example, that they would prefer the coffee brand name *Jolna* because the back vowel sound is more associated with darkness according to their understanding. However, these respondents were in the minority.

From the results, one can see that semantic connotations affected the respondents’ perceptions, which can be seen especially in the open responses. However, a similar observation is also made in the article by Shrum et al. (2012, p. 278), emphasizing that there is much more to a word or brand name than its sound, and even stating that in comparison to semantics, sound often has a smaller role. As an example, they refer to “Ford Focus” which is the brand name for a small car, and “Chevrolet Equinox”, which is the brand name for a large SUV, and the fact that these names contradict the front/back vowel guideline. In this example, the semantic connotations overshadow sound connotations (Shrum et al. 2020, p. 278).

Though the intention of my questionnaire was to focus solely on the phonetic associations, it seems unlikely to completely be able to eliminate semantic associations. The semantic associations of respondents were both negative and positive, such as *Faluron* being associated with “failure” and *Esteida* with “aesthetic”. Some of the associations were shared by many of the respondents, while some of them were only mentioned by one or a few people. When discussing the findings, I mainly focused on the associations that were brought up by more than one respondent. In developing possible brand names, it might be a good idea to utilize and combine both semantic and phonetic aspects. For example, Shrum et al. (2012, p. 278) suggest that when evaluating brand names of equal appeal that communicate meaning through their semantic associations, phonetic symbolism could offer additional value. The findings of Klink (2000, p. 30) indicate that the research participants assessed brand names with phonetic symbolism embedded more positively than products with no phonetic symbolism embedded in the brand name.

Although the brand names were created based on the English system of phonemes and were intended to be fictitious brand names in the English context, no cues were provided to the respondents about this in order to not affect their perceptions in any way. However, the language used in the questionnaire was English, which could have affected, for example, the way that the respondents thought the brand names would be pronounced. Because of the embedded phonetic features, the brand names were expected to yield sound symbolic associations despite the native language (Finnish) of the respondents. However, despite English being used as the language of the questionnaire, respondents associated the brand names with various languages, or specific words from different languages, including English, Finnish, French, German, Norwegian, and Danish, for example.

In some of the responses, it could be seen how people's experiences or backgrounds might affect their perceptions. For example, some respondents explained that an association with a certain language could be caused by their own background of having studied or encountered that language. Although there were many similar themes in the responses, in some of the responses it could be seen that people preferred different brand names for different reasons. Some of the similar themes that could be detected were, for example, that overall, longer brand names were more often associated with being more expensive than the shorter brand names. On the other hand, shorter brand names were more commonly associated with a smaller or cheaper product.

Ease of pronunciation was mentioned by the respondents many times, for example, whether the brand name seems natural to include in a Finnish sentence. Certain sounds or letters were mentioned to make the brand names sound more foreign to the Finnish language, such as [g], [d] and [b], which would thus make the pronunciation more challenging. Foreignness or associations with a foreign language or country were seen as a positive aspect, if the associated country was viewed positively in relation to the product type in question – for example, France and cosmetics, Germany and coffee, and Japan and technology. In some cases, even if not linked to a specific country by the respondents, the foreign sounds were also perceived in a positive way as “exotic” or “cool”. Brand names that the respondents thought could also sound natural in the context of the Finnish language were often perceived as more “natural”, “ethical”, or “reliable”.

Many of the responses can also be mirrored and compared with the dimensions of judging the strategic desirability of a brand name suggested by Robertson (1989, p. 61). For example, Robertson stated that the brand name should be simple enough to memorize without difficulty. Some respondents preferred names on the shorter side, explaining that the shorter, simpler names are easier to remember and pronounce. Robertson (1989, p. 61) also indicated that the brand name should support the planned image of the product. This idea was supported in the responses. For example, when respondents were asked to choose their overall favorite brand name, for example, from potential brand names for a face cream and explain their choice, they would often describe to have chosen the brand name that sounds the softest in their perception. When considering face creams, softness is presumably a positive aspect that supports the image of the product. According to Robertson (1989, p. 61), a good brand name should also elicit mental images. The respondents described quite vivid and distinct mental images especially related to the brand names they preferred the most.

What came as a surprise to me was how strong some of the opinions and perceptions of the respondents were, and how many different aspects could affect their perceptions in positive or negative ways. The mental images of the respondents seemed strong. Some of them listed multiple different adjectives, vivid mental images, and expressed positive feelings towards some of the brand names, meanwhile some of the respondents expressed rather strong disliking towards some of the brand names or used a process of elimination by choosing the brand name that seemed the least unappealing to them. The perceptions seem to demonstrate and confirm how strong the mental images evoked in people by certain words, letters and sounds can be. This, in turn, illustrates how crucial and difficult it is to develop a suitable and good brand name for a product.

## 6 CONCLUSION

The intention of this thesis has been to investigate the ways in which Finnish native speaking university students perceive English brand names based on their phonetic features. This was achieved by creating and sending out a questionnaire, and by analyzing the results through the lens of content analysis and paired t-tests. In this thesis, it was found that vowel and consonant sounds of brand names could affect the perception of the respondents regarding different features of the product type. The responses of the respondents aligned strongly about the back vowel indicating darkness of coffee in comparison to the front vowel, front vowel indicating femininity of perfume in comparison to the back vowel, and fricative consonant indicating softness of face cream in comparison to the stop consonant. It can also be stated that respondents associated the phonetic features of the name *Sielt* more with smallness, lightness, and coldness than with bigger size, heaviness, and warmth.

To the best of my knowledge, the perception of English brand names based on their phonetic features has not been studied among Finnish native speakers before. The results of this thesis, therefore, provide additional information about this topic in relation to the global phenomenon of phonetic symbolism from the perspective of the Finnish context. For example, Lowrey and Shrum (2007, p. 414) have attempted to explore whether phonetic symbolism effects also hold in non-English languages and found implications suggesting that they do. These findings, therefore, contribute to that discussion.

In addition to the statistical results regarding how vowels and consonants affect the perceptions, respondents described various connotations, associations, and ideas that they had towards different brand names. These included adjectives, mental images, and references to other existing brand or company names, people, words, and languages. The respondents also explained assumptions related to the length of the brand names and different letters or sounds included in them. It could be stated that the languages or countries the respondents associated with the brand names affected the ways in which they perceived the brand names. For example, when a respondent associated a fictitious brand name for coffee with German language, the respondent then also associated the brand name with other aspects related to Germany, such as coffee shops and cafés, and at least partially due to these associations,

preferred the brand name over the other options. Some of the associations were common and perceived by many of the respondents, while some of them were unique to only one or a few of the respondents.

I am satisfied with the data collection for this thesis and believe that the questionnaire was the most suitable method of data collection, since this way I was able to receive a sufficient number of responses. This makes the results more comparable with previous research, in which questionnaires have also commonly been a tool for gathering data. However, the fact that the brand names were in written form could have influenced the perceptions of the respondents, since it is possible that they have interpreted the sounds based on the letters in different ways. If the data was collected through face-to-face interviews, I could have utilized sounds, for example, by pronouncing the brand names out loud. In this case, I could have also delved deeper into the different perceptions and associations of the participants. However, regarding efficiency, and being able to gather data from a large pool of participants within a shorter timeframe, the questionnaire still seems like the most suitable option.

Working on this thesis, I noticed how difficult it is to narrow the connotations down to only sounds. Both in the open question about whether a brand name has affected the respondents' perceptions about a brand before, as well as in the open questions about the fictitious brand names, different kinds of responses included references to semantics, aspects related to corporate reputation, actions and ethics, as well as experiences, word-of-mouth and advertising, for example. Therefore, to strictly focus on the phonetic aspects of the brand name, in future research, even more attention could be paid to formulating these questions in a clear manner to receive more accurate answers. Based on the responses, however, one can see that phonetics cannot be the only element considered when naming products, companies, and brands, but it is still a factor worth considering.

In further research about similar topics, fictitious brand names could be created with the help of artificial intelligence. This could make the brand names even more neutral and minimize any possible biases of the researcher or similarities with existing brands of the product type. Artificial intelligence voice models could also be utilized in the case that a researcher wants to present the sounds to the participants through auditory means, while minimizing inconsistencies or changes in articulation that may naturally occur in humans.



The creation of fictitious brand names is complicated by the fact that it is difficult to create a name that has no similarities to words in any other language. Especially when introducing a product or brand to the global market, it can be almost unavoidable to create a brand name that is completely neutral semantically. This can also be seen in the results of this research, where the respondents had many different associations with various languages, which was unintentional on my part. Athaide and Klink (2012, p. 210) also explain that they might have unintentionally incorporated semantic meaning when they created fictitious brand names that were intended to be in Hindi. They add that the likelihood of conveying unintended semantic meanings increases when there are several languages present in the marketplace (Athaide & Klink 2012, p. 210).

Going beyond individual sounds, more research could be conducted on the perceptions related to specific sequences of sounds, since they could influence how respondents perceive brand names. For example, in this thesis, many of the associations with existing words seemed to be because the brand name shared the same few or more subsequent sounds or letters with the word, possibly overshadowing the associations about the one sound in focus. This kind of phonetic symbolism research could also be conducted on a larger scale, for example, by involving participants from multiple universities, or expanding to other groups of people.

Phonetic symbolism effects in brand names could also be investigated in the context of fictitious or real brand names in the Finnish language. The correlations and connections between people's demographic information (language skills, gender, etc.) and phonetic symbolism perceptions could be investigated more in depth to understand how brand names for different groups of people could be created even more accurately in marketing, and for other purposes as well. However, this kind of approach would have gone beyond the scope of this study, considering the extent and focus of this MA thesis.

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## APPENDIX

### Master's thesis questionnaire: Phonetic symbolism in brand names

Background information

**Please enter your age \***

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**Please select your gender \***

- Male  
 Female  
 Other

**Please enter your field of study (major and minor subjects) \***

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**Please enter your native language(s) \***

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**Please rate your level of proficiency in Finnish and English.**

**Below, enter all the other languages you know and rate your level of proficiency in each of them.**

	Poor	Basic	Good	Advanced	Excellent
Finnish *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
English *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
_____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
_____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
_____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
_____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
_____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
_____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
_____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
_____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**How important is brand name to you when making purchase decisions? \***

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Do you recall a time that the name of a brand has in some way (negative, positive, other) affected your attitude, perception or opinion of the brand? \***

- Yes
- No

If you answered "Yes", please describe: \*

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Next, I am going to introduce examples of brand/product types. You are asked to choose the brand name that best suits the product attribute related to the product. After choosing your preferred option from each word pair, you are asked to choose your overall favorite and provide a short rationale for your selection.

First product type is "face cream".

**Which brand of face cream sounds softer? \***

- Vonta
- Konta

**Which brand of face cream sounds softer? \***

- Paluron
- Faluron

**Which brand of face cream sounds softer? \***

- Sinel
- Tinel

**If you were looking to buy a face cream, which brand would you purchase based on its name? \***

- Vonta
- Konta
- Paluron
- Faluron
- Sinel
- Tinel

**Why would you choose this brand name; what does the name make you think? \***

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The second product type is "coffee".

**Which brand of coffee sounds darker? \***

- Jolna
- Jelna

**Which brand of coffee sounds darker? \***

- Seuler
- Sauler

**Which brand of coffee sounds darker? \***

- Rilis
  - Rulis
- 

**If you were looking to buy coffee, which brand would you purchase based on its name? \***

- Rilis
- Rulis
- Sauler
- Seuler
- Jolna
- Jelna

**Why would you choose this brand name; what does the name make you think? \***

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The third product type is "perfume".

**Which brand of perfume sounds more feminine? \***

- Maosa
- Miosa

**Which brand of perfume sounds more feminine? \***

- Letok
- Lutok

**Which brand of perfume sounds more feminine? \***

- Esteida
- Osteida

**If you were looking to buy perfume, which brand would you purchase based on its name? \***

- Maosa
- Miosa
- Esteida
- Osteida
- Letok
- Lutok

**Why would you choose this brand name; what does the name make you think? \***

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The fourth product type is "electric scooter".

**Which brand of electric scooter sounds faster? \***

- Faid
- Vaid

**Which brand of electric scooter sounds faster? \***

- Lyvek
- Lyfek

**Which brand of electric scooter sounds faster? \***

- 
- Troas
  - Troaz

**If you were looking for an electric scooter to rent/buy, which brand would you choose based on its name? \***

- Faid
- Vaid
- Lyvek
- Lyfek
- Troas
- Troaz

**Why would you choose this brand name; what does the name make you think? \***

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The fifth product type is "laptop".

**Which brand of laptop sounds lighter (in weight)? \***

- Dalf
- Palf

**Which brand of laptop sounds lighter (in weight)? \***

- Galtena
- Taltena

**Which brand of laptop sounds lighter (in weight)? \***

- Kimy
- Bimy

**If you were looking to buy a laptop, which brand would you purchase based on its name? \***

- Kimy
- Bimy
- Galtena
- Taltena
- Dalf
- Palf

**Why would you choose this brand name; what does the name make you think? \***

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I have created a name for a product in the category of food; **Sielt**. Now I want to know what kind of connotations you associate with this brand name.

**What is the size of this product? \***

	Very small	Small	Moderate	Large	Very large
*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**What is the weight of this product? \***

	Very light	Light	Moderate	Heavy	Very heavy
*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**What is the temperature of this product? \***

	Very cold	Cold	Moderate	Warm	Very warm
*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**What is the level of bitterness of this product? \***

	Sweet	Slightly bitter	Moderately bitter	Bitter	Very bitter
*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**What is the level of mildness of this product? \***

	Not mild	Slightly mild	Moderately mild	Mild	Very mild
*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Please describe freely; what kind of product in the category of food could this be? \***

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