SOUND BRAND FIT

A cross-modal study on perception of fit between sound logos, visual logos and brand

Julie Winther | February 2012
MSc. Marketing Communication Management
Thesis advisor: Suzanne C. Beckmann | Department of Marketing | Copenhagen Business School

171.326

EXECUTIVE SUMMERY

This thesis study's the fit between sound logo, visual logo and brand in a sound branding context. The cross-modal study is carried out on six Danish brands and their existing sound logos and visual logos.

The objective of the study is two-fold: 1) To study how the constructs of likeability, recognition, affect, brand knowledge and brand attitude influence consumer's perceived general fit in the modalities of audio, visual and audio-visual, and 2) to explore how the sound logo meaning and brand meaning fit correspondingly on a set of brand personality attributes. It is expected that a high perceived general fit will result in fewer differences between brand personality attributes.

Likeability and recognition is found to influence respondents' perceived general fit in the audio-visual modality, where the combination of sound logo and visual logo is exposed. For the attribute fit, two brands show high perceived general fit and corresponding few differences between brand personality attributes; another two brands show low perceived general fit and corresponding large differences between brand personality attributes; and two brands has respectfully low attribute fit and a high perceived general fit and medium attribute fit and low perceived general fit.

The study also finds evidence that sound logos can fit with brands in more than one way. Depending on how perceived general fit and attribute fit are rated high or low, a sound logo can either support the brand meaning, add additional meaning to the brand, or devaluate the existing brand meaning.

By comparing perceived general fit and attribute fit, the study find that the unconscious fit between sound logo meaning and brand meaning does not always correspond with a conscious rated perceived general fit. Hence, the two analyses provide complementary information to understanding a fit between sound logo and brand. When studying perceived fit in the future including an attribute fit measurement may provide fruitful insights to the results.

The recognition values were surprisingly low in the Audio modality, where the sound logos are presented without the brand context. It raises the question if consumers in everyday life actually perceive sound logos as a representative for the brand; as a logo? Implications for companies and management of sound branding are discussed in the end of the paper.

ACKNOWLEDGEMENTS

This project turned out to be much larger and longer than initially anticipated and only with help from many great people I finally achieved what I had set out to do.

First of all, I would like to thank Suzanne C. Beckmann for her good advising. Your guidance, comments and questions has been very much valued and I felt in good hands throughout the project.

My deepest appreciations go to the guys at Delta SenseLab; Søren Vase Legarth, Torben Holm Pedersen, Jesper Ramsgaard, Juniad Khalid and Guillaume Le Ray. Thank you for including me in your fabulous, geeky world of sound sensory and listening tests and for making me feel welcome in the Lab.

A special thanks to Jesper Ramsgaard for his great help, support and sparring throughout the project. Our long discussions, your critical point of views and overview of the literature have been the greatest help I could ever wish for.

Also, I would like to thank Sonic Minds and Karsten Kjems for providing the sound logo material and for their interest in my project. It is always a pleasure to work with you and to discuss sound branding insights, -tactics and -strategy.

My parents and brother deserves a big thank you their endless believe in me and also my friends and network for their encouragements and interest. My mom, Trine Winther Johannsen, deserves another thank for helping me out with literature research search. Librarians are super.

Finally, I would like to express my general gratitude to Tech-house music with its 125-130 bpm; for keeping my spirit and work-speed up in the late hours in front of the computer. Without Tech-house the project would have been a lot more quiet and dull to write.

Julie Winther,
Copenhagen, 21 February 2012.

1 INTRODUCTION

You can probably still recall old examples of jingles and songs from old commercials. Strategies for music and corporate sounds have been used for many years by companies as attempts to sharpen the brand identity and orchestrate memorable customer events. Music used to enrich the key message in advertising may be the single most stimulation component in a commercial (Hecker, 1984).

Ten-twenty years ago, marketers and scholars faced questions of which kind of music to use in TV and radio commercials and how musicological terms such as tempo, pitch, volume etc. influenced attitude toward the ad, recall of advertising message (Gorn et al. 1991, Middlestadt et al. 1994). Music in advertising has evolved into what we today call *Sound Branding*; a branding discipline that comprises brand equity building, brand positioning and brand identity through corporate music strategies (Lusensky 2010). It has moved from being an extra advertising effect to an important brand element that, like other brand elements, can strengthen brand equity if it is managed strategically and consistently (Bruner 1990).

The basic thought behind sound branding is to leveraging on consumers' immediate reactions and cognitive processing of sound and music in a commercial setting. With a shift in marketing focus from the four P's to brand experiences (fuelled among others by Pine & Gilmore's Experience economy from 1998), neuro marketing (fuelled among others by Zaltman 2003 and non-academically by Lindstrøm 2008) and sense branding (see e.g. Schmitt 1999 and Lindstrøm 2005) sound branding started to grow as a branding discipline. The resent historical change in research focus (from musicological terms' influence in advertising to a broader understanding of building brand equity) results in a limited amount of research from a brand equity perspective.

Music have proved to impact behavior in retail settings (Vida et al. 2007, North et al. 1999) where shoppers tended to stay longer if they found a high musical fit between music played and store image. When the perception of "musical fit" is high, music also influence consumer's perceptions and attitudes of products (Morris & Bode 1998, Gorn et al. 1991, Mark 1974) or brands (Hung 2001), and influence memorability, and recall related to advertising (Yeoh & North 2010, Kellaris et al. 1993).

Sound branding is a growing business with attention from companies, academia, music industry and agencies. One audible element in sound branding that has gained a lot of focus is the small sonic piece *sound logo*. Companies such as Intel, LG, Mercedes Benz, Sennheiser, Samsung, are using sound logos as an audible brand signature in TV- and radio commercials. Companies and

organizations in Denmark have also seen the potential and sound logos are in Danish context used by companies such as Danske Spil, NRGi, Fair Forsikring, Vestas, and Danish Crown. The thought behind the small audible piece is that sound logos create attention to the brand by enhancing brand recognition and form specific brand associations that support the brand image (Darpan 2009, Jackson 2003, Bronner et al. 2010). Sound logos have been studied from different perspectives such as sound logos' fit with a brand's tagline[1] on emotional variables (Ramsgaard 2009), relation to brand memory (Venkatamaran 2007) and the composition (Palghat 2009).

How the sound logo "fits" the brand is a question often raised by companies wanting to use sound branding. "How is it measured?" and "how do I know sound branding deliver what it promises?". By studying the fit between sound logos and brand this paper seeks to come one step closer to understanding how sound logos is perceived alone and in combination with visual logos in the mind of consumers.

1.1 RESEARCH QUESTION

Research on sound branding has been focusing on sound logos as music in regards to its composition (Palghat 2009), the effects of music on humans in different brand settings (McInnis & Park 1991, North et al. 1999 or see Bruner 1990 for extensive overview) or in relation to advertising (Hecker 1984, Graakjær 2009, Morris & Boone 1998, Yalch 1991). Sound logos are rarely experienced alone but interact with e.g. brand name and visual logo in the brand context. The cross modal interaction with other brand elements may chance the brand meaning or the elements it is presented with.

The object of the study is two-fold; to test which constructs influence a perceived general fit and to explore how sound logo meaning and brand meaning fit on a set of brand attributes. The thesis wishes to answer what influence perceived general fit and to explore if such a conscious perceived fit is congruent with the elicited meaning of the sound logo and meaning of brand. The objective comparison of sound logo meaning and brand meaning will form a subconscious perception of fit, where respondent are not directly asked. Thus, the thesis also wishes to shed light on if respondents' conscious perception of fit corresponds with an objective measured fit of sound logo- and brand meaning. Thus, my overall research question is:

1. **How do different constructs influence a perceived general fit between sound logo and brand in the modalities of audio, visual and audio-visual by consumers and do**

[1] Tagline is also called pay-off or slogan. Gillette has the tagline: "the best a man can get", the female equivalent Venus has the tagline "reveal the goddess in you", and McDonalds "Im lovin' it".

the sound logo meaning and brand meaning fit correspondingly on a set of brand personality attributes?

To answer this overall research question, following working questions are formulated to guide the analysis

2. What are sound logos and in what way should they be analyzed?
3. How do humans create meaning from visual and auditory stimuli? – Why is this relevant in marketing communication?
4. How is sound applicable in the framework of brand personality scales?
5. Which constructs influence a perceived general fit between sound and brand?
6. Are sound and brand perceived differently on brand personality scales?

When answering above questions, I will discuss why this sound logo research is relevant to companies today and in which way it can support Danish companies that are already working with sound branding.

1.2 STRUCTURE OF PAPER

The construct of fit between sound logo, visual logo and brand is studied in two ways: 1) Perceived general fit (subjective perception of sound logo's fit to the brand), and 2) Attribute fit (fit between sound logo meaning and brand meaning).

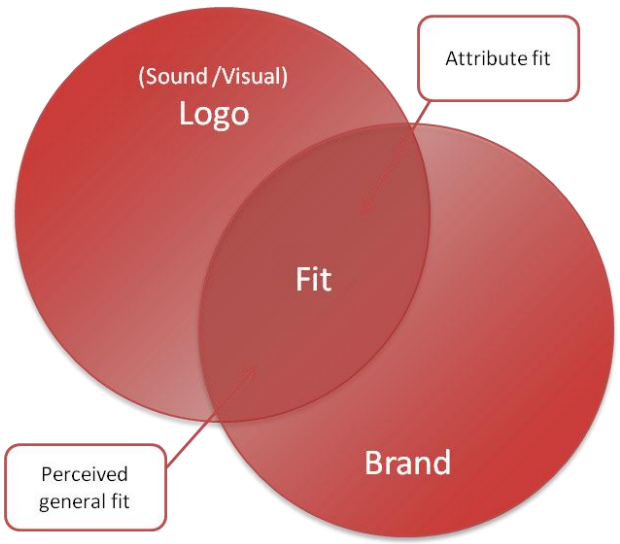


Figure 2: The area of focus and framework of the paper

In chapter 2, a theoretical framework is presented with the theoretical constructs and analytical methods used for the study: First, the sound logos are defined and placed in a brand management context. Second, the link between sound and brand is discussed and the fit between sound logo and brand is defined. On the base of the review hypothesis 1 is defined. Third, a discussion of brand meaning leads to the framework of brand personality dimensions and the frameworks' application on sound is investigated. Fourth, the test of perceived general fit is discussed, pointing out the constructs of likeability, recognition, affect, brand knowledge and brand attitude as possible influencers of perceived general fit. On the base of the review hypothesis 2-6 is defined. In chapter 3, the six hypotheses are summarized and presented.

In chapter 4, the analysis method is presented including study design, collection of data and sampling plan. In chapter 5, the analyses are conducted: First, descriptive data of the constructs are presented and discussed. Second, the statistical predictors of fit are found. Third, the brand attributes are explored. Fourth, the attribute fit is analyzed and discussed against the perceived general fit. In chapter 6, the study is discussed in a general discussion.

In chapter 7, the thesis' final conclusion is presented and chapter 8 discusses the papers' implications for companies.

2 THEORETICAL FRAMEWORK

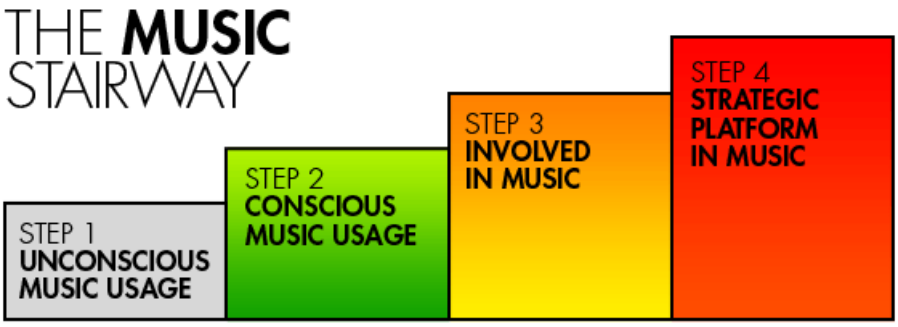
Sound branding is an area of research that draws on different theoretical disciplines such as cognitive psychology, marketing and branding, and musicology. In this chapter, I will also draw from those disciplines to put together a theoretical framework that explain the constructs and analyses methods needed for the study.

In the following paragraph I will distinguish between sound branding and music advertising and elaborate why I choose to focus on sound logos in a corporate branding context. The mentioned examples of sound branding in the introduction and in the following paragraph can be found in Appendix J: Sound examples.

2.1 SOUND BRANDING OR MUSIC MARKETING?

There are different understandings of how sound branding can be applied in a company praxis. As sound branding is a relatively new branding discipline there are ongoing discussions of what can rightly be named sound branding opposed to music marketing and isolated commercials using a catchy tune. This paragraph describes my own classification of two different approaches.

Sound branding is the *strategic use of sound* to create an auditory identity for the brand (Jackson 2003). In the book Sounds Like Branding (2010) the author and CEO Jakob Lusensky from Heartbeat International presents four stages of strategic management of music. The stages are presented as incremental steps on a latter:



Heartbeat International: The Music Stairway[2]

In the book, the first strategic step in sound branding is companies' unconscious use of music; the play-as-we-go ad hoc management. Second step is the conscious stage where companies have "*developed their own music identity through sounds and carefully chosen values*" (Lusensky 2010, p.4). It is described as the stage where companies develop a sound logo or theme song which becomes a brand element and hence strategic tool to the company (Lusensky 2010). Step 3 "Involved in music" and step 4 "strategic platform in music" describe strategies where companies collaborate with the music industry e.g. through co-branding by functioning as a record label (e.g. Heineken and Groove Amanda) or by providing a music platform for music artists and consumers (E.g. Tak Rock by Royal Beer, a sponsor-platform for upcoming bands in Denmark or Joe and the Juice, a Danish juice and coffee chain with a ear-catching club-dance music concept).

Lusensky offers an categorization to the various sound branding strategies that is seen in the field, however, the steps implies that a company cannot implement music collaboration (step 3) without having established a corporate sound identity (step 2). In my opinion these proposed four stages should not be seen in prolongation of each other or as incremental steps towards "true" sound branding management. Where the branding discipline is concerned with long term strategy of building the brand and managing the overall identity, marketing is of a more tactic nature with short term goals related to the marketing mix and sales activities (see e.g. Balmer 2001). I will in the following paragraph argue that the *conscious stage* (step 2) and *active music*

[2] Can be found at http://www.soundslikebranding.com/musicstairway

involvement stage (step 3) are two very different approaches that can be executed side by side. The two approaches are better distinguished as *sound branding* and *music marketing*.

Music marketing

Heartbeats International argues that sound branding becomes an entertainment element that "*turns consumers into fans*"[3]. One way is to position the brand through powerful brands experiences with use of artists and music as entertainment e.g. in events of live communication (Lusensky 2010) or marketing communication such as campaigns and TV-advertisement (Graakjær 2010 and 2008, Bruner 1990). This can be done by artists endorsement (e.g. Giorgio Armani & Beyoncé and SAS & Tina Dickow), co-branding e.g. by signing a band and be a record label (e.g. Bacardi & Groove Amanda) or by establish an entire music platform for artists to evolve and exchange and create music (e.g. Tak Rock by Royal Beer and PepsiCo's Green Label Sound). Companies in this league of artist collaboration cannot afford to treat music in an ad-hoc fashion (Kilian 2007 in: Bronner & Hirt 2007) neither financially nor brand image wise.

Back in the late 80's experiential aspects of consumption experiences came in focus and the concept of hedonic consumption was described by e.g. Hirschman and Holbrook (in: Lacher 1989). Music as a product for hedonic consumption itself also received attention (Lacher 1989). Strategies where the music industry becomes an important player, and/or where artist co-branding holds a central role in the marketing, all have the purpose of transfer associations from artists, genres and lifestyles to build brand image and brand equity. Zander (2006) argues that music can lead to significantly different impressions of the brand depending on musical style without affecting general evaluation of the product. Hung (2001) found respondents' perception of a shopping mall presented in a video changed with the background music. Depending on music the mall was either perceived as high-end, with emphasis on women's fashion, jewelry, or as young, in, and active, with focus on designers, models, and young movie stars.

Sound branding

More "corporate branding" minded music and sound can also be composed specifically for the brand by music designers. The strategy is to align the designed sound and music in companies' communicative touch points to create a corporate sound identity that supports the visual brand identity (Bronner & Hirt 2007). In this approach brand sound experiences is not created through entertainment involving the music industry but with the specific purpose of creating an audible

[3] See their very inspiring blog at http://www.soundslikebranding.com and the specific blog post at http://www.soundslikebranding.com/?p=821

and easily recognizable "red thread" through corporate touch points. That could be everything from sound on websites, to IVR on-hold music in telephone systems, sound logos, functional sounds like ringtones and computer sounds, to entire "corporate soundtracks" (Kilian 2007 In: Bronner & Hirt 2007, Lusensky 2010).

Kilian (2007 In: Bronner & Hirt 2007) makes a distinction of what he labels "Brand Sounds" and "Music Collaboration" (see the framework on page 12). Brand sounds include brand songs, jingles, sound logos, brand soundscapes and themes whereas music collaboration includes music compilations, music sponsoring and -events and product/ brand name placement (Bronner & Hirt 2007). The classification illustrates the difference in the type of music that is primarily associated to the brand and the type of music that is primarily associated to the performing artist but shared by the company. "Brand Sounds" are developed specifically with a supportive purpose and add an extra dimension to an existing brand identity.

The multisensory brand management is particular interesting because it uses sound branding as a tool to elicit specific brand associations (Schubert 1996, Ramsgaard & Winther et al. (in press)), emotional responses (Middlestadt et al. 1994) and brand perception and -attitude formation (Hung 2001, Zander 2006).

To sum up, there is a difference between sound branding and music marketing; a company can be involved in music as a tactical way of building the brand through secondary associations, without having a corporate sound brand identity. Conversely, a sound identity can be established without using music in marketing. This thesis focuses on the special developed corporate sound logos which exclude the possibility of respondents creating associations directly from music artists or genres in the study.

2.1.1 Sound logos in a branding context

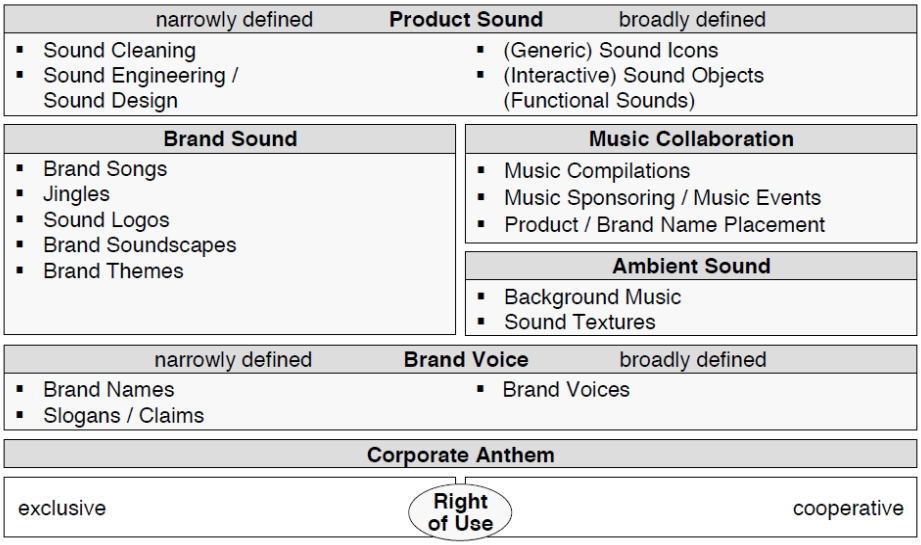
A sound logo can best be described as the auditory equivalent of a visual logo and is typically a sound of limited duration with musical characteristics (Jackson, 2003). By Graakjær & Jantzen (2009) the sound logo is described as: "*An important tool in creating such corporate sounds is the sound logo, i.e. a distinctive, short melody that serves to generate an identity in a company's various interactions with its various publics. Just like visual logos these short sonic sequences help to distinguish the company from possible competitors in the mind of the customer*" (p.255).

Sound logos are often defined as short and simple musical pieces in three to six notes originated from Jackson (2003). Intel and Mercedes Benz are examples of such sound logos with three to six notes. Yet, many sound logos have more than six notes; e.g. Danish Oddset with nine notes or

Philips with seven notes. Another well-known example is McDonald's which, like Oddset and Philips, breaks Jackson's attempted definition of a sound logo.

Some companies make use of sound effects or recorded environmental sounds i.e. human sounds such as an exhale or the sound of heartbeats. These sounds cannot be defined as notes at all, but are used in sound logos; e.g. by Audi (heartbeat sound), Danish Crown (knife slicing and sizzling steak-sound), and Vestas (a "swiping" sound effect). In these examples, musicological terms do not seem to fully cover the description of sound logos. The sound logo examples illustrate this point; musicological terms do not fully describe sound logos and that sound logos, hence, cannot be analyzed as musical pieces. I therefore suggest that sound logos theoretically should view solely as one unit - a brand element that happens to be acoustic.

Below is Kilian's (2007) illustration of how different audible elements relate to each other:



Typology of Audible Brand Elements, (Kilian 2007 In: Bronner & Hirt 2007 p.41)

Sound logos are placed in the left box "Brand Sound" together with brand songs, jingles, brand soundscapes and brand themes. In Kilian's classification there is a line between the box of "Brand Sound" and the boxes of "Music Collaboration" and "Ambient Sound". Here the sound logo is defined *by the function* it carries out and not by a standardized design described in musicological terms.

Sound logos are often confused with jingles and they do seem very much alike. Besides sound logos, jingles are mostly the only audible brand element that companies use long term. They are described as extended musical slogans (Kilian 2007 In: Bronner & Hirt 2007). The most important distinction between jingles and sound logos are 1) that sound logos (primarily)

relates to corporate brand, where jingles (primarily) relates to product and 2) that jingles has lyrics with focus on communicating the key product attributes. Sound logos on the other hand have no lyrics and are (primarily) used as a recognizable acoustic corporate signature in the end of commercials (see e.g. Snyder 1993 In: Henderson & Cote 1998).

On the base of above discussion, this paper defines a sound logo as:

A short, distinctive sonic sequence that helps stakeholders to distinguish the company from possible competitors by generating an auditory identity in combination with other sound branding elements

A good sound logo is a brand asset that adds a dimension of experience to the brand in the way the company has intended it. In time, the sound logo may converge into a kind of brand symbol that carries associations that helps shapes the brand image and functions as a memorable link to the actual brand.

2.1.2 Differentiation between music and sound

Graakjær (2008) argues that sound logos shares same expressive characteristics as e.g. ringtones and interface sounds in computers and suggests that it may be more appropriate to consider the main expressive dimension of sound logos to be a "sound" (ibid).

Freadrich and King (1998) argue that sounds are associated with symbols or objects as well as feelings but also holds embodied meaning in itself (e.g. Freadrich & King 1998, Schubert 1996). Sound can be used to establish a memory pathway through *natural association* to an object; e.g. to the product by playing the sound of a bottle with fizzing bubbles being opened and poured in a glass with ice-cubes. Establishing a memory pathway by paring sounds that holds (pure) tones with an object is called *conditioned association* (Freadrich & King 1998). Sound logos that use pure tone are conditioned associated while sound logos using recorded real sounds are naturally associated.

Several researchers have shown that fast music is considered to be more happy and/or pleasant than slow music (Bruner 1990). According to Freadrich and King (1998) perceived "pleasantness" of *music* can be a function of many different associations from a social setting; with whom it was heard, what experiences occurred, etc. Because *sounds* do not share the same association to e.g. social settings, it is argued, pleasantness is not related to the surrounding experience but rather to the actual sounds and sound qualities (ibid). Griffith & Mitchell (2008) argues that pleasantness is enhanced when the internal processing is eased through repetition, which is called mere exposure effect. This effect has been found on both sound and music.

There is a difference between immediate reactions to sound stimuli and the cognitive processing of music. Music includes many other variables than the sensory of sound alone and naturally require a longer internal processing (Meyer 1970). Focusing on syntax, Patel (2003) compares music with language and proves that the processing overlaps. Cognition of music is viewed, like language, to be (socially) learned and while the syntax of music can be broken down to smaller units (ibid.), sound is a unit in itself – a medium – that alone has no musical meaning (Serafine 1988). Music can be seen as cognition; as the development of thought from the sensing sound (Serafine 1988).

Although sounds – and sound logos –have both referential and embodied meaning and may even sometimes be interpreted as music, sound logos are here analyzed as not having a syntactical structure that analytically should be broken into smaller units or musical metrics.

2.2 LINKING SOUND AND BRAND

In advertisement a picture (e.g. a logo) often refers to an accompanying headline or brand name (Barthes 1985a and 1985b in: Hung 2001). Consumers "read" (create meaning from) the picture linked with the headline and brand name rather than read the picture independently of its context. Hung's (2010) findings suggests that consumers "read" audiovisual images in the same way and that audiovisual images hence play an important role in meaning creation processes (Hung 2010).

The link between sound and brand can be explained by the association network theory (Collin & Loftus 1975). A node can represent everything such as things (ibid), feelings (Bower 1987 in: Schubert 1996), sounds (Schubert 1996), brands and products (Krishnan 1996). The association network is activated when one retrieves stored information from the mind e.g. when one is exposed to stimuli (Collin & Loftus, 1975). The music holds a set of attributes and associations that are semantically linked to the brand through conditioned associations (Schubert 1996). A "hierarchy" in nodes is formed where one music-node represents an entire hierarchy of lower levels of nodes that are closely connected in order to explain the given concept for the listener. Schubert suggests that lower levels of music in this node-hierarchy are levels of the musical signals; the different sections in the song, then the sequences of pitches, and at the lowest level of the musical signal is the pitch, loudness, timbre etc. (Schubert 1996)[4].

[4] These hierarchies can provide some help to explain why some instruments generally are perceived as e.g. represent different characteristics.

Likewise, brands consists of associations as well (Keller 1993). Strong brand associations are established either by repeated exposure or through phonemic and semantic similarities such as concepts that sound alike or are semantically related. Pay-offs and jingles often rhyme or have a special word-combinations ("*Twix*; its all in the *mix*" "that *calls* for a *Carlsberg*" "*Wanna Fanta*, don't you *wanna*?" [My accentuation]), which is one explanation of why people tend to remember them better (Yalch 1991). One explanation is that the short distance in the lexical network makes them easier to remember as they are semantically closer linked in the mind (Bower & Bolton 1969 in: Yalch 1991, Collins & Loftus 1975, Schubert 1996).

Sound logos are often developed based on the idea that specific auditory expressions convey close links to attributes such as corporate values[5]. The procedure is mostly: 1) Brand is analysed and attributes are chosen, 2) attributes are converted to sound and 3) tested to see if the composed sound express the chosen attributes. This "translation" approach builds on an implicit understanding that the selected brand attributes are static elements (having a "fixed" interpretation) that are always associated closer with some sounds or musical expressions than others. The process also implies that the strength of the link between the sound and attributes is equally strong in both directions. Collins & Loftus (1975) and Krishnan (1996) argues that the link between two nodes can have different strength depending on the direction it is activated. A brand can e.g. elicit associations to a specific sound but the sound may not elicit associations to the brand.

A top-of-mind study of free associations of sound logos showed that subjects rarely associate sound logos with brands or attributes (e.g. corporate values) (Ramgaard & Winther et al. 2011). The study also showed that different semantic spaces[6] are created from the associations that the sound logos elicit. The semantic spaces are not as unambiguous as a company can hope or holding a strong meaning consensus across respondents (ibid.). Literature suggests that the link between sound and brand must primarily reply on marketing efforts.

2.2.1 Defining fit

The big question raised by both companies and the sound designers is how to actually produce sound that fits the brand is. But what is *fit*?

Fit is defined by MacInnis and Park (1991) as music that corresponds with consumers' subjective perception of the music's relevance or appropriateness to the central ad message.

[5] See e.g. case submissions to the Audio Branding Congress 2012 online
[6] A multi-dimensional category where e.g. a cluster of associations closely semantically linked to each other related to one concept; see Abbott et al. (2008).

McInnis and Park focus on the emotion-laden experience and the fit in high- or low involvement products. They found impact of fit on both positive emotions and attitude toward the ad. North et al. (2004) explored the effects of musical and voice fit on responses to advertisement. They found that "*both musical and voice fit can prime certain aspects of the listeners' knowledge and also increase liking for ads, much that it might improve knowledge-based and affective responses to advertising.*" (p.1675). They also suggests that musical-voice fit may have a positive effect by highlighting certain brand attributes regardless of high- or low involvement. North et al. uses the same definition of fit as McInnis and Park.

Yeoh and North (2010) explain that fit between music and product is a matter of finding matching connotations from music and product. They investigated the impact of musical fit on product recall in Malaysia and found evidence of music corresponding with the product attributes enhanced recall. However, the study also showed that Malay and Indian participants were more likely to recall food from their own cultures, irrespective of the music played.

A consideration that MacInnis and Park, North et al. and Yeoh and North avoid is of which music they test and how the respondents like the music. Bruner argues that studies of music and its impact on humans should at least control for music familiarity and liking of music because "*music has been treated too generally in most past marketing studies, with interest merely in its presence or absence in some treatment.*" (1990, p.100). McInnis & Park acknowledge that their results may have been influenced by perception of the music used as manipulation. Agreeing with Bruner, this study will account for liking and familiarity.

Diamantopoulos et al. (2004) study the fit between brand and brand extensions on brand personality dimensions (cf. Aaker 1997). They hypothesise that a good fit between an extension and the brand implies that extension is perceived to be consistent with the brand. This will result in small changes in the location of the brand on the personality dimensions). Conversely, a poor fit results in a perceived inconsistency between the brand and that of the extension, which will show a shift in the score on some brand personality dimensions (Diamantopoulos et al. 2004.

Diamantopoulos et al.'s multidimensional approach to fit is supported by Zander (2006) who considers fit as a flexible construct that is able to transport relevant information about the product in a commercial message. He argues that different music selections may be equally fitting from the consumer's perspective, but that the meaning communicated may differ (ibid.). The selection of music is hence not only a matter of fitting sound to a general message, but more

importantly to consider that the cross modal interaction with other elements may communicate a different meaning.

Below are listed four theoretical views on fit:

Author	**Definition or use of fit/congruency**
MacInnis & Park, 1991 North et al., 2004	*"fit is defined here as consumer's subjective perceptions of the music's relevance or appropriateness to the central ad message"* (p. 162) (North et al. 2004, p.1682)
Zander, 2006	*"when elements of a stimulus set correspond with other items in the set, the individual parts are not perceived as separable, do not compete with one another for cognitive resources, and hence create 'emergent meaning"* (p. 467)
Diamantopoulos et al., 2005	"[…] *whether the consumer accepts the new extension as being a suitable member for the brand category"* (p.133) and " […] *a good fit between the extension and the core brand implies that the extension is perceived to be consistent with the core brand resulting in small (if any) changes in the location of the core brand".* (p.133)
Yeoh & North 2010	"[…] *operates by activating knowledge of the world and raising the salience of associated products*" (p.6).

Table 1: Theoretical views on fit

Two approaches has been found; one-dimensional perception of fit (does it/does it not) and a multidimensional (how is meaning communicated). North et al. (2004) measures fit in both ways; by asking to the perceived fit, and by measuring the advertisings on a list of attributes in the different combination of music-voice fits.

In this paper both approaches to fit will be explored. Consistent with test methods of North et al. and Diamantopoulos et al. this study will use a set of attributes to explore the fit between sound logo and brand as well as asking directly to the perceived general fit and test which constructs influences the perception. Perceived fit will be named *perceived general fit* because it relates to the general perception of the brand including sound, brand and other aspects that comes to mind for the respondents. A good fit between sound and brand may imply that sound logo is consistent with the brand resulting in small changes in brand meaning. Likewise, a poor fit may

result in an inconsistency between the brand and the sound logo resulting in large differences. It is hence hypothesised:

> H1: The higher the perceived general fit, the fewer the differences between brand personality attributes.

2.3 BUILDING BRAND MEANING

Brand image relates to the consumer's perception of the brand and is the sum total of impressions that consumers receive from many sources (Nandan 2004). Brand image is constituted by an association network (John et al. 2006) and associations help build the brand meaning in the mind of the consumer (Keller 2008).

Brand equity is build when *"the consumer has a high level of awareness and familiarity with the brand and holds some strong, favourable, and unique brand associations in memory"* (Keller 2008, p.53). Brand symbols activate the existing network easier if they are meaningful and familiar to the consumer because they are stronger linked in the semantic and/or phonemic network (Collin & Loftus 1975).

The association network identifies the brand's uniqueness and value to consumers, and suggests ways that the brand's equity can be leveraged in the marketplace (Aaker 1997) by identifying the brand's associative uniqueness (Aaker 1996 in: John et al. 2006) the numbers of associations connected to the brand (Krishnan 1996) and the strength of links between the brand and brand associations (Keller 2008). The associative meaning is particularly relevant for understanding consumer's perception of brands (Keller 2008, Krishnan 1996). Existing (mature) brands have an almost endless network of associations which has grown through time (Krishnan 1996) and forms the consumer's knowledge of the brand.

Brand meaning is in this paper defined as the associative meaning related to the particular brand. Based brand meaning, the consumer form (future) expectations to the brand (Arnould et al. 2004).

2.3.1 Brands Personalities

Plummer (1985 in: Diamantopoulos et al. 2004) suggests that brand image consists of three features: Physical attributes, functional characteristics and characterization. The latter was termed brand personality and could be human traits such as "youthful" (ibid.). By associating brands with people, companies can be described and discussed through a metaphor of human personality to personify the brand (Aaker 1997).

Brand personality is a concept that has been conceptualized in many ways and basically describes the personalization of a brand; how it acts, looks, communicates, beliefs, etc. from consumers' perspective (Smit et al. In: Hansen & Christensen 2003). A brand's personality can evoke associations and feelings and hence be an important motivator of consumer response (Biel 1993 in: Burke 2004) and create emotional relationships with the brand (Smit et al. In: Hansen & Christensen 2003). It can be drawn indirectly from graphic identity, communication style, behaviour, etc. (ibid.) and also more directly from people associated with the brand e.g. through endorsement. A study has shown that consumers can easily associate a brand with celebrities or famous historical figures and to one's own self (Rook 1985 & Fournier 1994 In: Aaker 1997). "*Brand personality can help create a set of unique and favourable associations in consumer memory and thus build and enhance brand equity.*" (Diamantopoulos et al. 2004, p.129).

Two perspectives seem to be present; a corporate and a consumer perspective (Smit et al. In: Hansen & Christensen 2003). Jennifer Aaker (1997) defines brand personality from the consumer perspective as *"the set of human characteristics associated with a brand, which makes it unique, compared to other brands"* (p.347). From a corporate perspective a distinct developed brand personality can be used to sharpen the brand perception through a clearer differentiation and communication (Diamantopoulos et al. 2004), increased brand preference and maybe in the end enhance trust and brand loyalty (Brakus et al. 2009 in: Müller & Kirchgeorg 2011).

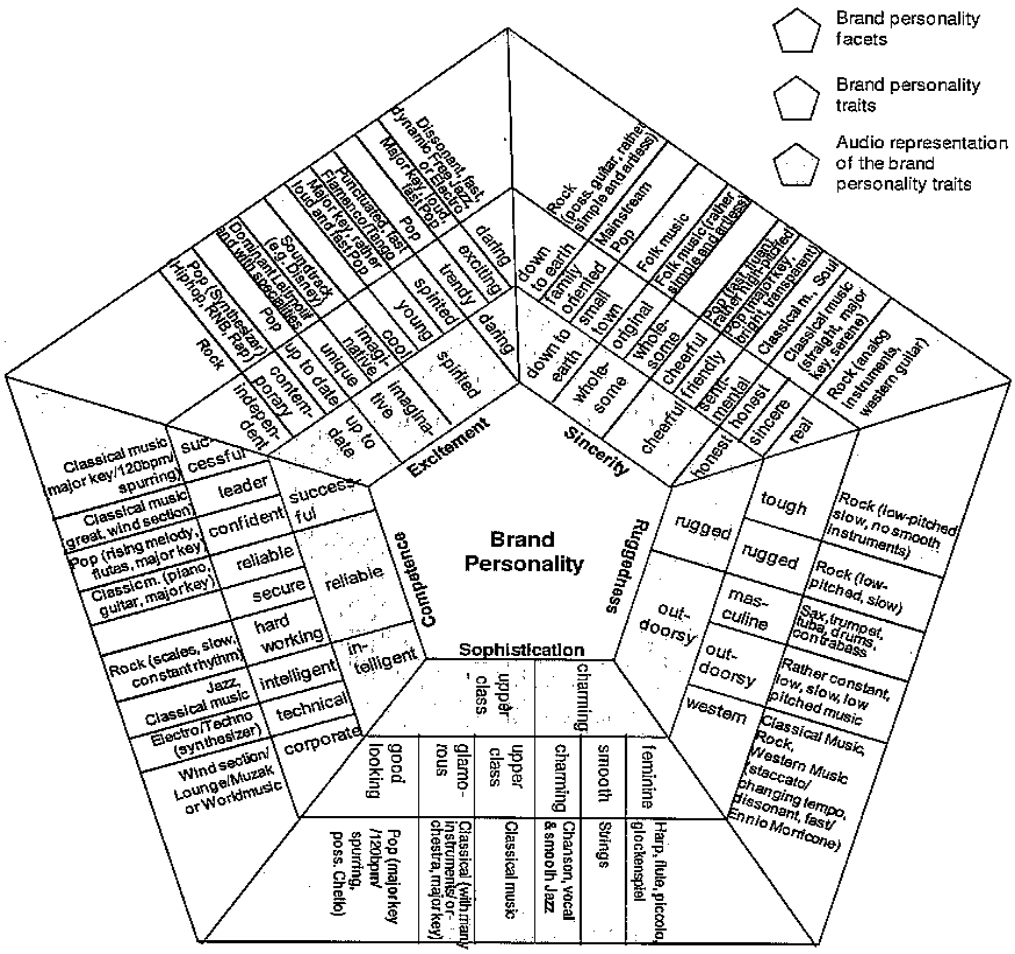
Aaker (1997) has found five brand personality dimensions: Sincerity, Excitement, Competence, Sophistication and Ruggedness. The procedure was in six steps: First, she collected personality characteristics from psychology, from brand practitioners and performed a free association task with a total of 309 items. Then she reduced the items to 114 by asking respondents to judge how descriptive the 309 items were on a 7-point scale. Third, 37 brands were rated on the 114 items which showed the five personality dimensions through factor analyses. Then, for every factor a new factor analysis was completed resulting in the 15 "facets". The facets were split into three clusters to select the item with highest item-to-total correlation which resulted in the list of 42 items. As a fifth step the item list was tested on 20 different brands which confirmed the results. She also tested the framework in countries of Spain and Japan (Aaker et al. 2001) and found that some dimensions (Ruggedness, Passion, Peaceful) are culture-specific and that some dimensions seem to be stable across cultures, however with different sub categories and traits.

This paper uses attributes from Aaker's framework the five brand personality dimensions (1997) as framework to measure brand meaning. The dimensions of brand personality can give

a multi-dimensional assessment of meaning of brand and visual logos. In the next paragraph I will elaborate on the framework's application on the audio modality.

2.3.2 Audio Brand Personalities

Attempts have been made to link music and brand personalities. Through literature review and expert opinions Müller and Kirchgeorg (2010) have compiled an *audible* brand personality communication framework that seeks to convert the brand personality traits into musical characteristics of genre, instruments, tempo and pitch and match existing studies' results with Aaker's brand personalities.



Audio branding personality communication framework (Müller & Kirchgeorg 2010, p.197)

It strikes me that Müller and Krichgeorg have not made clear distinctions between genres, instruments, and music metrics (pitch, volume, tempo, and tonalities)[7]. The thought of

[7] E.g. have music genres not been specified: "Classical music", which has been used for several different traits in the framework, can give associations to an endless amount of things depending on if it is music like Beethoven or

expressing different attributes with sound has been present for years, which the literature review testifies; however, they explicit describe no guidelines to secure a certain level of research quality in what they find. I am personally sceptic when it comes to basic metrics or characteristics are sought to be translated to (abstract) associations. Associations are based on the persons' social background, personal experiences and beliefs (Arnould et al. 2004) and can vary or change depending on the stimuli that activate the association network. It is doubtable if this framework is solid enough to stand a back-translation. Many cases of sound branding indicate the same approach of "translating" attributes to sound and musical expressions but one cannot expect that a framework such as this will function as universal guidelines. For example "*Rather constant, low, slow, low pitched music*" cannot be expected always to elicit associations to the attribute of "out-doorsy" (see picture above). Sound expressions are "multi-dimensional" spaces and cannot be reduced to less. A skilled musician can easily make a tuba, which is mapped in the framework as "masculine", to sound "feminine" by manipulating expressive elements such as pitch or tonality. Maybe even the played tune alone can make the tuba sound feminine.

Müller & Kirchgeorg (2010) take on the same approach as Henderson & Cote and Palgat (2009), however it does not seem to give a satisfying understanding of the elements they deconstruct – the objects are simply too complex (no matter the modality). The audio branding personality experiment has despite the critique great value as it collects the prior attempts in literature. Most importantly, the experiment shows that sound branding experts agree that different dimensions of attributes can be expressed auditory.

Another study on brand personalities and music congruency is conducted by Burke (2004). She has tested music congruity and the effects of ad claim based on the five brand personality dimension. Subjects heard five audio ads that included music with each treatment group hearing one ad for each brand personality dimension. Her results show that consumers can create meaning of suggested brand personality characteristics in advertising music and that schema congruity (fit between music and ad claim) does affect consumer responses (Burke 2004). Based in the schema theory, she predicts that people have similar musical schemas that lead to consistent conclusions across individuals about the music's characteristics. She showed that respondents did possess the ability to distinguish a discernable characteristic from each musical selection, and that they had distinct opinions on which characteristics were not well suggested by the music (ibid., p.34).

Debussy, if is it a trio or symphony orchestra (and which instruments?) and so on. The same point was raised by Bruner (1990).

Understanding sound logos relation to the brand seems to lie in the consumer perception of the total impression of brand. The studies of Aaker's brand personality attributes as semantic indicators of auditory expressions suggest that the framework is capable of capturing the subjective perceptions of brand meaning from sound stimuli and the auditory expression of sound logos. Attributes from Aaker's brand personality dimensions can thus also be applied in on sound logos in this study.

2.4 MEASURING BRAND CONSTRUCTS

In a consumer based brand management perspective, the power of brands lies with the consumers (Keller 2008). The concept of Consumer Based Brand Equity has been examined from strategic (Keller 2008, Aaker & McLoughlin 2007) and theoretical perspectives (De Pelsmacker et al. 2007). Consumers' brand knowledge is build from what they have learned, seen and heard through brand experiences over time (Keller 2008). This experience forms a partnership between the brand and the consumer (De Pelsmacker et al. 2007, Schmitt 1999) which may develop into brand loyalty.

Brand meaning is conveyed through different brand symbols such as brand name (Keller 2008, Robertson 1989), brand mark (visual logo) (Henderson and Cote 1998, Robertson 1989), and sounds (Kilian in: Bronner & Hirt 2010, Graakjær & Jantzen 2009). These elements contribute to build brand equity through descriptive and persuasive meaning. The descriptive meaning determines brand awareness and salience (e.g. through defining Point-of-Parity and Point-of-Differentiation), while persuasive meaning determines brand image and positioning (Keller 2008).

According to Keller (2008) brand elements are measured on the success criteria (p.140f):

- *Memorability*: Easily recognizable and recalled
- *Meaningfulness*: Descriptive and persuasive content
- *Likeability*: fun and interesting, rich visual and verbal imagery, aesthetically pleasing
- *Transferability*: within and across product categories, across geographic boundaries and cultures
- *Adaptability*: Flexible and updateable
- *Protectability*: Legally and competitively

The first three criteria form the *offensive* strategy while the latter three form the *defensive* (ibid.). Meaning should according to Keller, be created into two ways; "*as general information about the nature of the product category*" (Keller 2008, p.141), and "*as specific information about particular*

attributes and benefits of the brand" (ibid.). If the element, e.g. the visual logo, is clearly understood it may be more easily linked to the brand or product (Hem & Iversen 2004).

Results of the first study support a relationship between structural characteristics of the brand name (e.g., front vs. back vowels) and the brand mark's size, shape, and color. The second study found that brands with marks that are consistent in design with the brand name better communicate intended brand meaning. An important implication is that a properly operationalized brand may require fewer marketing expenditures to create brand image.

Henderson and Cote assume that constructs such as e.g. (logo) recognition, affect, and meaning are not solely built through media exposure but are partly inherent part of the logos design. They have conducted empirical analysis of 195 logos and calibrated 13 design characteristics to form "Guidelines for Selecting or Modifying logos" (1998). According to Henderson and Cote following important factors qualify a good logo: Recognisability, affect, meaning, familiarity and Codability (consensus evoked meaning). In terms of meaning, they suggests that if the logo has clear meaning it can be linked more easily to the company or product (ibid.). Their study has the same purpose as Iancu (2009) and Palghat (2008) to make general design guidelines, or as Müller and Kirchgeorg (2010) to make general execution guidelines, and they do not engage in a discussion of how marketing efforts or different brand contexts influence these logo qualities and dimensions. Henderson, Cote and Keller both mention recognition, likeability, affect and meaningfulness as success criteria for visual logos (and brand elements in general).

Logos should (at least) be *recognizable*, *elicit consensually held meaning*, and *evoke positive affect* (likeability)(Hem & Iversen 2004, Keller 2008, Henderson & Cote 1998) to (successfully) support the brand meaning. Using the constructs mentioned in both studies, this study will measure likeability, recognition and affect and test how they influence consumers' perceived general fit. Meaningfulness will be measured as logo meaning and brand meaning on the brand personality attributes.

Additionally, constructs of brand knowledge and attitude will be included in this test. Below follows a discussion of the individual constructs, starting with brand knowledge and brand attitude.

2.4.1 Measuring brand knowledge and brand attitude

Brand knowledge is consumers' accumulated knowledge of the brand on the base of what they have learned, felt, heard, seen and experienced over time (Keller 2008). Brand knowledge consists of two components: Brand awareness and brand image (Percy & Elliott 2009). Brand awareness relates to the strength of the brand in the consumer's memory; the better recall and recognition, the stronger brand awareness (Krishnan 1996, Keller 2008).

Consumers' evaluations of brands are immediately reconstructed based on their existing brand knowledge when they are exposed to cues linked to the brand in their mind (Hansen & Christensen 2003). Knowing the brand may influence the perception and evaluation of an object, in a beer-tasting experiment by Larry Percy (in: Keller 2008, p.50 and Hansen & Christensen 2003, p.21), consumers detected large differences in taste when the brand names were given. Consumers could detect little if any difference in taste when the brand name was hidden. When the brand knowledge got activated and people related the taste to their perception of the brand, the brand influenced the perception of taste.

Lange and Dahlén (2003) studied brand-ad information congruency and found a difference in results between familiar and unfamiliar brands for brand memory. For familiar brands, ad memorability was higher for information congruency ads than incongruent ads whereas there was no difference for unfamiliar brands. They explain that incongruent information to a known brand as not fitting the consumers "brand schema", which influence their ad recall. However, for unfamiliar brands they argued that no "brand schema" is established, which makes an incongruent ad harder to remember. Focusing on brand memorability, the results also showed that incongruent ad made familiar brands easier to remember. They explain the difference with that incongruent information makes consumer process the information more carefully (ibid.). The study shows different results for familiar and unfamiliar brands when testing a "fit" between brand and information.

Alba (1983) found that prior knowledge accounted for large difference in product recall. She argues that consumer with high knowledge individuals will not only recall more total information about the product but also more sophisticated and perhaps more important information. Peracchio and Tybout (1996) studied elaborate knowledge and through schema-theory argues that elaborate knowledge includes a variety of easily accessible subcategories that can be activated if the information is not elaborate enough.

Consistent with these findings, Mary Wagner (2008) found that existing product knowledge also has significant effects on both attitude towards the brand and attitude towards the advertisements, in her study of fit between brand, music and advertisement. The analysis indicated a significant 3-way interaction between product knowledge, music-brand congruity, and cognitive load[8] on attitude toward the advertisement. Participants with high product knowledge rated the brand higher than participants with low product knowledge and same results were produced with attitude towards the advertisement (Wagner 2008). Wager argues that her results could have been influenced by the type of music chosen for the study.

Brand knowledge in Keller's consumer-based brand equity is conceptualized according to the association network theory (Keller 1993). The stronger and bigger the network is the more the consumer know about the brand (Krishnan 1996). Conversely, less brand knowledge produce a smaller association network, which may be easier to influence and develop. Keller (1993) argues that brand knowledge should be based on strong, unique and favourable brand associations, which makes brand knowledge and attitude closely connected as constructs; assessment of knowledge is a process of judgment where humans evaluate their knowledge and forms attitudes towards a given subject (Arnould et al. 2004). Brand equity is the result of positive brand attitude (Percy in: Hansen & Christensen 2003) and a positive brand attitude influences the perception of the brand positively (De Pelsmacker 2007).

Having high brand knowledge may influence evaluation of other brand elements and the perception of fit between them. A strong attitude towards the brand may also be harder to influence in the perceived general fit.

H2: Brand knowledge influence perceived general fit

H3: Brand attitude influence perceived general fit

2.4.2 Measuring likeability and recognition

The brand element success factors recognition and likeability is often evaluated as a result of a high/low fit. Research on recognition and likeability in relation to a "musical fit" has been carried out in advertisement contexts where recall and recognition is measured on elements such as ad message, voice and products. No such studies have been found carried out on sound logos in a brand context why I will draw on studies related to music marketing.

[8] Cognitive load is the defined as the cognitive resources available to process information (Wagner 2008).

Kellaris et al. (1993) found that when using "attention-gaining" music in advertising both brand name and message recall were enhanced when music-message congruency was high. No effect was found for low music-message congruency. They found that when congruency is low, attention-gaining music seems to be a distraction from ad processing. Likewise, North et al. (2004) also found that musical fit was able to promote recall the specific brands and classes of products in advertisement. Indications were also found that the musical fit enhanced participants' ratings of liking for the ad and likelihood of purchasing the advertised product.

Effect on brand and product recall has been found in an advertising context, however no studies focusing on *recognition* relation to branding have been found. Music seems to support the recall of advertising message when musical fit is high because music can prime relevant beliefs about the brand or product because activates the relevant information (North et al. 2004). When a logo is recognized it has already been linked and activated in the association network and association links to the brand have been formed (Krishnan 1996) – although the links may be loose and weak. The effect presumably also occur reversed; when a sound logo is recognized it is perceived to be better fitting with the brand because the associated (existing) brand knowledge primes the perception of the sound being linked to the brand. Being able to recognize the sound logo should ease processing and positively influence affective judgment, which may promote a higher perceived fit between sound logo and brand.

North et al. (2004) found that not only did a high music-voice fit support recall of the advertising message the music-voice fit also increased liking for the ad through the increased activation of related cognitive constructs. They discuss that for high-involvement listeners such fit may increases the salience of certain brand attributes and for low-involvement listeners it increases their liking for the advert. Among other findings Burke (2004) proved that evaluations of the advertising music itself showed that attitude toward the music was positively related to its congruity with the personality-based positioning of the brand (Ibid.). Relating, likeability of the sound logo may influence the brand meaning.

The constructs of likeability and recognition may be closely related. As music listeners, we are conservative: We like the music that we already know. The Mere exposure effect (formulated by Zajonc in 1968) has been tested widely in literature (e.g. see Peretz et al. 1998 for overview). Repeated repetitions improve recognition while having (positive) impact on affect judgments (ibid.). The repeated exposure of a stimulus leads to increased ease of processing, which in turn is attributed to pleasantness and liking (Griffith & Mitchell 2008).

The mere exposure effect takes place without conscious cognition and it is argued that as affective responses to stimuli occur faster than cognitive responses these responses are often made with much more confidence. The effect is found as being related to implicit memory[9] e.g. by Griffith & Mitchell (2008) that confirmed the effect by studying the negative priming and found that it reduced affective ratings. Mere exposure effects on affect judgments have been found in with odors as well as with different kind of music and with random tone sequences (see Peretz et al. 1998 for overview). The sense of pleasantness may additionally influence positive rating of perceived general fit.

Bruner (1990) calls for research that takes into account the liking the music as a moderator and it may be that liking of music influence the perception of fit. Because sound and music affects humans emotionally, liking or disliking a sound logo may prime the respondent to evaluate other elements or theoretical construct accordingly. Additional Bruner argues that sound familiarity may also influence results and that studies should control for familiarity by measure it as a possible predictor or moderator variable. As a minimum, he argues, familiarity should be included in pretesting to indicate if the music used in the actual test is unfamiliar/ familiar to listeners. Agreeing with Bruner, following hypotheses are thus proposed:

H4: Likeability influence perceived general fit

H5: Recognition influence the perceived general fit

2.4.3 Measuring affect

Most have felt on their own body how music can evoke emotions and feelings. Baumgartner et al. (2006) found that congruent presentations of emotional visual and -musical stimuli could automatically evoke strong emotional affects (and emotional experiences). It has also been shown that, in everyday life, music is predominantly by listeners used for mood and emotion regulation (Zentner 2008).

There seems to be a consensus that music in advertising enriches the key message and may be one of the most stimulating components in a commercial (e.g. Hecker 1984, Graakjær 2009). "*The "messages" of music are more affective than cognitive, for example calm or sedate music decreased subjects' anxiety, and the structural elements of music such as major (happy) and minor (sad) modes influenced the listener's feelings.*" (Morris & Boone 1998, p.518).

[9] "*Implicit memory refers to the behavioral changes that are attributable to a prior episode with an item and that cannot be accounted for by explicit memory for that event. Typically, implicit memory is revealed by tasks that do not require intentional or conscious recollection of events (Schacter, 1987).*" (Griffith & Mitchell 2008, p.885f)

Russell (1980) has found two dimensions on which emotions related to music can be measured. Valence refers to felt pleasant-unpleasant emotions, while activation-deactivation refers to arousal (of bodily activation). The *Core Affect* has been widely used in the field of music and emotions and constitute "*the basic affective qualities of any emotional experience, always present (even in a neutral emotional state or reaction), and cognitively accessible at any given moment.*" (Västfjäll & Gärling 2007, p.233).

Zentner et al. (2008) have developed a list of music-relevant emotion terms that accounts for music-elicited emotions. Different lists of descriptive terms can be used, the Geneva Emotional Musical Scale (GEMS)-9 consists of the terms; Wonder, transcendence, power, tenderness, nostalgia, peacefulness, joyful activation, sadness and tension. Also a GEMS-25 and -45 exists. Some of the terms in the lists can also be found in the brand personality dimension attribute set (Aaker 1997). Using PAD scales Morris and Boone (1998) found music may not always "*significantly change pleasure, arousal, dominance, brand attitude, or purchase intent in an emotional advertising condition, but it can change how the viewer feels when watching the advertisement*" (p. 23). MacInnis and Park (1991) found little or no effect on emotional response in their study, which they partly explained by a poor fit between the advertisement and the background music (Morris & Boone 1998).

Although music has been proved to affect humans little evidence has been found that also short pieces of sound such as sound logo evokes emotional affects. A study by Ramsgaard (2009) argues that emotions evoked by sound logos can be measured by using the GEMS (Zentner et al. 2008) and Core affect scales (Russell 2003). A high affect on activation or pleasure may positively prime the respondent perception of general fit. Affects elicited by sound logos may have an important influence on perceived general fit.

H6: Affect influence perceived general fit between the sound logo and brand

3 HYPOTHESES

In the theoretical framework different constructs and theories related to brand and sound branding were discussed. This paragraph will sum up the hypothesis proposed in the theoretical framework.

The objective is to study how different constructs influence a perceived general fit between sound logo and brand in the modalities of audio, visual and audio-visual, and further study how the meaning of sound logo and brand fit correspondingly.

A distinction between sound and music was made and cross modal correspondence between sound and brand was discussed. Then, a discussion of fit followed resulting in two ways to analyze fit; one dimensional construction perceived general fit and a multi-dimensional attribute fit. Brand meaning was discussed using brand personality as a metaphor for describing the brand's meaning. The framework of brand personality dimensions was elaborated as a way to measure brand meaning and further applied to the sound branding context. The success criteria of brand elements were then found and constructs of affect, likeability, recognition were chosen for the test along with brand knowledge and brand attitude.

To sum up on the theoretical framework, the test will study the predictability on perceived general fit from the constructs:

- brand knowledge (brand knowledge and brand usage)
- brand attitude (brand importance and brand likeability)
- likeability (logo liking)
- recognisability (logo familiarity and recognition)
- affect (logo pleasure and activation)

on consumer's perceived fit between sound logo and brand. Further, brand personality attributes will measure the multidimensional understanding of attribute fit and be compared to perceived general fit.

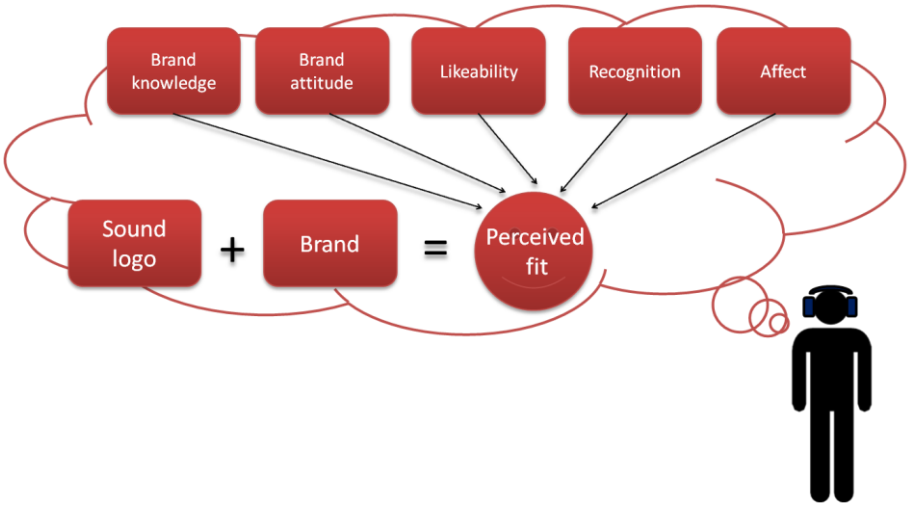


Figure 3a: Model of hypothesis

The six hypotheses from the theoretical framework are:

H1: The higher the perceived general fit the fewer the differences between brand personality attributes.

H2: Brand knowledge influence perceived general fit

H3: Brand attitude influence perceived general fit

H4: Likeability influence perceived general fit

H5: Recognition influence the perceived general fit

H6: Affect influence perceived general fit

4 METHOD

Analyzing sound logos as brand elements instead of pieces of music has consequences for the research method. The study has an inductive approach where the empirical knowledge from observations gives way for developing general principles about a certain subject (Hair et al. 2009). As this is a relatively new field of research the study also has an explorative element where new correlations and investigation are formulated. The study design is presented in the next paragraph but first some methodological implications are discussed.

To sum up, viewing sound logos as pieces of sound and not as music delimitates discussions of musical style and respondent's preferences as in e.g. Zander (2006). Also, I find it of little interest to break down sound logos to various musical metrics as in the methods to those of Palgat (2009) who studied sound logos compositions to find the best type of sound logo. That would imply a very limited selection of musical attributes or characteristics as being the dominating perceptual elements of the tested sound logos. Such an approach would force me to ignore the fact that many sound logos make use of sound effects or recorded real sounds. That would exclude sound logos from the study that some companies are in fact using today.

4.1 LEVELS OF ANALYTICAL CONTEXT

Sound logos can be strategic tools that are able to auditory *distinguish the company from possible competitors* by *generating an auditory identity*. To successfully achieve this, sound logos as brand elements must be: *Memorable, Meaningfulness, Likeable, Transferable, Adaptable*, and *Protectable* in the mind of the consumer in order to contribute to build brand equity (Keller 2008 p.140).

Whether these success criteria are reached through focus on marketing communication or on the construction of the element itself seems to be under debate in the literature. Henderson & Cote (1998), for example, attempts to make an overall design guideline for visual logos on the assumption that logo recognition, affect, and meaning is not something that is (solely) build through exposure and communication efforts. They do not engage in the discussion of how e.g. exposure influences these constructs or how different elements interact. Instead the criteria of success are seen as an inherently part of the logos design.

The focus on sound logos has primarily been from the same position as Henderson & Cote (1998). The title of Palgat's study *"Hearing, Remembering, and Branding: Guidelines for Creating Sonic Logos"* (2009) and Iancu et al.'s *"Tune Your Brand In. The Perfect Jingle Mix"* (2009) illustrates the approach of finding general (objective) guidelines of how to compose the most optimal sound logo. Both papers focus on finding an effect (mainly preference and recognition) as a function of varying musical metrics like numbers of tones, pitch, melodic structure etc.; much like Henderson & Cote's approach to visual logos. Palgat and Iancu et al. shows that it is very reasonable to think that different designs (compositions) of sound logos hold different auditory expressions – similar to Henderson & Cote's detection of e.g. different expressions in shapes. They too do not engage in the discussion of how context, and sound logo's the interaction with other brand elements, influence the perception.

Recent papers have focused on sound logos relation to different brand elements or brand evaluation criteria. An exploratory study studies the sound logos' fit with a brand's tagline on emotional variables (Ramsgaard 2009). The emotional scales GEMS-9 (Zentner et al. 2008) and Core affect (Russell 1980, 2003) give the most satisfying result in profiling sound logos emotionally. The objective of the study is a preliminary validation of a selection of methods applied in performing emotional profiling of sound logos (Ramsgaard 2009). Sound logos have also been studied in relation to brand memory (Venkatamaran 2007). The thesis examines the effect of sound on recognition and cued recall. The findings suggest that brand recognition is more sensitive for ads with non-sonic style logo included in comparison with ads with a sonic style logo included. Sound logos influence on brand perception has been studied by Feitsma (2011). The study applies a full brand personality dimension study (cf. Aaker 1997) and finds Dutch brand personality dimensions that can be applied on both sound and brand. Such cross-modal studies suggest that cross-modal correspondence change consumer's perception in contrast to presenting the stimuli alone.

Graakjær (2010) delimits musicological analyses of the music itself in his research of music in advertising. The object of analyses may be different but the approach illustrates the opposite view. Here, it is the use of the element that is of interest. Graakjær argues that music in advertising should be analyzed from two other perspectives; from a so called *co-text* with other interacting element and from a broader *context*. The *co-text* is when music is listened to "within" the commercial. *Co-text* analytical focus is on the aspects of the music's internal performance and interplay with other dimensions of expression and interacting elements (p.101). In a branding context that could be an element's (cross modal) interaction with other brand elements.

The *context* is from where music is listened to from "outside" the commercial and the aspects of the music's (external) "fundament of existing" ("livsgrundlag") is in focus (p.15). In a branding context this could be the perception of the corporate brand's position in the market space from a consumer perspective or how sound branding can be used to position the company in the market space from a managerial perspective.

Three levels of analytical context of sound logos is found; the inherent meaning (isolated analyses of the element), a sort of "within the brand" *co-text* (the interaction with other elements), and the brand *context* (the brand in market space).

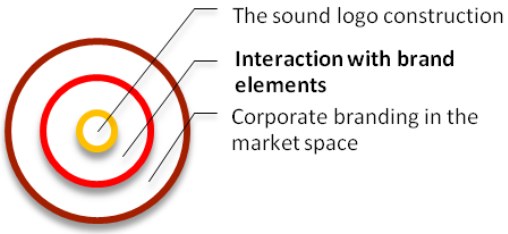


Figure 1: Levels of meaning creation of sound logos

It is neither the objective of the thesis to seek general rules or guidelines for composing the "optimal" sound logo nor to define brands' brand strategy and sound brand strategy and/or positioning in the market space based on the analyzed sound logos. Instead this paper analyses sound logos' cross modal interaction with other brand elements by focusing on how sound logo, visual logo and the combination "fits" consumers' perception of the brand. The three analytical levels are of course closely interacting hence the study's results will be discussed in relation to the sound logos' construction and to the brand context in the end of the paper.

4.2 STUDY DESIGN

Little has been written on sound logos' influence on, or interaction with, brand image. Cheskin Research and Beatnik Inc. did a study in 1999 on "*Impact of sound on the web*" (Cheskin 1999) but very little data and information about the study is provided in the published material. The published material, however, serves as an inspiration for the design.

In the study sound, visual and a combination of sound and visual is investigated; the setup is testing three brands on the three types of stimuli (sound logo, brand logo, or brand logo with sound) presented to the respondents via a computer screen. Each modality (audio, visual or audiovisual) consisted of the same series of tests and utilized the same question structure. Brands were presented one at a time and after each brand was shown, respondents answered questions about Recognition and Identification and Imagery Communication (Cheskin 1999). Identifying *Recognition and identification* two questions of recognition of object and its brand representation were asked. In identifying *Imagery communication* Cheskin Research uses a list of 11 attributes that are rated by respondent allocated on the three modalities.

Cheskin Research use three existing brands Intel, NBC and Headspace but they did not take into account the subjects' knowledge or attitude towards the brand. If subjects have little knowledge of the logo presented they are naturally unable to identify it. Additionally, when asked to valence rate different attributes assigned to e.g. the combination of sound logo and visual logo, the attitude towards the brand might influence the answers. A very negative attitude towards the overall brand may affect the valence rating of the sound logo in combination with the visual logo negatively. This may also influence the perception of fit.

Studying perceived fit cross-modally between sound logo, visual logo and brand, the setup has one group for each modality; 1) audio 2) visual 3) audio-visual combination, which is also the setup for Cheskin Research study (1999). The setup will be a three-by-three experiment with between-subject manipulations (Haslam & McGarty, 2003). A between subject design will always seek to analyze across respondents instead of analyze e.g. the effect of a stimuli on the individual respondent.

The combination of brand, respondent group and modalities are illustrated below:

	Respondent group 1a	**Respondent group 2a**	**Respondent group 3a**
Brand 1	Audio	Visual	AudioVisual
Brand 2	Visual	AudioVisual	Audio
Brand 3	AudioVisual	Audio	Visual
	Respondent group 1b	**Respondent group 2b**	**Respondent group 3b**
Brand 4	Audio	Visual	AudioVisual
Brand 5	Visual	AudioVisual	Audio
Brand 6	AudioVisual	Audio	Visual

4.2.1 Stimuli

I will first describe how stimuli in the three modalities are presented in the questionnaire. Depending on question and modality, respondents are exposed to different stimuli. Below is the model of the questionnaire flow.

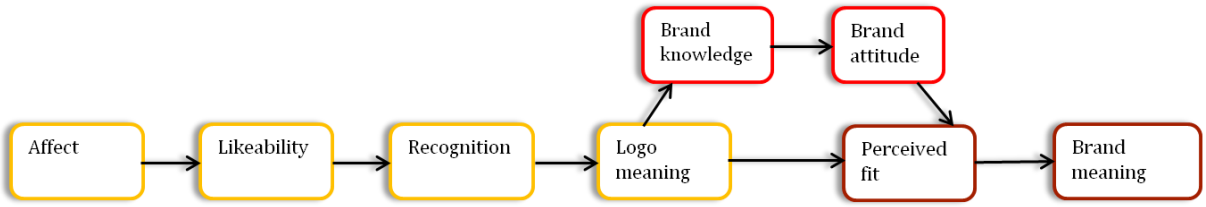


Figure 4: Flow of questionnaire

In the audio modality, the respondents are exposed only to the sound logo in the questions of affect, likeability, recognition, logo meaning. Asking to brand knowledge and brand attitude the name of the company is mentioned but no logos are shown. When asking about perceived general fit and brand meaning both the sound logo and visual logo are exposed.

In the visual modality, the respondents are exposed only to the visual logo in the questions of affect, likeability, recognition and logo meaning. Asking to brand knowledge and brand attitude the name of the company is revealed. When asking about the perceived fit and brand meaning the sound logo is also exposed along with a text reminding them to listen to the sound logo.

In the audiovisual modality, the respondents are exposed to both sound logo and visual logo in the questions of affect, likeability, recognition and logo meaning. Asking to brand knowledge and brand attitude the name of the company is revealed. When asking about the perceived fit and brand meaning no additional stimuli is added.

4.2.2 The constructs

Below I will describe each construct. The questionnaire can be found in Appendix A: Questionnaire.

Affect measures the affect of logos on a 7-point Likert type scale describing pleasure (Sad, Depressed Displeased / Glad, Happy, Pleased) and arousal (Dull, Passive, Sleepy/ Peppy, Active, Awake) (Russell 2003). A Danish translation of the scale was conducted by consulting the Swedish scale developed by Västfjäll & Gjärling (2007) and back translated. Only the logo is exposed to the respondent for this question.

Likeability measures how the respondent likes the logo on a 7-point Likert type scale.

Recognition measures how the respondent recognizes the logo by asking to familiarity and recognition (Henderson & Cote 1998, Hem & Iversen 2004) on the same 7-point Likert type scale is used.

Brand knowledge measures how well the respondent knows the brand in terms of knowledge and usage.

Brand attitude measures brand importance and brand likeability. Both constructs are measured on the 7-point Likert type scale and presented on the same "screen" in the questionnaire.

Logo meaning measures the logos are meaningfully perceived. Logo meaning is rated on an attribute list containing 18 attributes on a 7-point Likert type scale. The attributes consist of personality traits selected from Aaker's brand personality dimensions and related cross-cultural studies (Aaker 1997, Aaker et al. 2001, Huber et al. 2000, Ferrandi et al. 1999 and Supphellen & Grønhaug 2003). The selection method is explained in the next paragraph.

Logo meaning measures only how the respondents evaluate the logo without being exposed to information about the brand name. The attribute list is divided into five screens exposing the respondent for 6 traits at the time. The division is necessary to ease the flow by avoiding scrolling. For each 6 traits the respondent can listen to sound logo by clicking on the "Play". As sound logos are short it is important that the respondent has directed his or hers attention to the

sound and not caught by surprise when playing the sound. To elicit as an intuitive response as possible the sound is only played once[10]. This is clearly described in the survey instructions.

Brand meaning is measured on the same list of brand personality attributes with the question related to the total brand perception. Sound logo, visual logo and brand name are exposed to the respondent. To minimize carry-over effects (Hair et al. 2009), from the logo meaning, three questions (with total of seven measurement scales) are placed between the two attribute lists. Moreover, the order of attributes presented is randomized.

Perceived general fit measures how the respondents perceive sound logo, visual logo or combination fits to his/hers perception of the brand on a 7-point Likert type scale. The respondents are exposed to the sound logo, visual logo and the brand name.

4.2.3 The attribute list for Brand Personality traits

The study uses Aaker's brand personality attributes to describe the sound meaning construct and brand meaning based on the same the general idea of Burke (2004) and Müller and Kirchgeorg (2010) who relates brand personality traits with musical abilities and expressions.

The framework is an American study and it has later been argued that the five dimensions do not carrying universal but specific cultural meaning (Aaker et al. 2001). Cultural specific versions of the personality dimensions have been found in Europe: German (Huber et al. 2000, Bosnjak & Hufschmidt 2007); Spanish (Aaker et al. 2001); French (Ferrandi et al. 1999); as well as in Japan (Aaker et al. 2001) and Russia (Supphellen & Grønhaug 2003).

The cultural specific brand personality dimensions clearly show differences between countries in Europe albeit the difficulties of comparing the results directly as the studies are not carried out consistently. No study of Scandinavian personality dimensions has been found why a new set of personality traits was compiled for this experiment. To make as robust and reliable an attribute list as possible for Denmark, within the scope of a thesis, personality traits from all three European sets was compared. Moreover, comparisons with Russian and Japanese traits were conducted if in doubt.

With starting point in the original American set of personality traits, two traits were selected from each original dimensional sub category (see Aaker 1997). The culturally overlapping dimensions Sincerity, Excitement and Sophistication are used. The dimension of Competence

[10] If the survey gave the possibility to play the sound unlimited times respondents would in situations of doubt listen to the sound many times, which will make them process the sound logo consciously.

and Peacefulness are added as they are shared by two European countries. The selection criteria for personality traits were:

1. High loading in the factor analysis for all European countries
2. Traits make intuitive sense in a Danish culture context

The dimension of *Ruggedness* was taken out as it was not found in either the Spanish, German or Japanese sets - nor do Diamantopoulos et al use it in their study. "Ruggedness" does not intuitively seem to make sense in a Danish context either. Instead, the traits g*entle* and *peaceful* from the Japanese and Spanish the dimension of *Peacefulness;* and the traits *passionate* and *temperamental* from the Spanish dimension of *Passion* were added to make as broad a representation of European dimensions as possible. In total 30 personality traits in six dimensions is selected for the attribute list in the experiment:

1. *Sincerity*: Down-to-earth, provincial, honest, sincere, original, authentic, cheerful, friendly
2. *Excitement*: Exciting, daring, young, cool, imaginative, unique, contemporary, independent
3. *Competence*: Reliable, secure, intelligent, technical, confident, successful,
4. *Sophistication*: Glamorous, elegant, charming, smooth
5. *Passion*: Passionate, temperamental
6. *Peaceful*: Gentle, peaceful

In a pre-test (n=186, snowball sampling) the traits were measured on a 9 point scale (from "not at all" to "very much") in a randomized order. With caution (due to the small sampling group) the pre-test shows indications of correlations with 15 of the 30 personality traits. The Principal Component Analysis showed that Aaker's dimensions of Competence and Sincerity were not replicated in this test. The result is not surprising as the various country sets are very different and produced in combination with sound stimulus to test the application of brand personality dimensions on sound.

As the attribute set from the pre-test reduces the attribute set for the final study to 15 attributes. In order to stay true to the original set of five personality dimensions, three extra attributes are added; one to underpin Peaceful and two to underpin Competence; *peaceful, reliable* and *technical*. The total 18 attributes for the final study are:

1. *Sincerity*: Down-to-earth, honest, friendly

2. *Excitement*: Exciting, daring, imaginative, unique, contemporary,
3. *Competence*: Reliable, secure, technical,
4. *Sophistication*: Glamorous, elegant, smooth
5. *Passion*: Passionate, temperamental
6. *Peaceful*: Gentle, peaceful

4.2.4 Selection of brands

Six brands are selected for the experiment. The selection criteria for the chosen brands are:

- Must all have a sound logo and a visual logo
- The sound logos must have been composted by music designers/composers and not by known musicians.
- The degree of exposure of the sound logo must vary
- Both well-known and less known brands must be selected

Below are descriptions of the brands and sound logos. Sound logos can be played from Appendix I: The tested sound logos.

Danske Spil is a very well-known brand in Denmark by people at all ages. It is a lottery and gaming company that used to be state founded but now competes on an open market.		**The sound logo** is very short with three tones representing "Dan-ske-Spil". It is played by piano and is high in tonality. The tones have no reverberation, background sound or chords. The corporate sound logo has been used heavily in radio and TV advertisement for more than a year.

Femina is a lifestyle magazine with both an online and printed magazine. It is targeting women primarily from 25 to 40. It's a known brand in Denmark.	FEMINA	**The sound logo** is a short melody played by an art electronic piano. The tonality is high giving the melody a simple, "lite" feeling. The melody is accompanied by chords. Their sound logo is very new, only used inconsistently in the WebTV and presumably unknown by most people.

Q8 Denmark is an international Oil and Gas company and one of the largest in Denmark.

Q8 targets both B2B and B2C and is a well-known brand among car owners, as well as non-car owners, due to their many gas station shops.

The sound logo is a melody played by guitar accompanied by bass. It has two odd sounds included, where the last falls on an off-beat. The two odd sounds sounds like driving on the corrugated edge line on a high-way or like a vibrating mobile on the table. In the end, a sound effect is added to drag the last tone.

The sound logo has recently been launched and can only be found on the website.

Danish Crown is a B2B slaughterhouse of pigs and cows plus a subsidiary food production company. Despite the fact they primarily are B2B, they are known brand by end-users/consumers because of the subsidiary food production – but presumably primarily by the older generation.

The sound logo is made by recorded real sounds and has no melody. First a sound like a slicing knife is played followed by a sound of meat sizzling (on a hot plate). It has no background sound, which makes it a bit discrete.

Their sound logo is automatically played when entering the website.

Mental Workout is a fairly unknown company producing personalized self-help programs through mobile applications. Their products are presumably directed mostly to highly educated people with stressful office jobs. They are actively using music in their products but their sound logo is expected to be unknown by respondents.

The sound logo is a short trill with a lower tone in the end. It is played by piano in light tonality and has barely noticeable sound effects of “sparks” in the background, which gives the sound a “fresh” or “crispy” feeling. The logo ends with a soft human exhale.

The logo is not exposed on their website but may be found in their applications.

Oddset is a betting game for football and is managed under the Danske Spil brand. It is a well-known brand among football enthusiasts, presumably by men between 20 and 40.

The sound logo is a short melody played on flute accompanied with guitar and maraca. The tempo is high and it is fun and childish. It has a sense of the Danish children singer-song writer from the 70’s and 80’s Poul Kjøller.

The sound logo is used in commercials and has been for more than a year.

4.3 COLLECTION OF DATA

A self-administered online survey is used, which makes it easier to meet the criteria of geographic spread and sampling size compared to personal interviews (Hair et al. 2009). Sound is an embedded part of study, and an online survey is a good way to incorporate sound as well as access a broad sample of the consumers in Denmark. According to Eurostats 86% of the Danish households have access to internet (www.eurostats.com) and according to Danmarks Statistik only 4 % of the 40-59 year old and 23% of the 60-74 year old had never used the internet this year.

In the attempt to minimize fatigue effects the modalities are randomized exposing the respondent for one audio, one visual and one audiovisual modality as explained in 4.1 Study Design – a kind between-between subject design which is also used by e.g. Aaker et al. (2001). This way the respondent is given one set of questions for audio, one for visual and one for audiovisual. This also minimizes practice effects and carry-over effects (Haslam & McGarty, 2003). Further, the presentation order of the brands and modalities is randomized to avoid *presentation-order effects*.

4.3.1 Scale measurement

The goal of the scale measurement process is to determine how to precisely measure the each construct (Hair et al. 2009). The study uses state-of-mind data which refers to "*mental attributes or emotional feelings of individuals that are not directly observable or available through some type of external source*" (ibid., p.341). As state-of-mind data only exists within the minds of people data quality and the accuracy are limited to the degree of honesty of the respondents (ibid.).

The chosen rating scales are seven point scales which gives a fine resolution in the respondent's answers. People are less likely to use the end points in a rating scale why a 7 point scale in praxis produces a more narrow range of answers (Hair et al. 2009). According to Hair et al. more scale points give opportunity for better variability in the data. Variability is an important consideration in evaluating personality traits on brands, although some researchers believe it is difficult for respondents to make a choice when there are more than seven scale points (ibid.).

An interval scale from 1-7 is used with endpoints defined as *Slet ikke* [not at all] and *Rigtig godt* [very much] to indicate distance property. The guidance is needed to make sure the scale is interpreted the same across respondents to meet the intelligibility criterion describing the degree of which respondents has understood questions and setup (ibid.).

4.3.2 Limitations in study design

Most often a brand element is presented in combination with products, visual advertisements, verbal elements, or other brand elements (Hung 2001, Barthes 1985b in: Hung 2001) and rarely sound logos are presented alone. A full integration of all brand elements in the study will be too complex and it will be impossible to take into account all factors and cross-modal correspondence that will reduce the study's reliability.

As sound logos vary greatly with different expressions and are designed with different objectives in mind, it may prove to be difficult to drawn general conclusions on the base of six brands. On the other hand, the study of six brands should be sufficient to identify the sound logos' influence on the constructs, which will give base for further studies. Note that the study by Cheskin Research (1999) was based on three brands.

Sound logos are studied in Danish setting only. This limitation is important as cross-cultural studies of affective response to music (Gregory & Varney 1996, Balkwill & Thompson 1999), music comprehension (Morrison et al. 2003) music cognition (Krumhansl et al. 2000) give evidence that music is cultural dependent and that the immediate perceptions of sounds are socially learned (Bruner 1990). The conclusions will hence only apply in a Danish context.

4.4 SAMPLING PLAN

Selecting respondents requires a careful selection of sampling group as the type of respondent can influence the results. The sampling plan ensures that the collected data are representative of the target population (Hair et al. 2009).

As sound logos are exposed to the entire Danish population through public websites, TV advertisement and radio advertisement the study uses a large target population situated in entire Denmark. The study seeks to understand the general consumer's perception hence, a nonstudent sample is used. As the study's objective is to find general assumptions across existing brands in Denmark respondents are between 15-70 years old, both males and females and from various education levels are chosen to avoid falling into a specific company target group or generation "gap". The age 17-65 is chosen because it represents different buying groups to the six brands.

Information about gender, age, level of education and place of residence were collected in order to prove the generalisability of the study. Demographic questions are placed in the end of the questionnaire. Questions of demographics can influence how respondents answer a questionnaire (Gladwell 2000). Placing demographic questions in the end, however, increases

the chance that they are not filled out by the respondents. In order to control the data collection process (Hair et al. 2009) the online survey is distributed through an internet based market research agency to ensure satisfactory demographic spread and response rate.

In a survey a satisfactory amount of respondent must be ensured to secure generalisability but limited resources must also be considered (Hair et al. 2009). External reliability is difficult to uphold with results distributed on 18 combinations (6 brands X 3 modalities). It is estimated that at least 150 people per brand are needed.

5 ANALYSES

The respondents were told that the survey was a part of a research project in collaboration between CBS but not informed about the objectives of the project. The overall session started with a short written introduction and the respondents started the questionnaire when they were ready. Between the three modality sessions a short exploratory text appeared marking a new set of questions were about to begin. Respondents were allowed to take breaks if needed between the three sessions.

The questionnaire took approximately 20-25 minutes to finish with questions for the three brands. Responses were collected over three days by the market research agency. 987 responses were collected with 48% male (mean 40.32, range 17-65, *SD*=12,093). Data for demographic spread can be found in Appendix B: Demographic Data.

The program SPSS was chosen to analyze data as it has proven a reliable, broadly accepted and used tool for statistical analysis.

5.1 ANALYSIS PROCEDURE

In the analysis procedure six steps are followed:

1. **Descriptive comparisons of brands**

The brands are first compared on the individual constructs. Mean values between the brands and across modalities are discussed and questions of possible correlations and dependent relationship between the constructs and perceived fit is raised. The descriptive data shows large variations between brands and modalities.

2. **Correlations of constructs and**

A Pearson correlation analysis on the constructs, and items within the constructs, is conducted to study how the constructs correlates (Howel 2010). Correlation analyses are made on the individual brands and modalities due to the large variations across brands and modalities.

3. Predicting factors for fit

The Pearson correlation analysis is used for a linear multivariable regression analysis with perceived general fit as the dependent variable. A linear multivariable regression analysis is used to explain the variation of the dependent variable by analyzing the influence of more than one independent variable (Howel 2010). Large differences between the modalities make it impossible to conclude across modalities and Hypotheses 2-6 is answered with a separation of the modalities. Hypothesis 2-6 is answered.

4. Logo and brand attribute dimensions

Then, the sets of attributes are explored. A Principal Component Analyses (PCA) is conducted to study the logo meaning and brand meaning from the brand personality attribute lists per modality. A variable factor map is conducted to show how the attributes are clustered and attribute dimensions are found. The results are compared to Aaker's brand personality dimensions and discussed.

5. Attribute fit vs. Perceived general fit

A paired-samples t-test is conducted and the mean values from logo meaning are paired with the mean values for brand meaning to analyze the attribute fit on the individual brands. The significant difference between the paired attributes indicates the attribute fit. The differences between logo meaning and brand meaning mean values are illustrated in spider plots with 95% confidence intervals. The results are compared with the perceived general fit. Brand context are included in a discussion of fit. Hypothesis 1 is answered.

The brands show very different results individually and across modalities, which make it difficult to draw any general conclusions. Thus, I will spend some time elaborating on the results from the individual brands and highlight patterns if they emerge. To summarize the hypotheses and relationship between the individual constructs from the questionnaire are as follows:

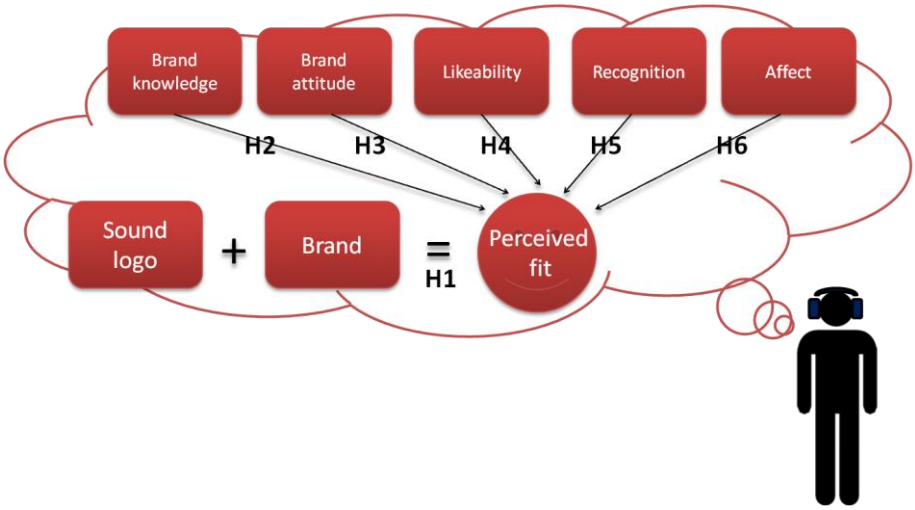


Figure 3b: Model of hypotheses

In the following analyses I will use the abbreviations A for the audio modality, V for visual modality and AV for the audiovisual modality. The brands are named:

Danish Crown= DC
Danske Spil = DS
Mental Workout = MW
Femina=FE
Oddset=OD
Q8=Q8

5.2 DESCRIPTIVE DATA OF THE CONSTRUCTS

Below is the descriptive data discussed, with the descriptive data illustrated in graphs based on the mean values for each construct and item. The confidence interval (95%) gives a hint if the modalities or brands are significant different – though this has to be fully confirmed in a t-test. Tables for mean values for the different constructs and modalities can be found in appendix C: Descriptive Data.

5.2.1 Perceived general fit

The perceived general fit between sound and brand is measured with the question: *How well do you think the* [sound, visual or combination of] *logo fits your perception of the brand?*

- It does not fit at all / It fits very well

Judging from the graph, the stimuli the respondent is exposed to change the perception of fit between the logo and brand.

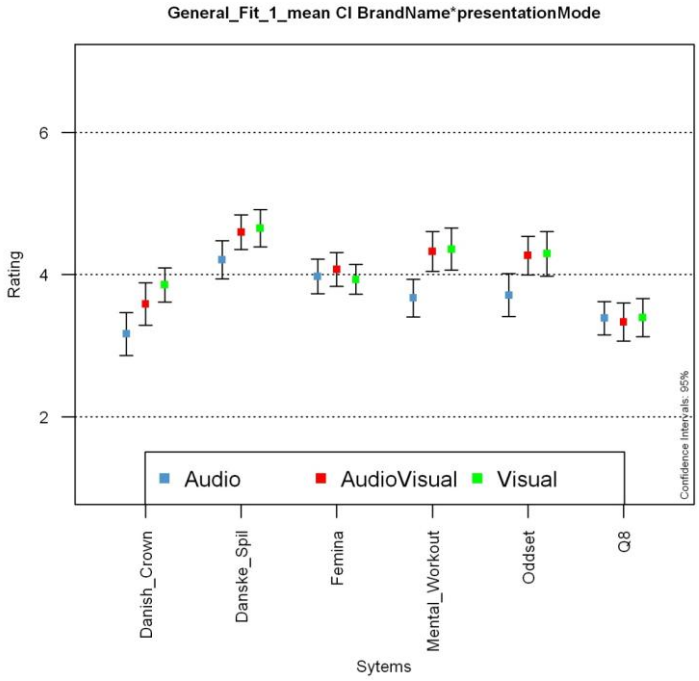


Figure 5: Illustrated perceived general fit mean values

DS has the best perceived fit between logo and brand and MW have the second best perceived fit. DS' sound logo is very simple and generic, which may help a high perceived fit (maybe) to any brand. MW's sound logo is light and plays a human exhale in the end, while the logo shows the name of the brand. In expression and composition it is two very different sound logos, which indicate that the form of sound logos does not influence the perceived general fit.

The general fit is generally perceived higher when the respondents have been exposed to the visual logo alone and lowest when they have been exposed to the sound logo alone. It may be explained by a higher recognition of the visual logo that may create a sense of brand familiarity.

The A modality in general had lower ratings of perceived general fit compared to the AV and V modality for DC, DS, MW and OD. One would expect the AV modality to have the highest mean values as the combination of sound and brand have been exposed more times throughout the questionnaire than in the V modality, which ease processing (cf. mere exposure effect) and cause a higher familiarity. In the AV modality the phrasing of the questions puts weight on the *combination* of sound logo and visual logo. It could be that the visual logo presented alone is more familiar than the combination, which leads to a higher perception of general fit.

5.2.2 **Affect**

Affect is measured by asking the questions: *How does the* [sound, visual or the combination of] *logo make you feel?* using the core effect scales of Russell's (2003):

1. Sad – depressed - displeased / glad – happy – pleased (Pleasure)
2. Dull – passive - sleepy / peppy – active – awake (Activation)

Judging from the graph, there are small significant differences in Affect2, whereas Affect1 shows larger variations across modalities on the individual brands. In Affect1 the visual logo for OD and MW are clearly significant different from the A or AV modality. Only the AV in Affect2 are significant different in the case of OD.

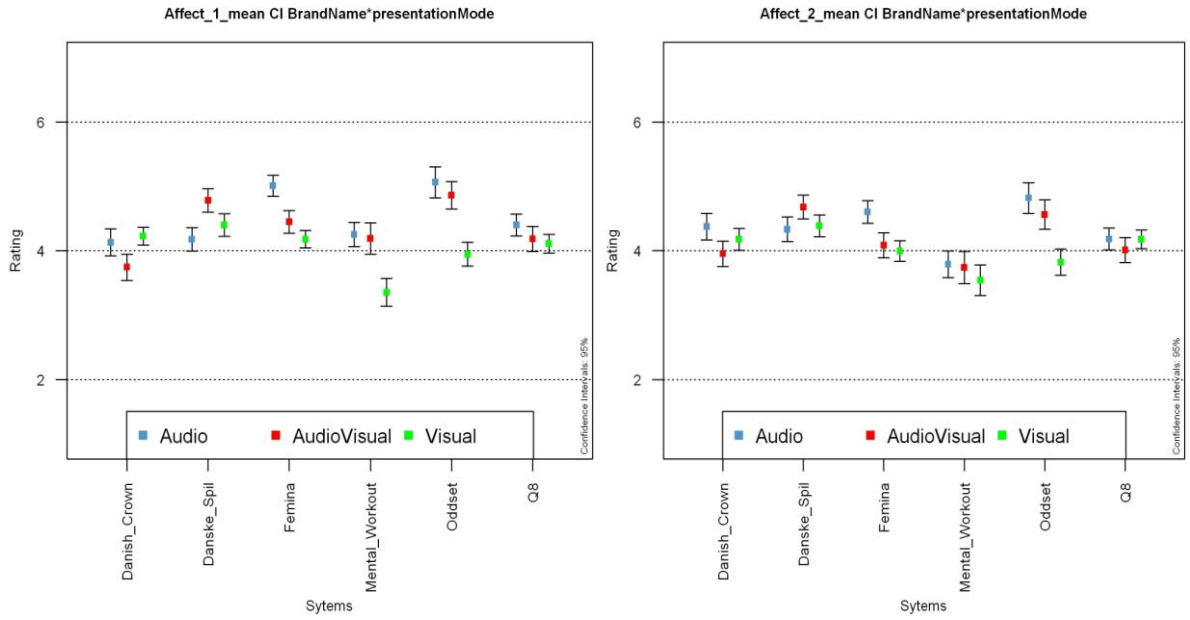


Figure 6: Illustrated Affect mean values. Left: Affect1, Right: Affect2

As expected the A modality have higher affect than V, except for DS. No sounds affect respondents on Sad, Depressed, Displeased affect. For all the brands except DC, the visual logo has less pleasure affect than the sound logo or the combination. This indicates that sound logos increase pleasure affects on the respondents.

DS and DC have the shortest and simplest of all the brands' sound logos and for the two brands the combination has a larger affect than the sound logo alone. The longer and more melodically sound logos of FE and OD have significant higher pleasure and activation affects from the visual logos. This indicates that longer and more melodious sound logos have a higher affect on the

respondents. The high tempo and childish sense of the OD sound logo may explain the high affect on both scales, while the high and light tones may explain the high affect of FE.

Opposed to FE and OD, Q8 also have a long and melodious sound logo but this brand has a very small difference between the modalities. It seems that the sound logo simply has little or no effect despite its longer melodious features.

It is also interesting, that the combination of sound and brand for DC seems to give a lower pleasure and activation on mean values than one of the two logos alone. The sound logo's recorded sounds of slicing and sizzling may confuse the respondents in combination with the visual logo.

MW is the only brand that is rated on the dull/passive/sleepy side of scale in activation (Affect2). MW's sound logo has a glad/happy/pleasing affect in Ba1 and as the company is providing self-help applications for reducing stress, meditation, sleep aid etc, the sound logo arguably supports the business of the company.

5.2.3 Likeability

Likeability is measured by asking the question: *How do you like the* [sound, logo, the combination]?

- I like it very much / I don't like it at all

There are great variances between brands and modalities. MW and FE have the best liked sound logos while DS and Q8 the lowest scores.

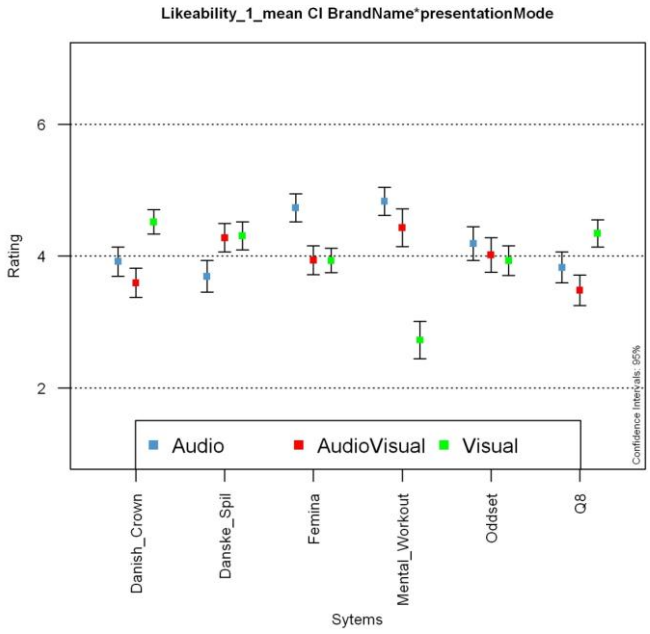


Figure 7: Illustrated Likeability mean values

Except for DS, the sound logos are liked more than the combination of sound logo and visual logo, no matter how the respondents like the visual logo. It could be that the sound logo is not recognized hence the respondents judge the sound alone on their expression, while the combination of sound logo and visual logo is judged more in relation to the activated brand knowledge.

Except for OD, the AV modality is rated very closely to either the visual logo or the sound logo, with one type of logo being significant different than the others. Either the sound logo or visual logo dominates the liking of the combination.

In two brands, DC and Q8, the combination is liked less than the logos presented alone. Asking "*how do you like the combination of the sound logo and the visual logo?"* may indicate the respondents' perception of fit. Looking at the mean values for perceived general fit, DC and Q8 in fact have the lowest mean values for in all three modalities.

Interestingly, MW has the best liked sound logo but also the worst liked visual logo. Still the combination in the AV modality still has the highest mean value. The combination with the calm sound logo may "reduce" the disliking and "lighten up" the perception.

The SD is noticeably higher in A modality, which may indicate a greater uncertainty in rating likeability from sound compared to visual logo or the combination. The SD is rather constant

between brands, which also indicate that the uncertainty is not dependent of the individual brand.

5.2.4 Recognition

Recognition (Rec) is measured by asking the question: *To which extent do you know the* [sound, logo, this combination]?

1. It is not at all familiar / It is very much familiar
2. It is not at all recognizable / It is very much recognizable

Also for this construct, there are large variations in the three modalities between the individual brands. Depending on which stimuli the respondent has been exposed to the recognition is rated significantly different.

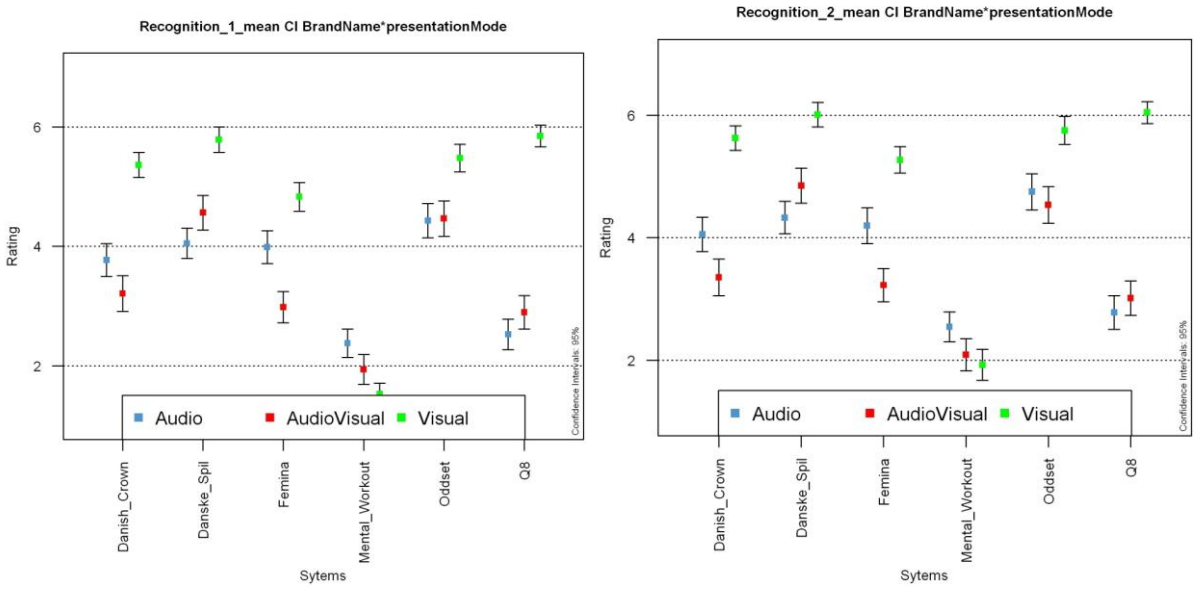


Figure 8: Illustrated Recognition mean values. Left: Rec1, Right: Rec2

MW is the exception where none of the modalities are significantly different from the other – this may be explained by the brand knowledge, which is also noticeably low compared to the other brands. Putting MW aside, the visual logo is rated significantly higher than the A and AV modality for all brands, indicating that the visual logo is well recognized and familiar among respondents. The high mean score in the V modality can be explained by respondents probably have been exposed to the visual logos many times before, but also by that respondents may be more trained in (used to) associating visual elements with brands as opposed to associating sound to brands (cf. association network theory).

For FE and DC, the combination of logos is less recognized than the logos alone. In theory, the AV modality should have higher values because it has more brand cues and is exposed to the respondents for a longer time. Potential false recognition may be able to explain why the combination of sound logo and visual logo leads to less recognition rates. As the only brand, MW has the highest mean values for the sound logo opposed to the visual logo. This may also be explained by a potential false recognition of the sound. For the other four brands the visual logo seems to "help" the sound recognition[11].

Recognition of the visual logo has lower SDs than A and AV, which indicates that rating Rec from the visual logo was done with less uncertainty. Interestingly, the AV modality has higher SDs than A modality and could be because brand knowledge influences the rating.

5.2.5 Brand knowledge

Brand knowledge (Bk) is measured by asking the question: *How well do you know the brand* [brand name]?

1. I don't know it at all / I know it very well
2. I have never used it / I have used it many times

Judging from the graphs, there are large variations between brands. The mean values in all three modalities for MW are (very) different from the other brands and share no similarities with the other brands, except the fact that the mean values are not significant different between modalities on either of the two items.

[11] One could reversely argue the sound logo aggravate the recognition, however, looking at the phrasing of the question. It is formulated as "*how do you recognize the combination of sound logo and visual logo?"* instead of e.g. "how do you recognize them?" or "how do you recognize the brand?".

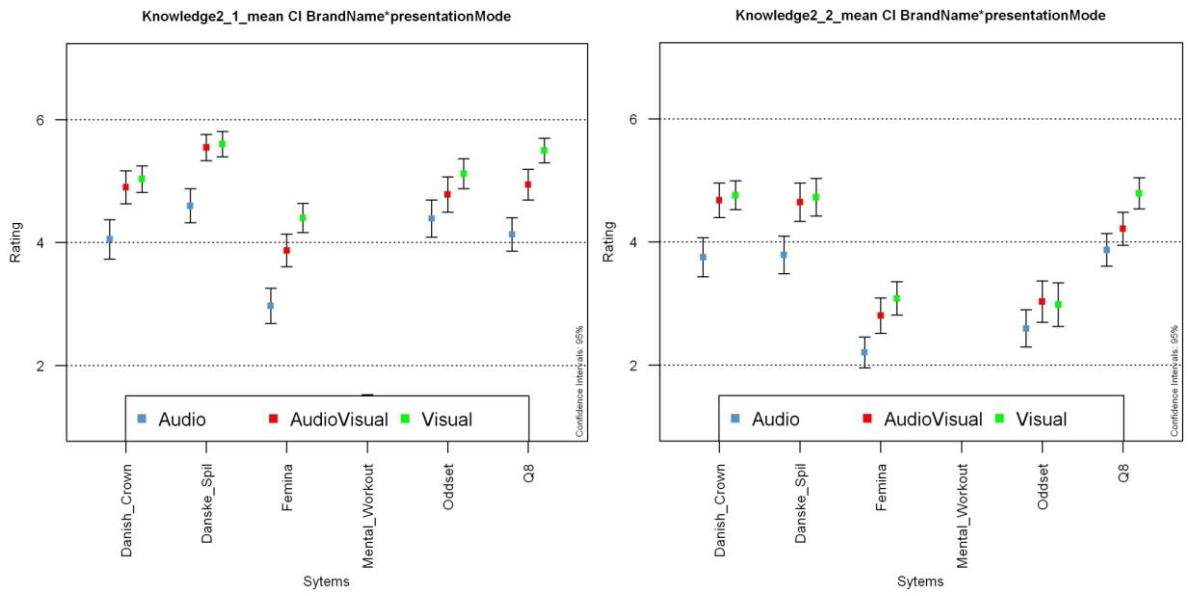


Figure 9: Illustration of Brand Knowledge mean values. Left: Bk1, Right: Bk2

It is surprising how MW on several constructs is remarkably different from the brands. This is mainly explained by the low usage and knowledge, which likely influences the other constructs. With only one brand being truly unknown it is difficult to detect if these differences are due to brand characteristics or just the fact that it is unknown. The mean values are Bk1: A=1,16 (SD=0,56), AV=1,37(SD=0,94), V=1,29 (SD=0,90) and for Bk2: A=1,16 (SD=0,59), AV=1,27 (SD=0,82), V=1,24 (0,85).

The type of stimulus the respondents have been exposed to clearly influence the brand knowledge rating. For all brands the mean value results show that if respondents are exposed to the sound logo alone they rate the brand knowledge lower compared to being exposed to the visual logo alone (see appendix C for descriptive data). This is probably due to recognition or a weaker association to the brand.

OD has the highest difference between knowledge and usage but in general the results on the two scales are very similar indicating that a high correlation between usage and knowledge.

There are large variations in the SD between the modalities. Respondents are more uncertain of brand knowledge when exposed to the combination of sound- and visual logo opposed to only being exposed to the visual logo. The mean value for visual logo is higher than the combination which shows that it is more difficult to evaluate one's brand knowledge when sound is included. If a respondent is uncertain s/he tends to give a slightly more negative answer. Also in Rec the

combination showed larger SD, which indicates that respondents may be unfamiliar with evaluating of a combination sound and visual stimuli when it is related to brands.

5.2.6 Brand attitude

Brand attitude (Ba) is measured by asking the same question as brand knowledge: *How well do you know the brand* [brand name]? and measured on the items of:

1. It is not important to me / It is very important to me
2. I don't like it at all / I like it very much

Judging from the graph, no significant differences between modalities per brand seem apparent on the brand importance and brand liking item.

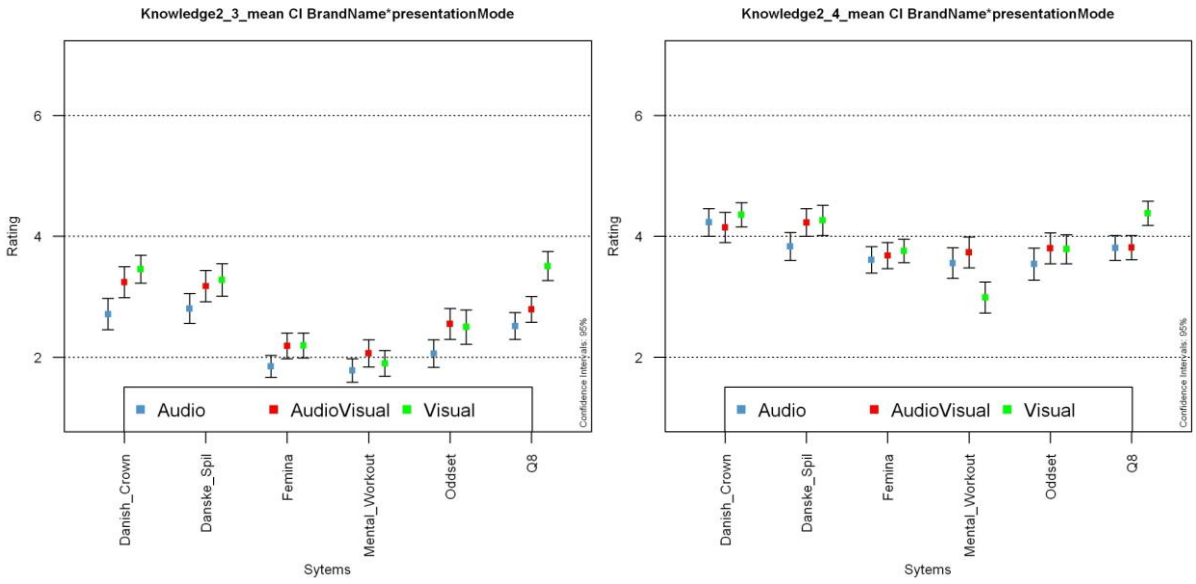


Figure 10: Illustrated Brand Attitude mean values. Left: Ba1, Right: Ba2

It was expected that the A modality would show higher ratings on brand liking knowing a positive affect was higher for sound logos. However, also here results show that when respondents are exposed to sound logo alone, the rating is more negative opposed the when respondents are being exposed to the visual logo.

There are quite large differences in mean value between the items of brand importance and brand liking, which indicate that the two questions are correlating. The differences is largest in the A modality and lowest in the V modality but in general the chosen brands are not very important to the respondents.

5.3 CORRELATIONS BETWEEN CONSTRUCTS

A Pearson correlation analysis was conducted as a base for the regression analysis. The closer the p-values are to +1 or -1, the closer the correlation is between the two analyzed variables (Salkind 2007). The correlation analysis only explores the dependence structure between the two selected variables but does not give information of causal relationships. Causal relationships can be analysed e.g. through linear multi regression analysis.

As the descriptive data showed large variations between brands it is not possible to make a general analysis across brands and modalities. Results of the correlation analyses for each brand and modality can be found in appendix D: Correlation analysis data. The correlations threshold of cross-constructs correlation coefficients is >.650 and >.500 for the two items within a construct.

Although it is risky to draw conclusions across brands and modalities, it can be said that there in most cases high correlations between the items within the individual constructs; Affect1 and Affect 2, Rec1 and Rec2, Bk1 and Bk2, Ba1 and Ba2. Interestingly, Ba1 correlates higher with Bk2 than ba1 on most brands.

Looking closer at the Ba1 and Bk2 correlation, there are high correlations in 14 out of 18 possible combinations of modalities and brands. It makes sense that using the brand (Bk2) and the importance of the brand (Ba1) correlates. Brand liking (Ba2) only correlates with both brand knowledge for DC in AV modality and with Bk2 for DS in the V modality. With two exceptions, Ba2 does not correlate with the three other items of brand knowledge and brand attitude. The other three items, however, correlate with each other in different ways, which may indicate a relationship between brand knowledge; usage and importance.

Looking closer at the correlation between Likeability and Affect1, there are high correlation in 14 out of 18 possible combinations of modalities and brands. Likeability and pleasure are closely related in meaning but it is none the less surprising that these constructs correlate that high because it relates to two different objects.

The correlations indicate that there is a risk of multicollinearity. If two constructs are high correlated, then knowing the score on one the variables should make one able to predict the score on the other. The stronger the correlation, the closer the two scores will fall to a regression line and thus give a more correct prediction. When independent variables are highly correlated it may be possible for one of the estimated coefficients to turn out negative (Salkind 2007). Should multicollinearity be present in this study, a regression coefficient may be influenced by

other variables that are in the model, and thus may not reflect the true inherent effect (Howel 2010).

Multicolleniarity was tested and results showed indications of it. Hence, a linear multiple regression analysis is conducted on collapsed items to avoid multicolleniarity when analyzing the influence of the constructs on perceived general fit.

5.4 STATISTICAL PREDICTORS OF FIT

Linear multiple regression analysis analyzes the causal relationship between a dependent variable and independent variables. In Appendix E: Regression analysis Data the results from the regression analysis can be found on each brand and each modality.

The coefficient can be interpreted as the variance of the perceived general fit (dependent variable) explained by the constructs (independent variables) (Salkind 2007). By including all the constructs it is possible to find the variables that gives the best prediction of the perceived fit. Fit is chosen as the dependent variable and affect, likeability, recognition, brand knowledge and brand attitude as independent variables.

First, I will go through the R-square that show if the model accounts for the variance in the perceived fit. The R-square is the square of the measure of correlation (R) and indicates the variance in the depend variable (perceived general fit). It shows how well the prediction of the dependent variable is when one knows the independent variables (Brace et al. 2006). The P-values indicates the probability and, thus, how sure the individual variable correlate with the dependent variable.

Below is a summary of the R-squares on brands and modalities:

	A	AV	V
MW	0,187	0,360	0,270
Q8	0,217	0,464	0,112
DC	0,259	0,481	0,156
DS	0,313	0,625	0,177
FE	0,136	0,351	0,074
OD	0,257	0,574	0,297

Table 2: R-squares, above 0,300 is highlighted

Preferably the R-square should be above 0,300 to indicate a medium-to-high correlation (above 0,500 is considered a high correlation). R-squares in this study are in general not high, which makes a sure prediction of variance in perceived general fit difficult. The R-square best predict

the variance of perceived general fit in the AV modality. The R-square for the brands MW and OD have lower R-square in the V modality while FE, DS, DC and Q8 have lowest R-square in the A modality. The variance explained in the A or V modality is more due to chance, than the manipulations. In the case of DS, the significance level is moderate in the A modality and may indicate some constructs can influence the perceived general fit for sound logos alone.

I will now look at the Standardized Coefficients to understand what can predict the perceived general fit between sound logo and brand in the AV modality alone. A large value indicates that the specific construct has a large effect on the dependent variable (Brace et al 2006). A high predictability on perceived general fit is indicated by the *t* and p-value if the t value is large (>0,2) and the p-value is significant (< 0,05).

Below are the constructs with significant values. All regression analysis can be found in appendix E:

		A **Beta**	***P***	**AV** **Beta**	***P***	**V** **Beta**	***P***
Q8	Ba	0,134	0,173	0,123	0,148	0,348	0,001
	Likeability	0,377	0,000	0,508	0,000	0,014	0,886
	Recognition	0,032	0,672	0,170	0,015	-0,119	0,231
	Bk	0,079	0,360	-0,081	0,301	-0,052	0,662
	Affect	-0,052	0,597	0,037	0,689	0,040	0,682
FE	Ba	0,090	0,390	0,095	0,321	0,137	0,233
	Likeability	0,262	0,014	0,381	0,000	0,097	0,364
	Recognition	0,049	0,527	0,223	0,002	0,033	0,710
	Bk	0,107	0,269	0,035	0,709	0,046	0,691
	Affect	0,011	0,909	0,029	0,715	0,025	0,804
OD	Ba	0,272	0,018	0,078	0,399	0,078	0,558
	Likeability	0,159	0,147	0,460	0,000	0,100	0,365
	Recognition	0,111	0,193	0,230	0,001	0,114	0,204
	Bk	0,137	0,185	0,069	0,443	0,221	0,080
	Affect	-0,029	0,786	0,073	0,284	0,204	0,076
DS	Ba	0,050	0,614	0,034	0,658	0,105	0,394
	Likeability	0,339	0,001	0,432	0,000	0,222	0,044
	Recognition	0,202	0,007	0,305	0,000	0,120	0,171
	Bk	0,039	0,679	-0,079	0,269	-0,044	0,708
	Affect	0,079	0,372	0,172	0,027	0,114	0,263
MW	**Ba**	0,309	0,000	0,216	0,025	0,287	0,004
	Likeability	-0,001	0,989	0,330	0,002	-0,160	0,158

	Recognition	-0,030	0,703	0,065	0,463	0,107	0,245
	Bk	-0,011	0,887	-0,109	0,220	-0,239	0,012
	Affect	0,218	0,025	0,138	0,159	0,334	0,004
DC	Ba	0,364	0,000	-0,089	0,364	0,038	0,728
	Likeability	-0,077	0,428	0,174	0,040	0,169	0,136
	Recognition	0,194	0,014	0,340	0,000	-0,106	0,298
	Bk	-0,079	0,422	0,073	0,447	0,194	0,092
	Affect	0,246	0,014	0,380	0,000	0,168	0,134

Table 3: Standard coefficients. Significant values and R-square above ,300 is highlighted.

In the AV modality, Likeability shows as a significant predictor of perceived general fit for all six brands and recognition shows as a significant predictor for all brands except MW. The results are not as unambiguous, significant and strong as hoped and the standard coefficients show that the constructs can only explain some of the variance of perceived general fit.

The reasons why predicting perceived general fit with sound logo or visual logo alone was not possible could be due to their short and simple nature; they are difficult to comprehend by respondent (and consumers) when they are presented without the branding context. Only when they are recognized (in combination with the visual logo) – and hence placed in brand context – they are comprehensible. This stresses the point of companies being able to link the sound logo to the company in the mind of the consumers and teach them to associate the sound in the specific brand context.

Being an unknown brand to the respondents, it may not be surprising that recognition fail to be a significant predictor of perceived general fit for MW. It is interesting that Ba show as significant predictor of perceived general fit for MW instead of recognition. Ba is only a predicting factor for MW and not for the other five brands. This is even odder because MW's visual logo was found *not* to be liked by the respondents, yet the combination of sound logo and visual logo is a positive significant predictor. This could be worth exploring further in a future study to see if this is true to unknown brands in general, or only in this particular case. To the extent this applies to unknown brands in general, the immediate judgment of the brand by the sound logo and the visual logo predicts whether respondents perceive the fit to be high. In the MW case, the sound logo is so positive liked that it influences the total judgment.

How well one thinks s/he has high brand knowledge has no influence on perception of perceived general fit. The result shows that logos (sound or visual) were not able to influence the response

to the stimuli. It may be because a logo in its nature holds little information about the brand in comparison with all influencing factors that shapes the brand knowledge.

In the descriptive data's AV modality, DC has a significant more negative affect than the sound logo alone or visual logo alone, DS has a significant more positive affect. Affect showed to be significant predictors for DC and DS. They have the shortest and most generic sound logos of the six brands with arguably less inherent meaning in the logos, which makes them easier to influence. Melodious and longer sound logos may hold too much inherent meaning to be significant influenced by the visual logo in the AV modality.

Some researchers argue (in Bruner 1990) that studies in general tend to be too verbally oriented, which makes it hard to adequately capture the distinct nature of affective responses. Measuring sound logo's affective nature closer e.g. fMRI scanning could be one option.

5.4.1 Discussion of results

The model can explain a medium to high variance in the AV modality. This means that consumers that like the combination of sound- and visual logo, plus recognize the combination, will probably also find the combination fitting to their perception of the brand. Contradictory, if one does not like the combination of sound logo and visual logo, or cannot recognize it, the perception of fit will probably be more negative. Hypothesis 4 and 5 is approved for the AV modality while hypothesis 2, 3 and 6 is rejected. In the A modality hypothesis 4 and 5 is approved only for DS. The results are not as unambiguous, significant and strong as hoped, yet the results has its validity as it is based on N=146-182 for each cell (brand/modality) and a total of N=987 respondents broadly representing the Danish population. However, other factors explain some of the variance of perceived general fit that is not accounted for in the study.

Consumers must be able to recognize the short and simple sound both as a branded sound (a sound that should be associated with a brand context) and as the representative for the brand (as an auditory symbol). This means that companies must focus on the marketing efforts and by repeated exposure teach consumers to associate the sound logo with the brand and hence being able to recognize it.

Additionally, DS showed medium significance in the R-square in the A modality, which indicates that it may also be possible (for some brands) to statistical predict a perceived general fit from consumer's likeability and recognition of the sound logos alone. The fact that DS has an unmelodious sound logo witness that melodious and longer sound logos may hold more

inherent meaning that are harder to influence by the visual logo. The generic sound logo is easier to incorporate in the brand context.

Mere exposure effect, where the internal processing is eased by repeated exposure (Peretz et al. 1998), may be able to explain why likeability and recognition predict perceived general fit. Peretz et al.1998 found that repetition increase liking of the unfamiliar melodies and was found best for detection of familiar melodies in a recognition task. The more one recognizes the combination, the more "common" the combination is perceived. Likewise, if one likes the combination the perceived general fit it is likely to be high. Likeability as a predicting factor in the AV modality is quite logic. It can be a kind of circulus vitiosus; liking the combination of sound- and visual logo influences how the fit between the same constructs is perceived. There is a slight difference of meaning between liking the combination and the perceived general fit: It is possible not liking two objects but still perceiving them as fitting. Putting it on the edge, one does not like a visual logo of a black skull and also doesn't like the Death metal-like sound logo but still find them fitting.

This study does not explore if sound logos creates high recognition or likeability – only that the recognition and likeability influence the perceived general fit. However, McInnis and Park (1991) found impact of musical fit on both positive emotions and attitude toward the advert and North et al. (2004) findings; participants' recall of the ad was enhanced by a high music-voice fit in advertising and that this fit also enhanced emotional responses to the ad such as increased liking. How a high perceived general fit influences the company is not explored, however, one may be able to draw parallels to the mentioned studies.

As a last general note to the regression analysis, with low R-squares in the A modality one may question the sound logo's potential without its brand context. The chance of sound logos alone is able to influence the perception of a general fit is small. DS showed it that sound logo's potential in creating recognition and likeability in radio may be higher if the sound logo is generic because it arguably makes it easier to implement in the brand context opposed to longer and more melodious sound logos.

5.5 CLUSTERING OF ATTRIBUTES

Now knowing that two constructs have potential of being significant predictors of perceived fit, when the respondent is exposed to the combination of sound logo and visual logo, I will now take a closer look at fit between the brand personality attributes. Respondents were asked to rate the logo meaning on a set of 18 attributes, and then later asked to rate the brand meaning

on the same set of attributes. A Principal Component Analysis tests if the brand personality attributes falls into to similar dimensions as Aaker's.

A PCA is multivariate analysis technique that is used for reducing large dataset (Salkind 2007). At this point the goal is however not to reduce the 18 attributes further but to study the dimensions on which the attributes correlates and explore how they (individual factors) are related. Whether to use a component analysis or a "true" factor analysis is an ongoing debate and there are arguments for and against (Costello & Osborne 2005). Many scientists argue that the differences between factor analyses and PCA's are of an unnoticeable difference.

The factor scores for the two attribute lists can be seen in Appendix F: PCA scores. The PCA showed differences in the perception of attributes depending on which brand they were applied on. Also, there were differences in how the attributes were perceived across modality. It is therefore difficult also here to make general conclusions across the three brands. The PCA shows that all attributes in general meaningfully can be applied to measuring either sound, visual or in combination of both, although *elegant* and *passionate* loaded very low.

Because it was not possible to compare the outcome directly with Aaker's attribute lists, a variance factor map was conducted to get an overview of how the attributes were related (See Appendix G: PCA, Variable factor maps). Variable factor maps can help detect clusters of attributes in the set but is not the same as dimensions.

Based on the variable map, four clusters of attributes are found in the A and the AV modality. The attributes are clustered as follows:

1. Temperamental, daring, technical
2. Imaginative, modern, exciting, unique, glamorous
3. Honest, secure, reliable
4. Down-to-earth, friendly, peaceful, gentle, smooth

The visual modality is different from the two others. *Imaginative* and *temperamental* have replaced each others' position on the variable factor map and the difference between cluster 1 and 2 is not clear compared to the other modalities. Further, glamorous is placed further from cluster 1. In the V modality the attributes are clustered as follows:

1. Imaginative, daring, technical, temperamental, modern, exciting, unique
2. Glamorous
3. Friendly, peaceful, reliable

4. Honest, secure, gentle
5. Down-to-earth, smooth

Despite the difference between V modality and A and AV modalities, there is a clear partition in the attributes: Cluster 1-2 is loading on dimension1 and cluster 3-4 is loading on dimension2. Dimension1 describes something that is outgoing, experimental and inconstant, while the dimension2 describes something calm, comforting and constant. They have striking similarities to Aaker's two dimensions Excitement and Sincerity. Five attributes out of eight on dimension1 of Experimental is found in Aaker's Excitement dimension. Three attributes from the dimension2 is found in Aaker's Sincerity dimension. Labels for the two Danish dimensions are:

Experimental

Temperamental, daring, technical, imaginative, modern, exciting, unique, glamorous

Comfort

Honest, secure, reliable, down-to-earth, friendly, peaceful, gentle, smooth

5.5.1 Summery and discussion of results

Applying the brand personality framework to sound and visual modalities has been explorative with intention of investigating the outcome and not only to approve or discard the framework as applicable.

Clearly, the sound has an impact on the attributes because attributes in the V modality are differently related compared with A and AV modalities. Despite the differences between V modality and the AV and V modality, it is still possible to find the two dimensions. It witness that 1) there are slight differences in how consumers ascribe attributes to sound or visual, and 2) there are two dimensions of attributes; an extrovert and experimenting dimension, and an introvert and comfortable dimension.

The analysis shows that some words or attributes are difficult to apply on both brand and sound. Companies that wish to evaluate their brand on attributes such as their own corporate values have to be aware if the selected attributes meaningfully can be applied on branded sounds, when they setup a survey or test.

The dimensions are similar but not consistent with Aaker's original study and the other national brand personality studies that have been conducted. Results seem to vary slightly when sound is applied to the framework. Studying advertising music and brand positioning, Burke (2004)

found that advertising music can be aligned with brand personality dimensions and was able to replicate the five dimensions and Feitsma (2011) found four dimensions that were slightly different from Aaker's original study.

The process and method for finding a Danish set of attributes has been slightly different than Aaker's, which may have had influence on the results. On the other hand, the attributes are selected from different European country sets of brand personality dimensions – words that have been proved to describe brands in other related cultural settings – thus, more similarity in dimensions were expected. On the other hand, only 30 words were originally tested, which is very small set compared to the mentioned studies.

The differences are arguably best explained by the fact that this analysis is based on sound and visual stimulus combination and the difference in the initial attribute selection - but also cultural differences can influence the results (Aaker et al. 2001).

Consumers experience brands with all senses and sound seems to give slightly different impressions of brand personality attributes, including sound in future studies could give a more precise picture of a brand's brand personality from Aakers' dimensions. Further studies can explore how brand personality attributes can be used to explain brands through sound, or in a combination with sound, by following Aaker's analysis method throughout.

5.6 ATTRIBUTE VS PERCEIVED FIT

In this paragraph I will use the brand personality attributes to explore how sound logo meaning is perceived differently from brand meaning. To analyze if the sound logo meaning and the brand meaning have been evaluated differently a paired-samples t-test is conducted. The individual attribute from logo meaning and brand meaning are paired; honest with honest, imaginative with imaginative etc. for all three modalities. A paired samples t-test only show if the attributes' mean differences are significant, and say nothing about the causal effect or influence from logo meaning to brand meaning (Brace et al. 2006).

Diamantopoulos et al. (2004) suggest that a good fit would result in small if any change in the location of the brand image on the brand personality scales and conversely, that poor fit could result in a perceived inconsistency between brand image and the brand extension (Diamantopoulos et al. 2004). Likewise, the paired-samples t-test is interpreted as: An attribute fit appears when there is no significant difference (<.05, sig. (2-tailed)) between the paired attributes. Conversely, there is a high attribute fit when there is a significant difference between the paired attributes. A high attribute fit is when 9 of the attributes has no significant difference.

In this context, it is possible that if the sound logo meaning and brand meaning fits on all attributes, the sound logo is not adding any additional meaning or information to the brand; it has no effect. In such a case a perceived general fit may be low. To analyse the fit between sound logo and brand, I will hence also compare the results with the perceived general fit. The results will indicate if it is possible to simply ask the respondents of how they perceive a sound-brand fit or if other methods have to be applied to get a true result when evaluating a sound brand fit.

5.6.1 Results of paired samples t-test and Spider plots

Spider plots illustrations are used to provide a more tangibly overview of the paired mean values. In the spider plots the dotted circle around the mark in the middle (the mean value) indicates a 95% confidence interval. If a of the circles overlap with a mark, the attribute is not significant different[12]. The results of attribute fit are discussed in relation to the other constructs.

The sound logo meaning is based on attribute mean values from the A modality, which means that the respondents have rated the sound logo without knowing the brand. In brand meaning, respondents are exposed to sound logo, visual logo and brand name. Sound logo meaning will be referred to only as logo meaning. The results and data of the paired samples t-test for each brand and modality can be found in appendix H: Paired Samples T-test Data.

5.6.1.1 Danish Crown

The logo meaning is more positively perceived than brand meaning on the attributes of *daring, unique, imaginative, technical, exciting, glamorous, temperamental,* and *modern* and more negative on the attributes *honest, friendly, reliable* and *down-to-earth*.

[12] Note that the illustration can appear slightly inaccurate, why the data set (see appendix) has been consulted to verify the significant differences.

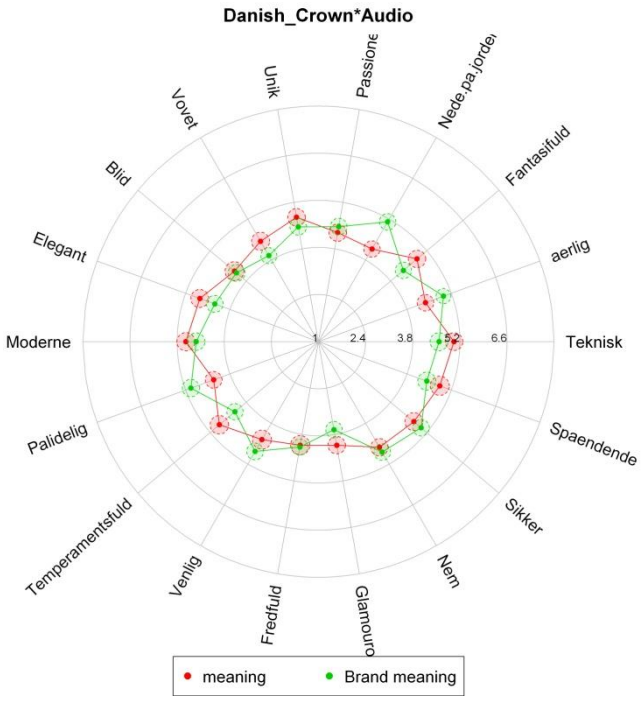


Figure 11: Danish Crown sound logo mean values on attributes;

Red: sound logo meaning, Green: brand meaning

There is an attribute fit on four attributes with no significant difference (p-value >.05) between the paired attributes of logo meaning and brand meaning, which gives a low fit. The attributes are: *gentle, peaceful, smooth,* and *secure*. On these four attributes the perception of logo meaning and brand meaning fits. The perceived general fit has a mean value of 3,16 (*SD*=1,85) in the A modality, which is the lowest score compared to the other brands. Respondents do not find the sound logo fitting the brand meaning.

The sound logo consists of recorded real sounds of a slice knife and sizzle beef. Recorded real sounds create natural associations which, according to Fredrich and King (1998), are 1) more familiar to us, thus, more pleasant 2) more natural to us, thus easier to remember and for companies easier to implement. However, the sound logo had relatively mediocre affect (A= 4,13 (*SD*=1,28)), which actually was less affective in combination with the visual logo (AV=3,75 (*SD*=1,27)). The low affect can also be seen on the paired attributes in the spider plot, where difference between sound logo meaning and brand meaning are relatively small with confidence intervals very close to each other.

The descriptive data show not only lower affect in combination with the logo but also lower likeability and lower recognition. Natural association used in a short sound logo may create a

sort of confusion for the respondent, where elicited "wrong" associations from the sound logo presumably do not match their perception of the brand.

DC is a highly modern company and one of the largest pig slaughterhouses in the world, but it might still carry brand meaning as the co-operative society of farmers from Jutland, that it historically has been known for. The brand meaning has consistently higher attributes scores on the Comfort dimension, which e.g. includes attributes of *down-to-earth, reliable* and *secure*. The logo meaning has on the other hand higher scores on attributes placed on the Experimental dimension, which includes attributes such as *modern, technical* and *temperamental*. DC is doing a larger branding process[13] and choosing a sound logo that scores high on experimental attributes might help to adjust their brand meaning.

On the website the connotations from the sound logo's slice and sizzle is arguably fitting the brand connotations. The consumer is presented with a background picture of a hand, a knife, raw steaks on a carving board and the text "Det handler om mad" ("It is about food"). Here, the context building brand meaning supports the sound logo's slice and sizzle sound. The sound logo is only used on the website as an entry-sound and had a low recognition. Maybe using the sound logo in other communication channels, where it is presented together with visual elements, would generate higher recognition, which will influence the perceived general fit.

*5.6.1.2 **Danske Spil***

All the brand meaning attributes with significant difference, *daring, unique, imaginative, honest* and *exciting,* were perceived more positive than the sound logo meaning. 11 paired attributes have an attribute fit with no significant difference between the paired attributes: *Down-to-earth, gentle, reliable, temperamental, friendly, peaceful, glamorous, smooth,* and *secure*.

[13] This can e.g. be seen by the fact that the logo has changed during the writing of the thesis.

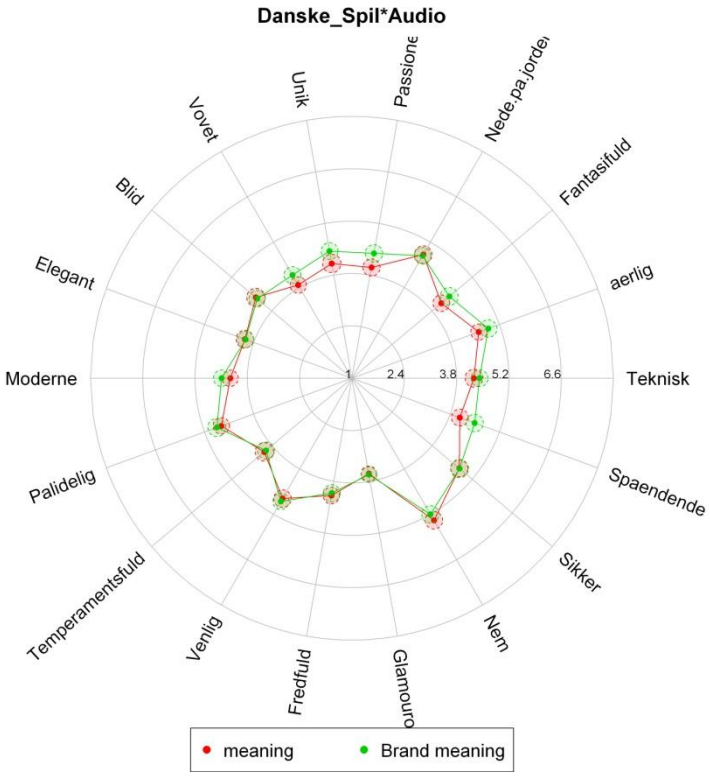


Figure 12: Danske Spil sound logo mean values on attributes

Red: sound logo meaning, Green: brand meaning

The attributes have small differences between logo meaning and brand meaning, with confidence intervals almost overlapping on all attributes. The attribute fit is reflected in the perceived general fit (A= 4,21 (*SD*=1,78), which is the best fit compared to the other brands.

The sound logo of DS is short and generic[14] with three notes played by a piano representing the name Dan-Ske-Spil. When the sound logo of DS is perceived to fit the brand both on attributes and perceived fit it may be because the sound logo has the combination of being generic and closely related to the (spoken) brand name. Using a generic sound logo may be easier to match the brand meaning because little "false" associations or recognition will influence, and confuse, the consumer.

In same line of thought, the support of name pronunciation could also produce a sense of familiarity that could ease the cognition process and, thus, enhance recognition. DS's recognition mean value in the A modality was in fact the highest compared to the other brands (Rec1=4,05 (*SD*=1,67), Rec2=4,33 (*SD*=1,75)). In the regression analysis, DS was the only brand with R-

[14] Generic in the sense, that any company in theory could use the sound logo and link brand associations to it. DC and MW are examples of sound logos that arguably are not generic.

square above 0,300 in the A modality and recognition is in fact also a statistical predictor of fit in the A modality.

The high attribute fit and perceived general fit shows that the sound logo may not add additional meaning to the brand. Instead, it supports the existing brand meaning. A study of sound symbolism[15] by Argo et al. (2010) shows that exposure to brand name that is spoken aloud produces positive affect that have a positively effect on consumers' brand evaluations. DS's three tone sound logo could unconsciously support the pronunciation of brand name, which may produce a sense of fit.

DS is a lotto and gaming company that handles money prizes for millions of Danish Kroner and the company also runs one of the largest Danish e-commerce sites. The highest mean values in brand meaning are found on the attributes *reliable, smooth, down-to-earth*, *honest* and *secure*. The high mean values on those specific attributes, and a sound logo that supports them, must be a satisfying result for the company.

From a creative perspective, the sound logo is very generic and uninteresting. Although the logo meaning supports the brand meaning consumers might also get bored with DS and stop paying attention. Already the sound logo is very generic and may not stand out from other types of sounds (e.g. mobile text message tones). Advertising, for example, wears out quickly for familiar brands and evidence shows that elements that are incongruent with each other are more memorable for familiar brands (Heckler & Childers 1992 in: Lange & Dahlén 2003) and additionally lead to curiosity and interest (Muehling & Laczniak 1985 in: Lange & Dahlén 2003). Maybe the sound logo is not creating the desired attention in e.g. an advertising block in the first place.

*5.6.1.3 **Mental Workout***

The results for MW show a completely different picture than DS and DC. This logo meaning is perceived more positive than brand meaning on the attributes of *down-to-earth, honest, secure, smooth, glamorous, peaceful, friendly, reliable,* and *gentle*. The sound logo is perceived more negative on the attributes of *imaginative, technical, temperamental* and *daring*.

[15] The notion that the sound of a word, separate from its connotation, conveys meaning

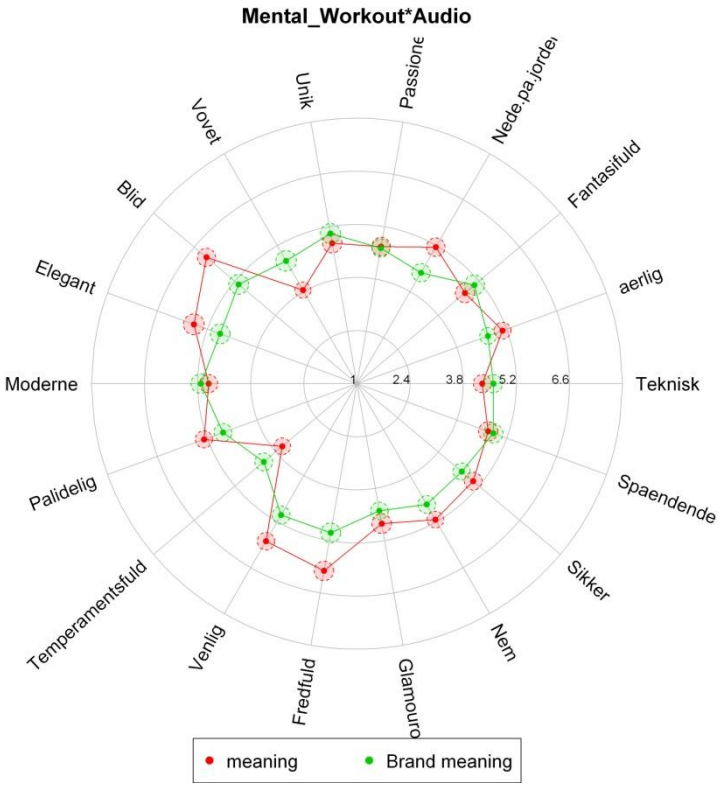


Figure 13: Mental Workout sound logo mean values on attributes

Red: sound logo meaning, Green: brand meaning

There is an attributes fit on three attributes: *unique, modern,* and *exciting*. Especially the attributes *peaceful, friendly, temperamental, elegant, soft* and *down-to-earth* are showing large differences between logo meaning and brand meaning.

The mean value of perceived fit is 3,67 (*SD*=1,73) in the A modality, which is third lowest score. In the AV modality the perceived fit is 4,33 (*SD*=1,71), which is the second highest of the six brands. Respondents high liking of the sound logo (A=4,83 (*SD*=1,40)) influence their perception of general fit but because the sound logo is not recognized the perceived general fit is low. It could be that the repetition that happens in the AV modality of the sound-visual logo combination has a slight mere exposure effect.

The sound logo meaning is perceived as more *down-to-earth, honest, secure, smooth, glamorous, peaceful, friendly, reliable,* and *gentle* than the brand meaning. The attributes are all placed on the Comfort dimension (except *glamorous*), which arguably support their business of self-help meditation, stress-free and sleep-aid applications. Having a sound logo that adds information to the brand could prove to be a good strategy for an unknown brand.

The brand meaning is more positively perceived on attributes on the Experimental dimension. Because the results showed that MW is highly unknown, it is safe to assume that it is the visual logo, with its up-side-down letters and black/white colors, that pulls the attributes in the direction of experimental attributes.

The sound logo and visual logo create opposing meanings. The disliked "experimental" visual logo may build up a tension, which the liked "comfort" sound logo deconstructs. Theoretically this relates to musicology where tension-redemption techniques are deliberately used to create pleasure for the listeners (see e.g. Meyer 1959). This mechanism may also be present here as the combination of sound logo and visual logo has the highest liking mean value of the six brands (AV=4,43 (*SD*=1,75)). Although the attribute fit may be low, the sound logo adds valuable meaning to the visual logo.

The opposing sound logo meaning and brand meaning plus the up-side-down letters create an interesting tension in the brand that may force an involuntary longer attention and processing time and lead to better memory of the brand. However, for an unknown brand it is important to build the brand meaning and therefore conflicting information might be damaging (Lange & Dahlén 2003). Additionally, incongruent information can make it harder to remember an unfamiliar brand.

MW is a brand using only digital marketing. Eyes being drawn to the visual logo, not much attention will be on the product proposition for the first important seconds when entering the website. In digital marketing, companies have only seconds to get their proposition across and it could be that the "annoyance" of the visual logo takes away that focus on the proposition. If MW played the sound logo as an entry-sound on the website, they will better support the brand meaning and the business proposition while create an experience for the visitors at the same time.

*5.6.1.4 **Q8 Denmark***

The logo meaning is perceived more positive on all attributes that do not have an attribute fit. Eight attributes have an attribute fit; *down-to-earth, honest, technical, secure, smooth, peaceful, friendly,* and *reliable*.

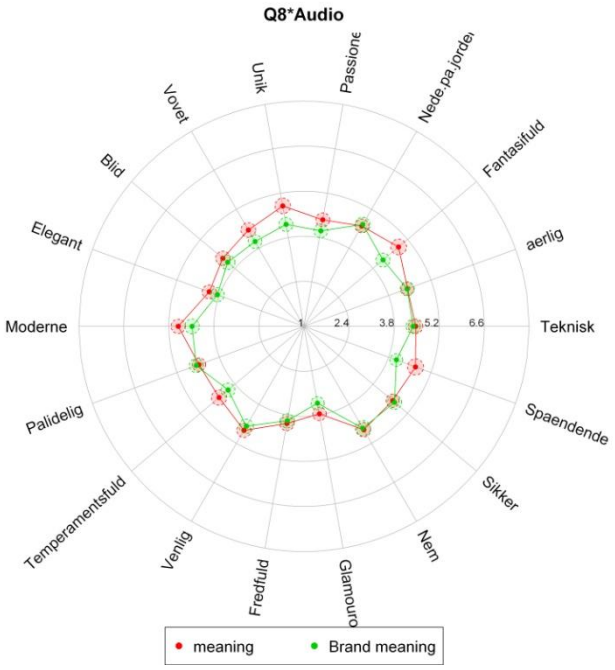


Figure 14: Q8 sound logo mean values on attributes

Red: sound logo meaning, Green: brand meaning

The logo meaning is perceived predominately to be *modern, unique, imaginative* and *exciting,* and the brand meaning is perceived predominately to be *friendly, smooth, secure* and *down-to-earth*. Most attributes are rated close to 4 or slightly below on the scale, and no attributes are above. The brand is more negatively defined; "it is *not*…" instead of positively defined; "it is …".

The attribute fit is high and it may seem positive that all significant different attributes are more positive rated on logo meaning. The respondents like the sound logo when it is presented alone but in the combination with visual logo something happens. The combination of sound- and visual logo has a surprisingly low likeability (AV=3,48 (*SD*=1,06) compared to the A and V modalities (A=3,83 (*SD*=1,61) and V=4,35 (*SD*=1,38)). Recognition is very high for the visual logo (Rec2: V=6,05 (*SD*=1,20)) but low when combined with the sound logo (Rec2: AV=3,01 (*SD*=1,82)) which shows that respondents are unfamiliar with the combination. It can also be that they have false recognition of the sound logo, which they realize in the combination with the visual logo. With influence from the low likeability and recognition, the perceived general fit is also low (A=3,39 (*SD*=1,64). The sound logo does not fit the respondent's perception of the brand.

Also, brand likeability (Ba2) is only high when the visual logo is presented alone to the respondent (V=4,38 (*SD*=1,34)); when hearing the sound logo in relation to the brand (alone or

in combination) the brand likeability is low (A=3,81 (*SD*=1,42) AV=3,81 (*SD*=1,29)). The sound logo seems to negatively influence the brand evaluation.

One explanation could be the fact that Q8 is a highly known brand (B1: AV=4,94 (*SD*=1,63), V=5,50 (*SD*=1,68), and respondent may have a "non-influential" perception of the brand. Q8 is an oil & gas company that has petrol stations for private cars spread across the country. The melodious and "soft" sound logo may not support the perceived brand meaning but instead adding confusing information to the brand. It could also be that in sound logo adds no information to the brand at all, which could explain the low affect, which results in a negative evaluation of the combination. Whatever the explanation, the sound logo is better liked than brand meaning but does not fit the respondent's perception of the brand. This creates a mismatch in the mind of the respondents and that devaluate the liking of brand.

*5.6.1.5 **Femina***

Like with MW, the sound logo meaning and the brand meaning of FE varies greatly between the different attributes. There is an attribute fit on nine attributes: *daring, unique, down-to-earth, honest, secure, temperamental, reliable* and *modern*.

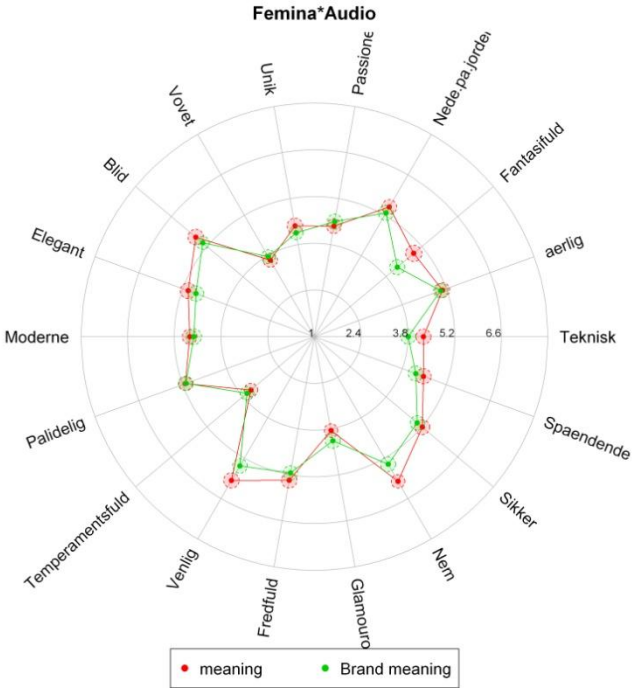


Figure 15: Femina sound logo mean values on attributes

Red: sound logo meaning, Green: brand meaning

The logo meaning has particular high ratings on the attributes *friendly, smooth, down-to-earth* and *gentle,* which all are placed on the Comfort dimension. Logo meaning has low ratings on

daring, temperamental, glamorous, exciting and *technical,* which all are placed on the Experimental dimension. Opposite DC FE has high attribute fit and only high rated Comfort attributes and low Experimental attributes. The perceived general fit is high compared to the other brands (A=3,98 (*SD*=1,57)).

The attributes describing the brand meaning are "woman-like" values. The sound logo has bright, clear tones and is by the respondents perceived as happy and active (Affect1: A=5,01 (*SD*=1,06), Affect2: A=4,45 (*SD*=1,18)), but the pink monogram of the brand name has little affect (V=3,99 (*SD*=1,10)). The sound logo also has a high likeability and is additionally rated slightly more positive on all attributes than brand meaning. This could mean that the sound logo may positively influence the brand meaning (when considering the high perception of general fit), where the visual logo seems to have less affect on this.

The sound logo and visual logo supports the proposition of the brand, but may slightly point in the direction of a more "girly" magazine with a pink visual logo and a light, happy sound that is rated on the Comfort dimension. Studies on colors show that darker colors correlates with potency and dominance and that red is e.g. seen as strong and active, while a color with less saturation[16] was seen as weak and bad (Adam & Osgood 1973 in: Valdez & Mehrabian 1994).

It could be interesting to analyze if (and how) the pink color in the visual logo influences the brand meaning. Likewise, it could be interesting to test five versions of pitch in the sound logo and see if a lower pitch would affect Experimental attributes such as *glamorous, exciting* and *daring*.

5.6.1.6 ***Oddset***

There is an attribute fit on *daring, exciting, temperamental* and *modern.* The difference between logo meaning and brand meaning is generally small.

[16] Pink is defined as *bright, low-saturation, red-purple* by Valdez & Mehrabian (1994, p.408)

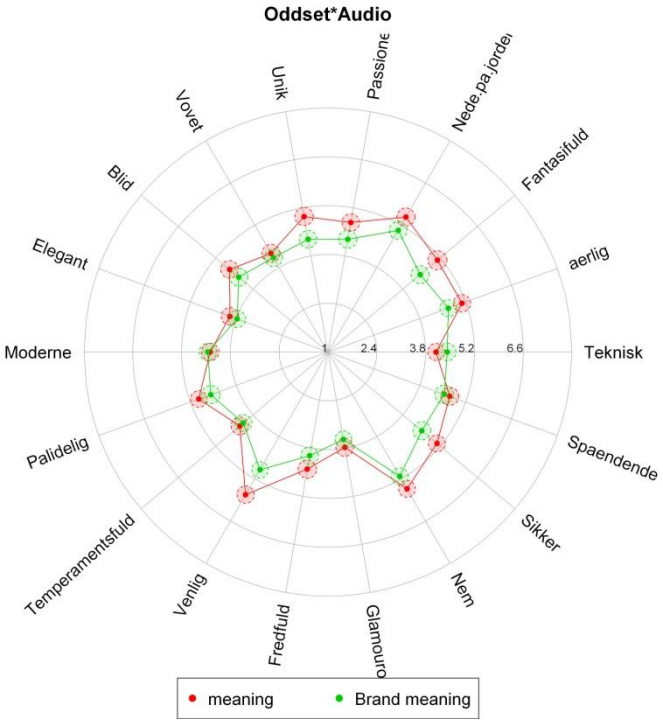


Figure 16: Oddset sound logo mean values on attributes

Red: sound logo meaning, Green: brand meaning

The attributes with no significant difference is not the highest rated attributes. The logo meaning is most positively perceived on the attributes of *friendly, smooth, down-to-earth* and *imaginative.* This may be odd attributes for a football betting game, however, the perceived general fit is rather high. Although the attribute fit is low it seems that the childish and funny sound, the sound logo expresses the same meaning as the brand – only more positively.

The logo meaning and brand meaning are placed on both attribute dimensions thus perceived on both Experimental and Comfort attributes. The perceived fit was not particular high (A=3,71 (*SD*=1,90) and (AV=4,27 (*SD*=1,78)), which is congruent with the attribute fit. The sound and brand meaning however is rated very similarly, scoring low or high on the same attributes. The only attribute that is perceived different is *technical*; the sound logo is perceived more positive than brand meaning on all other attributes. It could be that the sound logo is perceived as an (positive) exaggeration of the perceived brand meaning.

Although the fit is low, the logo meaning seems to "follow" the brand meaning on the attributes, which may be explained by a match on connotations (Yeoh & North 2010). Such connotations could be elicited from the sense of tempo from the sport, the sense of "play" and fun from the betting, which may be expressed through the "childish" sound. Such match could be further

investigated in e.g. a free-association test (e.g. see Ramsgaard & Winther (in press)) to explore the sound logo's associative space.

Friendly, smooth, down-to-earth and *imaginative* are very interesting attributes for a betting game brand, and may be explained by OD being good at catching the Danish culture's "coziness": friendly, fun and relaxed atmosphere typical created with family or friends and TV entertainment.

What at first glance seems to be an odd combination of sound logo and brand shows in this analysis some sense. If OD wish to be perceived higher on more Experimental attributes such as *temperamental, exciting* and *daring* on brand meaning, the sound logo will probably not support it.

5.6.2 Summery and discussion of results

Comparing attribute fit with perceived fit showed that the perceived general fit can be different than attribute fit. It was expected that the higher the perceived general fit the fewer the differences between brand personality attributes. Results showed not to be as simple; DS and FE had high attribute fit and a high perceived general fit, which supports H1. OD and DC had low attribute fit and low perceived general fit which supports H1 reversely. However, for OD a low perceived general fit with low attribute fit still have attributes rated very similar. Although the study show evidence there might be some correlations between perceived general fit and attribute fit, the study also shows that the distance between the paired attributes also have to be taken into consideration when analysing the attribute fit.

Sound logos fit to the brand in different ways depending if perceived general fit and attribute fit is high or low. For DS, OD and FE an attribute fit arguably supports brand meaning while Q8's sound logo seems to devalue the brand meaning. For MW the sound logo meaning might compliment brand meaning by "soften" the perception of the visual logo. Below are remarkable findings for each brand summarized:

5.6.2.1 Danish Crown

By analyzing the DC I found that natural association used in sound logos can create a mis-fit, probably because recorded sounds holds inherent associations which makes a match of connotations harder (Yeoh and North 2010). "Wrong" connotations from the sound logo can arguably cause a sort of confusion in combination with the brand, which negatively affect the liking and perception of fit.

5.6.2.2 ***Danske Spil***

At DS I that perceived general fit resulted in fewer a high attribute fit. The attributes are rated on both attribute dimensions and the similar ratings on the attributes shows a more "general" sound logo- and brand meaning. Using a generic sound logo may be easier to match with the brand meaning because little inherent meaning will influence. This also means that the sound logo is adding little new meaning to the brand. Ramsgaard & Winther et al. (in press) found that generic sound logos may have the negative downside to easily be confused with other sounds such as text message notification sounds.

5.6.2.3 ***Mental Workout***

In the case of MW I found that although the attribute fit was low the general fit could be perceived as high in the AV modality. Large variations between attributes and differences between sound and brand may actually complement the brand meaning. The large difference between the experimental visual logo and the comfort sound logo suggested that it has a tension-redemption effect may enhance pleasantness (Meyer 1959). However, the incongruent information may also make it harder to remember the unfamiliar brand (Yeoh & North 2010).

5.6.2.4 ***Q8***

By analyzing Q8 I found that a low perceived general fit could result in a medium-high attribute fit. Additionally, although the sound logo had a relatively high liking a negative liking in combination with the visual logo was created. It could be that the long melodious sound logo simply did not match the perception of brand. The attribute fit was relatively high but attributes were all rated low. The sound logo had such a small affect that respondents seemed to have difficulties evaluating it. It could also be that the attributes were not adequate to describe the logo- and brand meaning. Whatever the explanation, the sound logo created a mis-fit with the brand perception in the mind of the respondents, which devaluated the liking.

5.6.2.5 ***Femina***

By analyzing FE I found that high perceived general fit produced fewer differences between the attributes. The sound logo and visual logo meaning both supports the brand meaning of woman life-style. The sound logo and brand were both specifically rated on comfort attributes with large variations between the different attributes, which indicates a "specific" brand and logo meaning, opposed to e.g. DS that is "general".

5.6.2.6 ***Oddset***

By analyzing OD I found that a low perceived general fit and a low attribute fit could still produce rather similar ratings of logo and brand meaning. Although the combination of sound logo and brand may seem odd or mis-fitting to respondents, the sound logo proved to fit brand

meaning. Although the sound logos fit attributes of *daring, exciting, temperamental* and *modern* they are not the attributes rated most positively, which was unexpected. The relation between highest rated attributes and the attribute's with no significant difference could be explored further in another study e.g. by a free association study.

A last note on the results, cross-modal interactions between color and sound and between sound and name were briefly touched in the case of FE and DS. Such cross-modal correspondences were not directly accounted for in the study and may have influenced the results for the brands.

6 DISCUSSION OF THE STUDY

Predicting which constructs influence a perceived general fit showed to be more complex than expected.

The three modalities showed very different results which prove that sound logos are indeed perceived differently than visual logos, alone and in combination. In the AV modality constructs could explain some of the variance of perceived general fit in the regression analysis. The variance explained was however not as unambiguous, significant and strong as hoped.

DS had the highest recognition values in the A modality, and was additionally the only brand where likeability and recognition also could explain some of the variance of perceived general fit. For the other five brands, the variance explained of perceived general fit in the A modality was only due to coincidence. It is possible that brands with higher recognition values are needed to prove likeability and recognition as a statistical predictor of perceived general fit for sound logos alone. On the other hand, it was not possible to prove recognition in the V modality despite the very high recognition values in this modality.

Some researchers argue (in Bruner 1990) that studies in general tend to be too verbally oriented, which makes it hard to adequately capture the distinct nature of affective responses. Respondents were only able to play the sound once per "screen" in the online questionnaire, to make sure to get as immediate response as possible for the individual constructs. As the presented sound logos only have durations between 1 and 5 seconds a response at all could be hard to produce. On the other hand, it may be that awareness raised solely from participating in the survey and answering the questions made respondents more aware of rating e.g. on the sound logo's affect.

6.1.1 Reflections related to comparing perceived general fit and attribute fit

Comparing perceived general fit to an attribute fit shows that the subjective and conscious rated perceived general fit not always correspond to the objective measured attribute fit.

Sound logo meaning and brand meaning can be analyzed a profile multidimensional construct (Law et al. 1998). Different brands will naturally be strong on some brand personality dimensions and weak on others because some dimensions conflict with each other (Keller 1998 in: Diamantopoulos et al 2004), which create a strong and "specific" brand perception in the mind of the consumers. The spider plots shows that OD, FE and MW are perceived more "specific" with are large variations between the individual attributes in sound logo meaning. DS, Q8 and DC are perceived more "general" and have attributes that are all rated similarly. This could also be due to a lower affect, which makes it hard to evaluate (especially) the sound logos on the attribute set. If sound logos or brands are specific or general does not seem to influence noticeably on the perceived general fit.

Discussing the results of the paired-samples t-test by including brand context shows that the two analysis of fit should not be viewed as either/or. A low attribute fit may still be beneficial if the perceived general fit is rated high. The ideal combination of attributes will depend on the brand's own objectives and it is hence difficult to make general conclusions of good/bad attribute fits based on e.g. the amount of paired attributes that are not significant different, because many brands do not *wish* to be strong in all dimensions (Keller 1998 in: Diamantopoulos et al. 2004). For example is logo meaning and brand meaning consistently rated high on Comfort attributes for FE and likewise the logo meaning for MW is high rated on same dimension. DC's brand meaning is consistently rated higher on attributes on the Comfort dimension, while the logo meaning consistently is rated higher on attributes placed on the Experimental dimension. Only by including the brands' objectives can it be determined if this are good or bad fits.

The paired-samples t-test give information on which attributes the sound logo and the brand are stronger (more positive) and how large a difference there is between sound- and brand meaning but is not an indicator of show how good/bad the respondents perceive the fit. Diamantopoulos et al. (2004) argue that a good fit between an extension and the brand implies that extension is perceived to be consistent with the brand resulting in few differences between attributes. In this study, the case of FE and DS a high perceived fit result in fewer differences between brand personality attributes as hypothesized (H1) but the case of OD, MW, Q8 and DC shows that the perceived general fit does not indicate the attribute fit.

6.1.2 General reflections of the study

Some general reflection of the study has emerged during the process about selection of brands, the quantitative method and further analyses on the data set.

First, to broadly cover Danish brands six very different brands were selected for the study. They cover B2B and B2C markets, different target groups and very different industries. In retrospect, focusing on a specific type of brand or industry could have proved more fruitful as the data showed too large differences rightfully to compare the brands and draw general conclusions across brands.

Secondly, a quantitative method was used for being able to conclude on which constructs influence perceived general fit, as well as explore the sound logo meaning and brand meaning fit correspondingly, in a Danish context. To gain further insights in how sound logo- and brand meaning were perceived by the respondents qualitative studies such as focus groups can additionally be used. Hung (2001) uses focus groups to explore how shopping malls are perceived with different type of music in presentation videos. Because of the complexity of the cross modal interactions, quotes from respondents give valuable information about the respondents' thoughts. Quantitative studies are very difficult to produce generalizable results hence a combining quantitative and qualitative studies may provide the best method. Especially the case for Q8, where sound logo had a negative influence on brand meaning, comments from respondents could have been illuminating.

Thirdly, using the collected data set future analyses can be conducted on other constructs; for example can likeability, recognition or brand attitude be analyzed as dependent variable in new regression analyses. Such analyses may confirm if perceived general fit also influence likeability, recognition or brand attitude in the three modalities, as Kellaris et al. (1993) North et al (2004), Wagner (2008) and Lange and Dahlén (2003) were able to show in different setups where advertising music was studied. Such findings may also shed new light on the attribute fit results and relate to Burke (2004)'s findings on brand personality attributes in this study's setting. Also, testing difference in demography e.g. between geographic areas in Denmark, age or sex differences, or different music preference's influence could give additional information to this study.

6.2 IMPLICATIONS FOR COMPANIES

Consumer preference and memorability are important if the company wishes to establish a strong fit between sound and brand. Liking the combination of sound- and visual logo and recognizing the combination influence the perception of how the sound logo fits to the brand. This means that if one likes the brand experience with sound logo and visual logo, and is able to link it to the brand s/he will find the sound and the brand well fitting. Contradictory, if one does not like the combination of sound logo and visual logo, or is not able to link it to the brand, the perception of fit between the two brand elements will probably be negative. One way to establish recognition is through repeated exposure of the combination of sound- and visual logo. Repeated exposure will also improve likeability because of the mere exposure effect, where repetition eases the consumer's processing, and hence enhance pleasure.

There is a consensus in the sound branding industry that sound logos affect consumers emotionally, which influences the attitude and behavior. However, the study shows little affect from sound logos on the respondents and the affect was not predicting perceived general fit. This could mean that sound logos in radio commercials, IVR systems (Interactive Voice Response) in telephone services or other communication channels with sound only are not able to affect consumers emotionally. Sound logos are not like music and arguably sound logo are simply too short to produce noticeable affects.

The discussion of attribute vs. perceived fit shows that the knowledge the two tests provide supplements than excluding each other. When measuring sound meaning in relation to the brand meaning, the attribute fit can be used as a "control mechanism" of perceived general fit that can provide knowledge of how a high or low general fit is perceived. A low attribute fit can still be used if e.g. the company wishes to re-position the brand. Measuring attribute fit can provide valuable information if the sound logo is perceived on the right attributes. If a perceived fit is high it could be that attribute fit is low with large variations between the paired attributes, here the differences between logo meaning and brand meaning may actually *complement* each other by adding additional information.

In general, the recognition values for the sound logos alone were surprisingly low. The question remains if consumers in everyday life actually perceive the sound logos as a representative for the brand; as a logo? This supports the findings of the free association of sound logos by Ramsgaard & Winther et al. (in press). The associations showed that what by the sound branding industry is considered to be "well-known" sound logos are without the brand context often associated as text message tones, computer sounds, TV-sounds etc. by consumers. It hence

seems that industry and scholars cannot per se assume that a sound logo experienced in the market space is understood as being a representative for the brand.

Heavy marketing efforts are needed to establish a link in the mind of the consumers between sound logo and brand. Consumers need to repeatedly experience the sound in relation to the brand and learn to link it together before they are recognized Such references are needed to be established, not only for the company to "claim" a sound by creating e.g. brand awareness and -recognition, but also in general to teach consumers to recognize the short sound as *branded* sound – in the same way consumers have learned to recognize computer warnings sounds, ringtones, text messages notifications etc.

This is why a sound branding strategy is necessary if companies wish to make the most of the brand's already existing audible side. Each brand should consider its positioning strategy concerning their sound identity, which fits with the entire brand's position and USP. This study offers tools for measuring how a brands' sound logo fits the brand meaning and it may prove to be applicable on other types of branded sounds as well.

Different management tools have been suggested to how brand managers can use sound branding to leverage their brand position. The Danish sound branding company Sonic Minds[17] has developed a tool to identify the company's important sound brand touch points. The Sound Brand Touch Point Scorecard can be used to align sound by identifying the company's auditory communicative touch points and to how sound is best used in the specific touch point. Additionally, Vonk et al. (2007) suggest a sound branding tool for managers called the Audio Position Identifier (API). Using this tool, managers can identify the brand position on a matrix of sound branding level and strength of brand identity.

[17] www.sonicminds.dk

7 CONCLUSION

Sound logos are short, distinctive sonic sequences that help stakeholders to distinguish the company from possible competitors by generating an auditory identity in combination with other sound branding elements. This study found that sound logos are perceived differently than the visual logo or the combination of sound logo and visual logo on the tested constructs and on the tested brand personality attributes. The differences in the tested modalities witness that consumers experience brand elements differently depending on sense. Hence, sound logos can support or ad meaning to the existing brand meaning.

The analysis in this paper was two-fold; to test which constructs influenced the perceived general fit and to explore if a conscious perceived fit is congruence with the elicited meaning of the sound logo and meaning of brand on a set of brand personality dimensions.

The results showed large differences between the brands and it was not possible to make general conclusions across the brands. Also, differences in the modalities were found and a differentiation between the modalities was necessary to approve hypotheses 4 and 5.

The paper found that a higher perceived general fit does not always result in fewer differences between brand personality attributes (H1); sometimes brands with high perceived general fit had many and large differences between the paired attributes. H1 is approved for FE and DS and reversely with low perceived general fit and low attribute fit for OD and DC. However, the paired attributes was still rated very similar for OD. Brand knowledge (H2), Brand attitude (H3) and Affect (H6) do not influence the perceived general fit. Likeability (H4) and Recognition (H5) influence perceived general fit in the audio-visual modality, where sound logo and visual logo are presented together. It was not possible to prove any of the tested hypotheses (2-6) on audio modality or visual modality alone. This may be due the short nature of sound logos which can make them hard to comprehend in a study, where the immediate respond is tested.

Summarized, the results of the analysed hypotheses are as below:

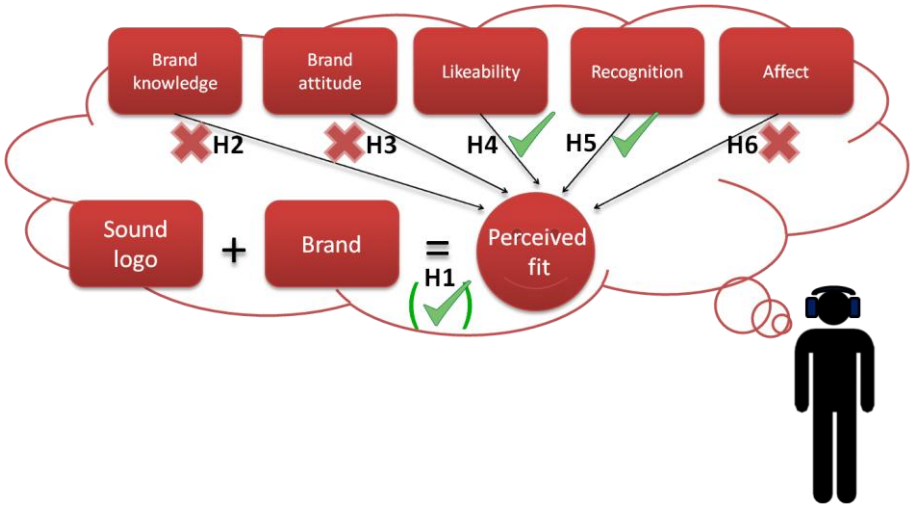


Figure 3c: Model of hypotheses

The brand personality dimensions found in the study's PCA are not consistent with other brand personality studies (e.g. Aaker 1997, Aaker et al. 2001). This may be due to the analysis being based on both sound and visual stimuli and because the attribute selection for the actual analysis was carried out differently than the original framework. The brand personality dimensions based on sound and visual stimuli showed two dimensions: Dimension1 described something that is outgoing, experimental and inconstant, while dimension2 described something calm, comforting and constant. The two dimensions have similarities to Aaker's two dimensions Excitement and Sincerity and were named: *Experimental* and *Comfort***.** The application of Aaker's framework on sound logos and the results provides ground for future studies on brand personality attributes as descriptors for sound elements related to sound branding.

As expected, sound logo and brand were perceived differently on the brand personality attributes, showing differences in sound logo meaning and brand meaning. Additionally, the paired samples t-test showed that some brands and sound logos were perceived on one dimension alone while others were perceived on attributes from both dimensions. For FE, both logo meaning and brand meaning was consistently rated high on Comfort attributes, while the brand meaning for DC was consistently rated higher Comfort attributes and logo meaning consistently higher on Experimental attributes.

The result of the attribute fit will be interpreted differently depending on the objective and the context in which it is used. An analysis of attribute fit will, thus, provide little useful knowledge to the brand unless it is explained in the context of which it is used. A clear idea of which attributes the brand wishes to be strong on, or a clear objective for the sound brand, is necessary

when measuring the multidimensional construct of sound brand fit. The ideal brand personality attribute of the brand will depend on the brands position in the market. Maybe woman lifestyle magazine FE does not wish to be perceived as *temperamental* and *technical* and maybe the slaughterhouse DC does not want to be perceived as *glamorous* or *gentle*. Brand meaning, and the fit with sound logo meaning, is a multi-dimensional construct where the ideal rating on the attribute set depends on the brand and its positioning and objectives. Hence, no conclusions were made whether an attribute fit was good or bad.

"Musical fit" has been treated generally in literature as being a fit between music and an object (e.g. ad message or voice) without discussing what constitutes the perception of fit in the mind of the listeners. This study indicates recognition and likeability as possible influencers in cross-modal comprehension of sound and visual logos, which is supported by implications of the mere exposure effect.

Only measuring a perceived fit is not sufficient to fully understand the fit between sound logos and brand. The two analyses of fit provide complementary information to the understanding of sound logos and brands and can support each other in measuring the fit between sound logo and brand. For example the difference between the six tested brands shows evidence that sound logos in combination with visual logo can either support the brand meaning, adding additional meaning to the brand or devaluate the brand meaning depending on how perceived general fit and attribute fit are perceived high or low.

Judging from the relatively low recognition scores in the A modality, where sound is presented alone, it seems that scholars and industry cannot per se assume that a sound logo is understood as being a representative for the brand when it is not presented in a brand context. It gives evidence that establishing the between sound logo and brand link in the mind of the consumers requires heavy marketing efforts. The consumer must learn to distinguish this type of sound as being *branded sound* in order to active relevant associations to brands – in the same way consumers have learned to recognize computer sounds, ringtones and notifications sounds.

8 LITERATURE

Aaker, David A & McLoughlin, Damien (2007): *Strategic Market Management.* John Wiley & Sons, Ltd, European Ed.

Aaker, Jennifer L. (1997): Dimensions of Brand Personality. *Journal of Marketing Research*, vol. 34/3 August, p.347-356

Aaker, Jennifer L., Garolera, Jordi, Benet-Martínez, Verónica (2001): Consumption Symbols as Carriers of Culture: A Study of Japanese and Spanish Brand Personality Constructs. Journal *of Personality and Social Psychology*, vol.81/3, p.492-508

Alba, Joseph W (1983): The effects of product knowledge on the comprehension, retention, and evaluation of product information. *Advances in Consumer Research*, vol.10, p.577-580

Argo, Jennifer J., Popa, Monica, Smith, Malcolm C. (2010): The Sound of Brands. *Journal of Marketing,* vol.74/July, p.97-109

Arnould, Erik, Price, Linda, Zinkhan, George (2004): *Consumers*. McGraw-Hill/Irwin, 2nd ed.

Balkwill, Laura-Lee & Thompson, William F (1999): A Cross-Cultural Investigation of the Perception of Emotion in Music: Psychological and Cultural Cues. *Music Perception,* vol. 17/1 Fall, p.43-64

Balmer, John (2001): Corporate Identity, corporate branding and corporate marketing; Seeing through the fog. *European Journal of Marketing*, vol.35/3/4, p.248-291

Baumgartner, Thomas, Esslen, Michaela, Jänke, Lutz (2006): From emotion perception to emotion experience: Emotions evoked by pictures and classical music. *International Journal of Psychophysiology*, vol.60, p.34-43

Bosnjak, Michael, Bochmann, Valerie, Hufschmidt, Tanja (2007): Dimensions of Brand Personality Attributions: A Person-centric approach in the German cultural context. *Social Behavior and Personality,* vol.35/3, p.303-316

Bronner, Kai & Hirt, Rainer (Hrsg.) (2007)*: Audio-Branding. Entwicklung, Anwendung, Wirkung akustischer Identitäten in Werbung, Medien und Gesellschaft*. Verlag Reinhard Fischer

Bronner, Kai et al. (2010): *Audio Branding Academi Yearbook 2010/2011*. Nomos Verlagsgesellschaft, Edition Reinhard Fischer

Bruner, Gordon C (1990): Music, Mood, and Marketing. *Journal of Marketing*, Oct., p.94-104

Burke, Kelly E (2004): A perfect duet? Brand Personality Positioning and Advertising Music Matching. *Graduate Faculty of the University of Georgia* http://ugakr.libs.uga.edu/bitstream/handle/10724/7393/burke_kelly_e_200405_ma.pdf?sequence=1

Cheskin Research & Beatnik, Inc. (1999): The Impact of Sound on the Web. http://www.cheskin.com/cms/files/i/articles//6__report-Beatnik%20rpt%20final.pdf

Collins, Allan M & Loftus, Elisabeth F (1975): A Spreading-Activation Theory of Semantic Processing. *Psychological Review,* vol.82/6, p.407-428

Costello, Anna B. & Osborne, Jason W. (2005): Best Practices in Exploratory Factor Analysis: Four Recommendations for Getting the Most From Your Analysis. *Practical Assessment, Research & Evaluation*, vol.10/7, p.1-9

Darpan, Jaid (2009): A Review of the concept "SONIC BRANDING" and techniques to measure its impact on Emotions, Brand Recall, Brand Recognition and Purchase Intention. *Icfai Business School*

De Pelsmacker, Patrick, Geuens, Maggie & Van den Berg, Joeri (2007): *Marketing Communication: a European Perspective*. Prentice Hall, Financial Times, 3rd ed.

Diamantopoulos, Adamantios, Smith, Gareth and Grime, Ian (2005): The impact of brand extensions on brand personality: Experimental evidence. *European Journal of Marketing*, vol.39, no.1/2, p.129-149

Feitsma, Merwin S. (2011): Brands & Sounds: The development of a scale to measure the fit between brands and audio logos. *Strategic Product Design, Faculty of Industrial Design Engineering, Delft University of Technology*

Ferrandi, Jean-Marc, Fine-Falcy, Sandrine, Kreziak, Dominique, Valette-Florence, Pierre (1999): Aaker's Brand Personality Scale: A Replication and a Double Methodological Validation in a French Setting. *Actes du XVeme Congrés de l'Association Francaise de Marketing*, p.1089-1112

Fraedrich, John P & King, Maryon F (1998): Marketing implications of nonmusical sounds. *Journal of Business and Psychology*, Vol. 13/1 Fall, p.127-139

Gorn, G. J., Goldberg, M. E., Chattopadhyay, A., & Litvack, D. (1991): Music and information in commercials: Their effects with an elderly sample. *Journal of Advertising Research*, vol. Oct./ Nov., p.23–32

Graakjær, Nicolai J (2008): Musik i tv-reklamer - En tekstanalytisk undersøgelse. *Institut for Kommunikation,* Aalborg Universitet.

Graakjær, Nicolai J (2010): *Musik I tv-reklamer – teori og analyse.* Samfundslitteratur

Graakjær, Nicolai J & Jantzen, Christian (2009): Music in Advertising. Aalborg University Press.

Gregory, Andrew H & Nicolas Varney (1996): Cross-Cultural Comparisons in an Affective Response to Music. *Psychology of Music*, vol.24 p.47-52

Griffith, Oren & Mitchell, Chris J (2008): Negative priming reduces affective ratings. *Cognition and Emotion*, vol.22/6, p.1119-1129

Hair, Joseph, Bush, Robert, Ortinau, David (2009): *Marketing Research, in a Digital Information Environment*. McGraw-Hill International Edition, 4th ed.

Haslam, Alexander S & McGarty, Craig (2003): *Research Methods and Statistics in Psychology*. SAGE Publications.

Hansen, Flemming & Christensen, Lars Bech (ed.) (2003): *Branding and Advertising*. Copenhagen Business School Press.

Hecker, Sidney (1984): Music for advertising effect. *Psychology & Marketing*, vol.1/3-4, p.3-8

Hem, Leif E & Iversen, Nina M (2004): How to Develop a Destination Brand Logo: A Qualitative and Quantitative Approach. *Scandinavian Journal of Hospitality and Tourism*, vol. 4/ 2, Taylor & Francis p.83-106

Henderson, Pamela & Cote, Joseph (1998): Guidelines for Selecting or Modifying Logos. *Journal of Marketing*, vol.62/April, p.14-30

Huber, Frank, Herrmann, Andreas, Weis, Michaela (2000): Markenloyalität durch Markenpersönlichkeit – Ergebnisse einer empirischen Studie im Automobilsektor. *Developments in marketing Science*, Vol.23 *Spotts and Meadow (eds.),* p.340-346

Hung, Kineta (2010): Framing Meaning Perceptions with Music: The Case of Teaser Ads. *Journal of Advertising,* Vol. 30/3, p.39-49

Iancu et al. (2009): Tune Your Brand In. The Perfect Jingle Mix. *Journal of Media Research, Ubb Media Centre,* vol.5, p.101-112

Jackson, Daniel (2003): Sonic Branding: An Introduction. *Palgrave MacMillian.*

John, Deborah R., Loken, Barbara, Kim, Kyengheui & Basu Monga, Alokparna (2006): Brand Concept maps: A Methodology for identifying Brand Association Networks. *Journal of Marketing Research*, vol.XLIII/Nov., p.549-563

Kellaris, James, Cox, Anthony & Cox, Dena (1993). The effects of background music on ad processing: A contingency explanation. *Journal of Marketing*, 57/Oct., p.114–125

Keller, Kevin L. (2003): Brand Synthesis: The Multidimensionality of Brand Knowledge. *Journal of Consumer Research*, Vol. 29/4, p. 595-600

Keller, Kevin L. (2008): *Strategic brand management. Building, Measuring, and Managing Brand Equity.* Pearson International Edition, 3rd ed.

Kilian, Karsten (2007): From Brand Identity to Audio Branding. In: Bronner, Kai & Hirt, Rainer (Hrsg.) (2007): *Audio-Branding: Entwicklung, Anwendung, Wirkung akustischer Identitäten in Werbung, Medien und Gesellschaft*. Verlag Reinhard Fischer

Krishnan, H.S (1996): Characteristics of memory associations: A consumer-based brand equity perspective. *International Journal of Research in Marketing*, vol.13, p.389-405

Krumhansl, Carol L, Toivanen, Pekka, Eerola, Tuomas, Toiviainen, Petri, Jävingen, Topi & Louhivuori, Jukka (2000): Cross-cultural music cognition: cognitive methodology applied to North Sami yoiks. *Cognition,* vol.76, p.13-58

Lacher, Kathleen T (1989): Hedonic Consumption: Music as a Product. *Advances in Consumer Research,* Vol.16, eds. Thomas K. Srull, Provo, UT: Association for Consumer Research, p.367-373

Lange, Fredrik & Dahlén, Micael (2003): Let's be strange: brand familiarity and ad-brand incongruency. *Journal of Product & Brand Management*, vol.12/7, p.449-461

Law, Kenneth S, Wong, Chi-Sum, Mobley, William H. (1998): Toward a Taxonomy of Multidimentional Constructs. *Academy of Management Review*, vol.23/4, p.741-755

Lindstrøm, Martin (2005): Brand sense: Sensory Secrets Behind the Stuff We Buy. *Free Press (Feb.1)*

Lindstrøm, Martin (2008): *Buyology*. Forlaget Børsen.

Lusensky, Jakob (2010): Sounds like branding. *Norstedts Publishing House.*

MacInnis, D., & Park, C.W. (1991): The differential role of characteristics of music on high- and low-involvement consumer's processing of ads. *Journal of Consumer Research*, Vol. 18/Sept., p.161-173

Mark, Lawrence E (1974): On Associations of Light and Sound: The Mediation of Brightness, Pitch, and Loudness. *The American Journal of Psychology*, vol.87/1-2, p.173-188.

Meyer, Leonard B (1970): *Emotion and Meaning in Music*. The University of Chicago Press, 9th impression

Middlestadt, S. E., Fishbein, M., & Chan, D. K.-S (1994): The effect of music on brand attitudes: Affect- or belief-based change? In: E. M. Clark, T. C. Brock, & D. W. Stewart (Eds.): *Attention, attitude, and affect in response to advertising* (pp. 149-167). Lawrence Erlbaum

Müller, Jenny & Kirchgeorg, Manfred (2010): Audio Branding in Line with Brand Personality. In: Bronner, Kai et al. (2011): *Audio Branding Academi Yearbook 2010/2011*. Nomos Verlagsgesellschaft, Edition Reinhard Fischer

Morris, Jon D. & Boone, Mary Anne (1998): The Effects of Music on Emotional Response, Brand Attitude, and Purchase Intent in an Emotional Advertising Condition. *Advances in Consumer Research* vol. 25, eds. Joseph W. Alba & J. Wesley Hutchinson, Provo, UT: Association for Consumer Research, p.518-526

Morrison, Steven, Demorest Steven, Aylward, Elizabeth, Cramer, Steven, Maravilla, Kenneth (2003): fMRI investigation of cross-cultural music comprehension. *NeuroImage,* vol.20, p.378-384

Nandan, Shiva (2005): An exploration of the brand identity-brand image linkage: A communications perspective. *Brand Management,* vol. 12/4, p.264–278

North, Adrian C., MacKenzie, Liam C., Law, Ruth M., Hargreaves, David (2004): The Effect of Musical and Voice "Fit" on Responses to Advertisements. *Journal of Applied Social Psychology,* vol.34/8, p.1675-1708

Park, C. & Young, S. (1986). Consumer response to television commercials: The impact of involvement and background music on brand attitude and formation. *Journal of Marketing Research*, vol.23/1, p.11-24

Palgat, Vijaykumar Krishnan (2009): Hearing, Remembering, and Branding: Guidelines for Creating Sonic Logos. *University of Cincinnati, Indian Institute of Management*

Patel, Aniruddh D (2003): Language, music, syntax and the brain. *Nature Neuroscience*, Vol.6/7, p.674-681

Peracchio, Laura and Tybout, Alice (1996): The Moderating Role of Prior Knowledge in Product Evaluation. *Journal of Consumer Research*, vol.23/3, p.177-192

Percy, Larry & Elliott, Richard (2009): *Strategic advertising management.* Oxford University Press, 3. ed.

Peretz, Isabelle, Gaudreau, Danielle & Bonnel, Anne-Marie (1998): Exposure effects on music preference and recognition. *Memory & cognition*, vol.26/5, p.884-802

Ramsgaard, Jesper (2009): Emotional profiling of Sound Logos. Audiodesign, *Institut for Informations- og Medievidenskab, Aarhus Universitet*.

Ramsgaard, Jesper, Winther, Julie, Beckmann, Suzanne, Le Ray, Guillaume (in press): Free association profiling on sound logos – an exploratory study. In: Bronner, Kai et al. (in press): *Audio Branding Academi Yearbook 2010/2011*. Nomos Verlagsgesellschaft, Edition Reinhard Fischer

Richins, Martha (1997): Measuring Emotions in the Consumption Experience. *The Journal of Consumer Research.* Vol.24/2, p.127-146

Russell, James (1980): A Circumplex Model of Affect. *Journal of Personality and Social Psychology.* vol.39/6, p.1161-1178

Russell, James (2003): Core affect and the psychological construction of emotion. *Psychological Review,* vol.110, p.145-172

Robertson, Kim (1989): Strategically Desirable Brand Name Characteristic. *Journal of Consumer Marketing*, vol.6/Fall, p.61–71

Salkind, Neil (ed.) (2007): *Encyclopedia of Measurement and Statustics*. Vol 1-3, SAGE Publications, Inc.

Schifferstein, Hendrik N.J & Hekkert, Paul (ed.) (2008): *Product Experience*. Elsevier.

Schmitt, Bernd H. (1999): *Experiential Marketing: How to Get Customers to Sense, Feel, Think, Act, Relate.* The Free Press.

Schubert, Emery (1996): Enjoyment of negative Emotions in Music: An Associative Network Explanation. *Psychology of Music,* vol.24, p.18-24

Scott, L.M. (1990). Understanding jingles and needledrop: A rhetorical approach to music in advertising. *Journal of Consumer Research,* vol.17/Sept, p.223-236

Serafine, Mary Louise (1988): *Music as cognition: the development of thought in sound*. Columbia University Press.

Smit, Edith G, Van Den Berge, Emilie, Franzen, Giep (n.d.): Brands are just like real people! The development of SWOCC's Brand Personality Scale. In: Hansen, Flemming & Christensen, Lars Bech (ed.) (2003): *Branding and Advertising*. Copenhagen Business School Press, p.22-43

Spence, Charles & Gallace, Alberto (2011): Multisensory Design: Reaching Out to Touch the Consumer. *Psychology & Marketing,* vol.28/3, p.267-308

Supphellen, Magne & Grønhaug, Kjell (2003): Building foreign brand personalities in Russia: the moderating effect of consumer ethnocentrism. *International Journal of Advertising*, vol.22, p.203-226

Västfjäll, Daniel & Gärling, Tommy (2007): Validation of a Swedish short self-report measure of core affect. Scandinavian Journal of Psychology, vol.48, p. 233-238

Valdez, Patricia & Mehrabian, Albert (1994): Effects of Color on Emotions. *Journal of Experimental Psychology: General*, vol.123/4, p.394-409

Venkataraman, Arun (2007): The sonic boom: Effect of Logo Presentation style in Television Commercials on Memory for the Advertised Brand. University of Missouri, Columbia, Faculty of the Graduate School

Vonk, Berdine, Steenfat, Majken, Ejlertsen, Mathilde, Stoorvogel, Andre & Saarela, Antti (2007): Breaking the silence – a managerial approach for companies to realise their audio potential. *School of Economics and Management. Lund University.*

Vida, Irena, Obadia, Claude, Kunz, Michelle (2007): The Effect of Background Music on Consumer Responses in a High-end Supermarket. *International Review of Retail, Distribution and Consumer Research,* vol.17/5, p.469-482

Vroomen, Jean & De Gelder, Beatrice (2000): Sound enhances visual perception: cross-modal effects of auditory organization on vision. *Journal of Experimental Psychology: Human Perception and Performance,* vol.26, p.1583-1590

Wagner, Mary S (2008): Dimensions of Music: The Effect of Music/Brand Congruity on Advertising and Brand Evaluations. *The University of Michigan*

Ward, Jamie, Huckstep, Brett and Tsakanikos, Elias (2006): Sound-colour synaesthesia: To what extent does it use cross-modal mechanisms common to us all? *Cortex*, vol.42, p.264-280

Yalch, Richard (1991): Memory in a Jingle Jungle: Music as a Mnemonic Device in Communicating Advertising Slogans. *Journal of Applied Psychology*, vol.76/2, p. 268-275

Yeoh, Johanne, North, Adrian (2010): The Effects of Musical Fit on Consumers' Ability to Freely Recall Related Products. *Empirical Musicology Review*, vol.5/1, p. 3-9

Zaltman, Gerald (2003). *How Customers Think: Essential Insights into the Mind of the Markets*. Boston: Harvard Business School Press

Zander, Mark F (2006): Musical influences in advertising: How music modifies first impressions of product endorsers and brands. *Psychology of Music,* vol.34/4, p.465-480

Zentner, Marcel, Grandjean, Didier and Scherer, Klaus R (2008): Emotions Evoked by the Sound of Music: Characterization, Classification, and Measurement. *American Psychological Association*, Vol.8/4, p.494-521

9 APPENDEX

(Submitted on USB-key)

APPENDIX A: QUESTIONNAIRE

Q#	QUESTION	CONSTRUCT	ITEM	SCALE	LITTERATURE REF
	SOUND				
1	Tryk Play og lyt. Kan du lide lyden, der afspilles?	Likeability	Sound	Jeg kan slet ikke lide den / Jeg kan rigtig godt lide den	
2	Tryk Play og lyt. Hvordan får lyden dig til at føle?	Affect	Sound	ked af det, deprimeret, misfornøjet / glad, munter, fornøjet sløv, passiv, søvnig / frisk, aktiv, vågen	Västfjäll & Gärling (2007): Validation of a Swedish short self-report measure of core affect Richins (1997): Measuring Emotions in the Consumption Experience
3	I hvilket omfang kan du genkende lyden?	Recognition	Sound	Slet ikke fortrolig med/ meget fortrolig med Slet ikke genkendeligt/ meget genkendeligt	Henderson & Cote (1998): Guideline for Selecting or Modifying Logos Hem & Iversen (2004): How to Develop a Destination Brand Logo: A Qualitative and Quantitative Approach
4	Hvordan vil du vurdere at følgende kendetegn beskriver lyden?	Sound Meaning	Sound	Attributliste (se nedenfor) Slet ikke / rigtig godt	J Aaker (1997): Brand Personality Dimensions J Aaker et al (2001): Consumption Symbols as Carriers of Culture: A Study of Japanese and Spanish Brand Personality Constructs Diamantopoulos et al (2005): The Impact of Brand Extensions of Brand Personality: Experiemental Evidence
5	Ved du hvilken virksomhed lyden repræsenterer?	Sound recall	Sound	Open answer text box + "Ved ikke"- check box	
6	Den lyd, du har lyttet til indtil nu, er [Brand navn]s lydlogo. Hvor godt kender du brandet?	Brand Knowledge	Name	Jeg kender det slet ikke / Jeg kender det rigtig godt Jeg har aldrig benyttet det/ jeg har benyttet det mange gange	Mishra, S., Umesh, U.N. and Stem, D.E. Jr (1993): "Antecedents of the Attraction Effect: An Information-processing Approach"
7	[samme skærm som Brand knowledge]	Brand attitude	Name	Det er ikke vigtigt for mig/ Det er meget vigtigt for mig Jeg kan slet ikke lide det/ Jeg kan rigtig godt lide det	Mishra, S., Umesh, U.N. and Stem, D.E. Jr (1993): "Antecedents of the Attraction Effect: An Information-processing Approach"
8	Synes du at, lydlogoet passer til din opfattelse af brandet?	Brand/sound fit	Sound Logo Name	Det passer slet ikke / det passer rigtig godt	
9	Hvordan beskriver nedenstående kendetegn [brand navn]?	Brand meaning	Sound Logo Name	Slet ikke / Rigtig godt	J Aaker (1997): Brand Personality Dimensions J Aaker et al (2001): Consumption Symbols as Carriers of Culture: A Study of Japanese and Spanish Brand Personality Constructs Diamantopoulos et al (2005): The Impact of Brand Extensions of Brand Personality: Experimental

					Evidence
	VISUAL				
10	Se på logoet. Hvad synes du om det?	Likeability	Logo	Jeg kan slet ikke lide det / Jeg kan rigtig godt lide det	
11	Se på logoet. Hvordan får det dig til at føle?	Affect	Logo	ked af det, deprimeret, misfornøjet / glad, munter, fornøjet sløv, passiv, søvnig / frisk, aktiv, vågen	
12	I hvilke omfang kan du genkende logoet?	Recognition	Logo	Slet ikke fortrolig med/ meget fortrolig med Slet ikke genkendeligt/ meget genkendeligt	
13	Hvordan vil du vurdere at følgende kendetegn beskriver logoet?	Visual Meaning	Logo	Attributliste (se nedenfor) Slet ikke / rigtig godt	
14	Logoet tilhører [brand navn]. Hvor godt kender du brandet?	Brand Knowledge	Name	Jeg kender det slet ikke / Jeg kender det rigtig godt Jeg har aldrig benyttet det/ jeg har benyttet det mange gange	
14a	[Samme skærm som knowledge]	Brand attitude	Name	Jeg kan slet ikke lide det/ Jeg kan rigtig godt lide det Det er ikke vigtigt for mig/ Det er meget vigtigt for mig	
16	Lyt til lyden. [Brand navn] har et lydlogo, der lyder sådan her. Hvordan synes du lyden passer til din opfattelse af brandet?	Brand/sound fit	Logo Sound Name	Det passer slet ikke / det passer rigtig godt	
17	Hvordan beskriver nedenstående kendetegn [brand navn]?	Brand meaning	Logo Sound Name	Attributliste (se nedenfor) Slet ikke / Rigtig godt	
	SOUND-VISUAL				
18	Lyt til lyden og se på logoet. Hvad synes du om dem?	Likeability	Sound Logo	Jeg kan slet ikke lide det / Jeg kan rigtig godt lide det	
19	Lyt til lyden og se på logoet. Hvordan får de dig til at føle?	Affect	Sound Logo	ked af det, deprimeret, misfornøjet / glad, munter, fornøjet sløv, passiv, søvnig / frisk, aktiv, vågen	
20	I hvilke omfang kan du genkende kombinationen af lyden og logoet?	Recognition	Sound Logo	Slet ikke fortrolig med/ meget fortrolig med Slet ikke genkendeligt/ meget genkendeligt	
21	Se på logoet og lyt til lyden. Hvordan vil du vurdere at følgende kendetegn beskriver kombinationen af lyden og logoet?	Sound-Visual Meaning	Sound Logo	Attributliste (se nedenfor) Slet ikke / rigtig godt	
22	Logoet og lydlogoet repræsenterer [brand navn]. Hvor godt kender du brandet?	Brand knowledge	Name	Jeg kender det slet ikke / Jeg kender det rigtig godt Jeg har aldrig benyttet	

				det/ jeg har benyttet det mange gange	
22a	[samme skærm som knowledge]	Brand attitude	Name	Jeg kan slet ikke lide det/ Jeg kan rigtig godt lide det Det er ikke vigtigt for mig/ Det er meget vigtigt for mig	
24	Hvordan synes du at kombinationen af lydlogo og logo passer til din opfattelse af brandet?	Sound-brand fit	Sound Logo Name	Det passer slet ikke / det passer rigtig godt	
25	Hvordan beskriver nedenstående kendetegn [brand navn]?	Brand-sound meaning	Sound Logo Name	Attributliste (se nedenfor) Slet ikke / Rigtig godt	

ATTRIBUTLIST

Nede-på-jorden
Ærlig
Venlig
Vovet
Fantasifuld
Unik
Pålidelig
Glamourøs
Elegant
Passioneret
Temperamentsfuld
Blid
Fredfyldt
Sikker
Spændende
Teknisk
Nem
Moderne

DEMOGRAFI

1	Alder:	15-70	Drop down
2	Køn:	Mand, Kvinde	Drop down
3	Region:	Region Hovedstaden, Region Sjælland, Region Nordjylland, Region Midtjylland, Region Syddanmark, [ingen oplysning]	Drop down
4	Angiv dit uddannelsesniveau	Folkskole, Gymnasium, Erhvervsuddannelse, mellem-lang videregående uddannelse, lang videregående uddannelse, ph.d [ønsker ikke at svare]	Drop down
5	Hvor vigtig er musik for dig i hverdagen?	Ikke vigtig/ meget vigtig	Skala 1-7
6	Hvordan ville du beskrive dine egne musiske evner?	Ingen evner/meget øvet	Skala 1-7
7	Hvad er din favoritgenre?	Jazz, blues, soul, metal, rock, pop, disco, funk, rnb, rap, folk, electronika, techno/trance, klassisk, verdensmusik, reggae/dub	Select

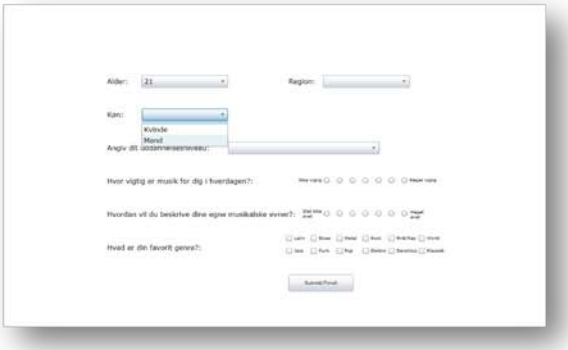
QUESTIONNAIRE EXAMPLES

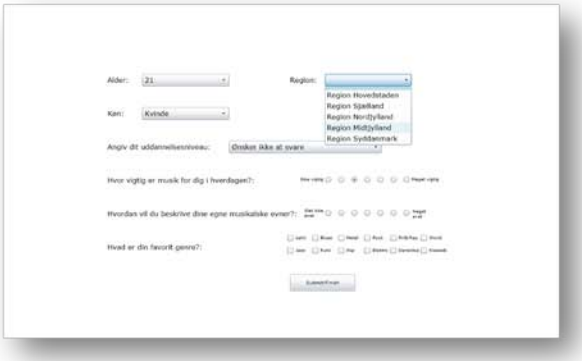
Examples of stimuli in A modality:

Eksamples of stimuli in V modality:

Eksamples of stimuli in AV modality:

Eksamples of demographic questions:

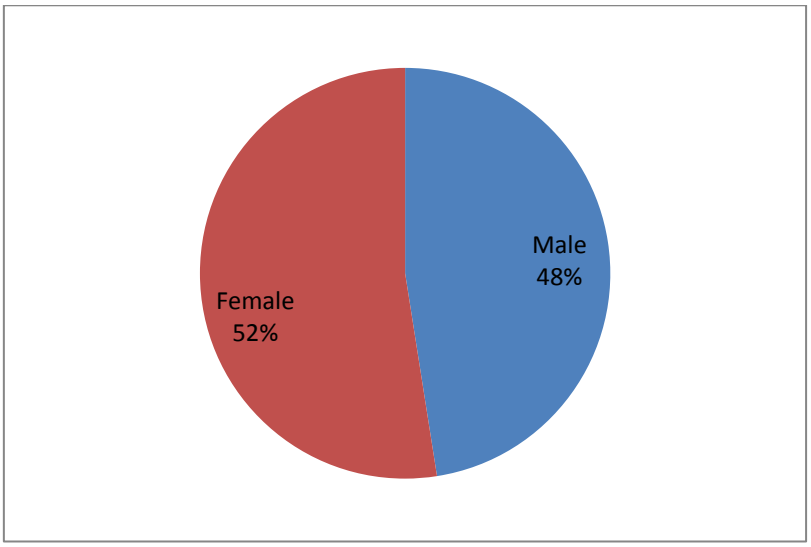




APPENDIX B: DEMOGRAPIC DATA

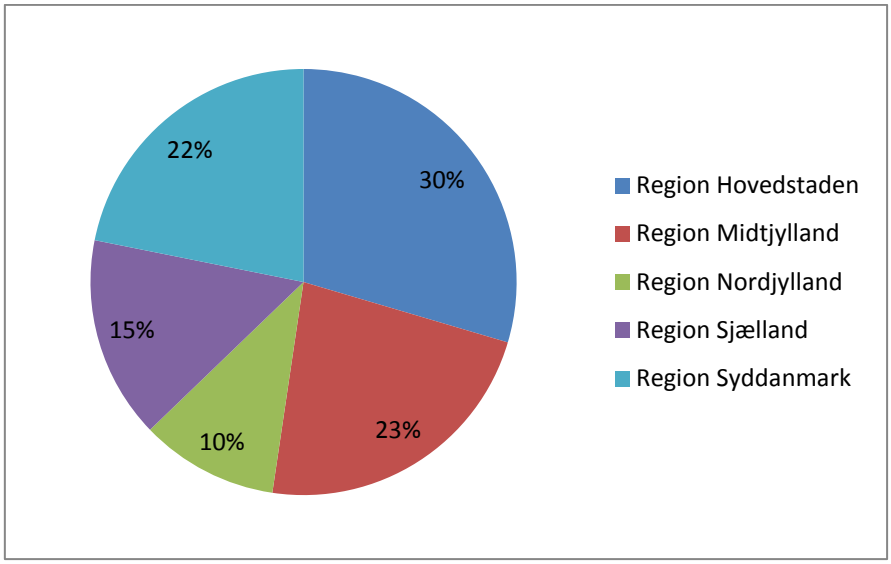
DISTRIBUTION ON SEX AND AGE

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Assessor Age	987	17	65	40,32	12,093
Valid N (listwise)	987				



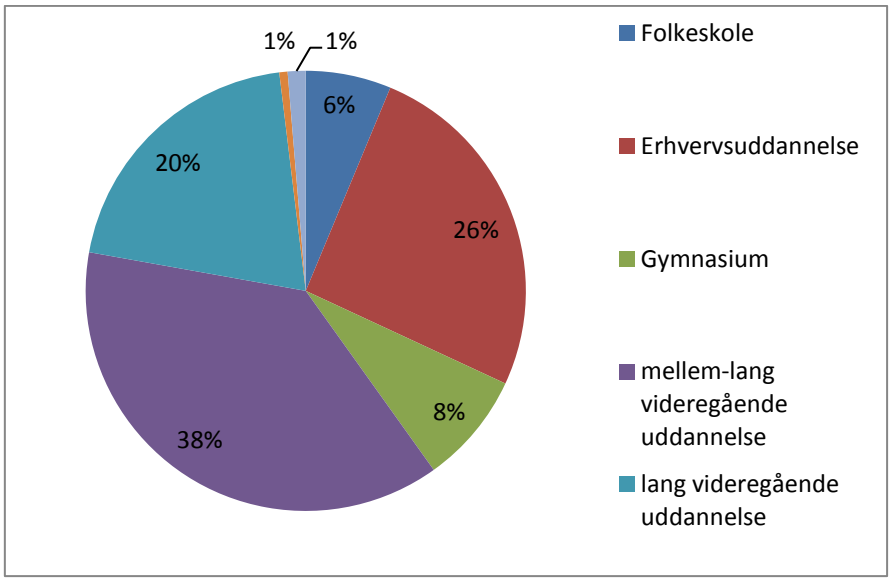
GEOGRAPHIC SPREAD

Region	N
Region Hovedstaden	291
Region Midtjylland	224
Region Nordjylland	103
Region Sjælland	151
Region Syddanmark	215



DISTRIBUTION ON EDUCATIONAL LEVEL

Level of education	N
Folkeskole	62
Erhvervsuddannelse	253
Gymnasium	81
Mellemlang videregående uddannelse	372
Lang videregående uddannelse	200
Ph.d.	6
Ønsker ikke at svare	13



APPENDIX C

Descriptive data

Descriptives

- Model constructs
  - Likeability, Affect, Brand knowledge, Brand attitude, Recognition

Brand	Modality	Cases	N	Value	Label
Danish Crown	Audio	0001 – 0146	146	1	DC_A
	A/V	0147 – 0299	153	2	DC-AV
	Visual	0300 - 0466	167	3	DC_V
Danske Spil	Audio	0467 – 0639	173	4	DS_A
	A/V	0640 – 0821	182	5	DS_AV
	Visual	0822 – 0983	162	6	DS_V
Femina	Audio	0984 – 1145	162	7	FE_A
	A/V	1146 – 1318	173	8	FE_AV
	Visual	1319 - 1501	183	9	FE_V
Mental Workout	Audio	1501 – 1668	167	10	MW_A
	A/V	1669 – 1814	146	11	MW_AV
	Visual	1815 – 1967	153	12	MW_V
Oddset	Audio	1968 – 2120	153	13	OD_A
	A/V	2121 – 2287	167	14	OD_AV
	Visual	2288 – 2433	143	15	OD_V
Q8	Audio	2434 – 2614	181	16	Q8_A
	A/V	2615 – 2776	162	17	Q8_AV
	Visual	2777 - 2949	173	18	Q8_V

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
Perceived General Fit	2,949	23.9%	9,382	76.7%	12,3301	100.0%

DANISH CROWN

DC Mean values

Audio

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Likeability	146	1	7	3,92	1,362
Affect_1	146	1	7	4,13	1,283
Affect_2	146	1	7	4,38	1,277
BrandKnowledge1	146	1	7	4,05	1,964
BrandKnowledge2	146	1	7	3,75	1,953
BrandAttitude1	146	1	7	2,71	1,575
BrandAttitude2	146	1	7	4,23	1,400
Recognition_1	146	1	7	3,77	1,676
Recognition_2	146	1	7	4,05	1,721
Valid N (listwise)	146				

AudioVisual

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Likeability	153	1	7	3,59	1,379
Affect_1	153	1	7	3,75	1,265
Affect_2	153	1	7	3,95	1,243
BrandKnowledge1	153	1	7	4,90	1,685
BrandKnowledge2	153	1	7	4,68	1,768
BrandAttitude1	153	1	7	3,24	1,610
BrandAttitude2	153	1	7	4,15	1,563
Recognition_1	153	1	7	3,21	1,863
Recognition_2	153	1	7	3,35	1,872
Valid N (listwise)	153				

Visual

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Likeability	167	1	7	4,52	1,221
Affect_1	167	1	7	4,23	,896
Affect_2	167	1	7	4,18	1,099
BrandKnowledge1	167	1	7	5,04	1,414
BrandKnowledge2	167	1	7	4,76	1,534
BrandAttitude1	167	1	7	3,46	1,516
BrandAttitude2	167	1	7	4,36	1,318
Recognition_1	167	1	7	5,37	1,373
Recognition_2	167	1	7	5,63	1,324
Valid N (listwise)	167				

Perceived General Fit	N	Mean	Std. Deviation
Audio	146	3.16	1.850
AudioVisual	153	3.59	1.869
Visual	167	3.86	1.580

DS Mean values

Audio

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Likeability	173	1	7	3,69	1,601
Affect_1	173	1	7	4,18	1,223
Affect_2	173	1	7	4,34	1,282
BrandKnowledge1	173	1	7	4,60	1,842
BrandKnowledge2	173	1	7	3,79	2,035
BrandAttitude1	173	1	7	2,80	1,645
BrandAttitude2	173	1	7	3,83	1,555
Recognition_1	173	1	7	4,05	1,671
Recognition_2	173	1	7	4,33	1,752
Valid N (listwise)	173				

AudioVisual

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Likeability	182	1	7	4,28	1,473
Affect_1	182	1	7	4,79	1,250
Affect_2	182	1	7	4,68	1,265
BrandKnowledge1	182	1	7	5,55	1,462
BrandKnowledge2	182	1	7	4,65	2,123
BrandAttitude1	182	1	7	3,18	1,760
BrandAttitude2	182	1	7	4,23	1,549
Recognition_1	182	1	7	4,57	1,984
Recognition_2	182	1	7	4,85	1,945
Valid N (listwise)	182				

Visual

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Likeability	162	1	7	4,31	1,384
Affect_1	162	1	7	4,40	1,117
Affect_2	162	1	7	4,39	1,088
BrandKnowledge1	162	1	7	5,60	1,339
BrandKnowledge2	162	1	7	4,73	1,959
BrandAttitude1	162	1	7	3,28	1,713
BrandAttitude2	162	1	7	4,27	1,607
Recognition_1	162	1	7	5,79	1,376
Recognition_2	162	1	7	6,01	1,295
Valid N (listwise)	162				

Perceived General Fit	N	Mean	Std. Deviation
Audio	173	4.21	1.783
AudioVisual	183	4.60	1.652
Visual	162	4.65	1.680

FEMINA

FE Mean Values

Audio

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Likeability	162	1	7	4,73	1,360
Affect_1	162	2	7	5,01	1,063
Affect_2	162	2	7	4,60	1,139
BrandKnowledge1	162	1	7	2,97	1,836
BrandKnowledge2	162	1	7	2,20	1,604
BrandAttitude1	162	1	7	1,85	1,177
BrandAttitude2	162	1	7	3,61	1,424
Recognition_1	162	1	7	3,99	1,787
Recognition_2	162	1	7	4,20	1,874
Valid N (listwise)	162				

AudioVisual

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Likeability	173	1	7	3,94	1,455
Affect_1	173	1	7	4,45	1,178
Affect_2	173	1	7	4,09	1,302
BrandKnowledge1	173	1	7	3,87	1,784
BrandKnowledge2	173	1	7	2,80	1,904
BrandAttitude1	173	1	6	2,18	1,427
BrandAttitude2	173	1	7	3,68	1,430
Recognition_1	173	1	7	2,98	1,760
Recognition_2	173	1	7	3,23	1,814
Valid N (listwise)	173				

Visual

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Likeability	183	1	7	3,93	1,265
Affect_1	183	1	7	4,18	,923
Affect_2	183	1	7	3,99	1,097
BrandKnowledge1	183	1	7	4,40	1,624
BrandKnowledge2	183	1	7	3,08	1,872
BrandAttitude1	183	1	7	2,19	1,419
BrandAttitude2	183	1	7	3,76	1,345
Recognition_1	183	1	7	4,83	1,634
Recognition_2	183	1	7	5,27	1,487
Valid N (listwise)	183				

Perceived General Fit	N	Mean	Std. Deviation
Audio	162	3.98	1.572
AudioVisual	173	4.08	1.585
Visual	183	3.93	1.440

MW Descriptives

Audio

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Likeability	167	1	7	4,83	1,400
Affect_1	167	1	7	4,25	1,236
Affect_2	167	1	7	3,79	1,361
BrandKnowledge1	167	1	4	1,16	,563
BrandKnowledge2	167	1	5	1,15	,587
BrandAttitude1	167	1	6	1,78	1,277
BrandAttitude2	167	1	7	3,56	1,656
Recognition_1	167	1	7	2,38	1,559
Recognition_2	167	1	7	2,54	1,597
Valid N (listwise)	167				

AudioVisual

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Likeability	146	1	7	4,43	1,750
Affect_1	146	1	7	4,19	1,482
Affect_2	146	1	7	3,74	1,518
BrandKnowledge1	146	1	6	1,37	,940
BrandKnowledge2	146	1	6	1,27	,818
BrandAttitude1	146	1	6	2,06	1,381
BrandAttitude2	146	1	7	3,73	1,564
Recognition_1	146	1	7	1,94	1,532
Recognition_2	146	1	7	2,09	1,601
Valid N (listwise)	146				

Visual

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Likeability	153	1	7	2,73	1,793
Affect_1	153	1	7	3,35	1,350
Affect_2	153	1	7	3,54	1,487
BrandKnowledge1	153	1	7	1,29	,902
BrandKnowledge2	153	1	7	1,24	,851
BrandAttitude1	153	1	7	1,90	1,334
BrandAttitude2	153	1	7	2,99	1,614
Recognition_1	153	1	6	1,52	1,148
Recognition_2	153	1	7	1,92	1,592
Valid N (listwise)	153				

Perceived General Fit	N	Mean	Std. Deviation
Audio	167	3.67	1.734
AudioVisual	146	4.33	1.714
Visual	153	4.36	1.852

OD Descriptives

Audio

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Likeability	153	1	7	4,19	1,601
Affect_1	153	1	7	5,07	1,499
Affect_2	153	1	7	4,82	1,487
BrandKnowledge1	153	1	7	4,39	1,896
BrandKnowledge2	153	1	7	2,59	1,890
BrandAttitude1	153	1	7	2,07	1,415
BrandAttitude2	153	1	7	3,54	1,662
Recognition_1	153	1	7	4,43	1,806
Recognition_2	152	1	7	4,74	1,848
Valid N (listwise)	152				

AudioVisual

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Likeability	167	1	7	4,02	1,709
Affect_1	167	1	7	4,86	1,392
Affect_2	167	1	7	4,56	1,499
BrandKnowledge1	167	1	7	4,78	1,873
BrandKnowledge2	167	1	7	3,03	2,199
BrandAttitude1	167	1	7	2,55	1,681
BrandAttitude2	167	1	7	3,80	1,676
Recognition_1	167	1	7	4,47	1,951
Recognition_2	167	1	7	4,54	1,966
Valid N (listwise)	167				

Visual

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Likeability	146	1	7	3,93	1,368
Affect_1	146	1	7	3,95	1,131
Affect_2	146	1	7	3,82	1,247
BrandKnowledge1	146	1	7	5,12	1,476
BrandKnowledge2	146	1	7	2,98	2,167
BrandAttitude1	146	1	7	2,50	1,735
BrandAttitude2	146	1	7	3,79	1,473
Recognition_1	146	1	7	5,48	1,410
Recognition_2	146	1	7	5,75	1,392
Valid N (listwise)	146				

Perceived General Fit	N	Mean	Std. Deviation
Audio	153	3.71	1.901
AudioVisual	167	4.27	1.778
Visual	146	4.29	1.934

Q8 Descriptives

Audio

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Likeability	181	1	7	3,83	1,605
Affect_1	181	1	7	4,40	1,163
Affect_2	181	1	7	4,18	1,157
BrandKnowledge1	181	1	7	4,13	1,854
BrandKnowledge2	181	1	7	3,87	1,817
BrandAttitude1	181	1	7	2,51	1,519
BrandAttitude2	181	1	7	3,81	1,415
Recognition_1	181	1	7	2,52	1,743
Recognition_2	181	1	7	2,78	1,873
Valid N (listwise)	181				

AudioVisual

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Likeability	162	1	7	3,48	1,505
Affect_1	162	1	7	4,19	1,257
Affect_2	162	1	7	4,01	1,271
BrandKnowledge1	162	1	7	4,94	1,628
BrandKnowledge2	162	1	7	4,22	1,736
BrandAttitude1	162	1	6	2,79	1,385
BrandAttitude2	162	1	7	3,81	1,286
Recognition_1	162	1	7	2,90	1,799
Recognition_2	162	1	7	3,01	1,818
Valid N (listwise)	162				

Visual

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Likeability	173	1	7	4,35	1,383
Affect_1	173	1	7	4,11	,955
Affect_2	173	2	7	4,18	,981
BrandKnowledge1	173	1	7	5,50	1,337
BrandKnowledge2	173	1	7	4,79	1,675
BrandAttitude1	173	1	7	3,51	1,605
BrandAttitude2	173	1	7	4,38	1,336
Recognition_1	173	1	7	5,85	1,215
Recognition_2	173	2	7	6,05	1,195
Valid N (listwise)	173				

Perceived General Fit	N	Mean	Std. Deviation
Audio	181	3.39	1.614
AudioVisual	162	3.33	1.723
Visual	173	3.39	1.790

APPENDIX D

Correlation analysis data

Correlation analysis

- Model constructs
  - Brand knowledge, Brand attitude

Brand	Modality	Cases	N	Value	Label
Danish Crown	Audio	0001 – 0146	146	1	DC_A
	A/V	0147 – 0299	153	2	DC-AV
	Visual	0300 - 0466	167	3	DC_V
Danske Spil	Audio	0467 – 0639	173	4	DS_A
	A/V	0640 – 0821	182	5	DS_AV
	Visual	0822 – 0983	162	6	DS_V
Femina	Audio	0984 – 1145	162	7	FE_A
	A/V	1146 – 1318	173	8	FE_AV
	Visual	1319 - 1501	183	9	FE_V
Mental Workout	Audio	1501 – 1668	167	10	MW_A
	A/V	1669 – 1814	146	11	MW_AV
	Visual	1815 – 1967	153	12	MW_V
Oddset	Audio	1968 – 2120	153	13	OD_A
	A/V	2121 – 2287	167	14	OD_AV
	Visual	2288 – 2433	143	15	OD_V
Q8	Audio	2434 – 2614	181	16	Q8_A
	A/V	2615 – 2776	162	17	Q8_AV
	Visual	2777 - 2949	173	18	Q8_V

Within construct corr coefficients

Across constructs corr coefficients > .650

DANISH CROWN

DC Audio / Correlation analysis

Correlations

		Likeability	Affect_1	Affect_2	Brand Knowledge1	Brand Knowledge2	BrandAttitude 1	BrandAttitude 2	Recognition_ 1	Recognition_ 2
Likeability	Pearson Correlation	1	,689**	,510**	,009	-,054	,047	,213**	,309**	,220**
	Sig. (2-tailed)		,000	,000	,910	,515	,575	,010	,000	,008
	N	146	146	146	146	146	146	146	146	146
Affect_1	Pearson Correlation	,689**	1	,686**	,049	-,006	,046	,310**	,306**	,219**
	Sig. (2-tailed)	,000		,000	,556	,939	,582	,000	,000	,008
	N	146	146	146	146	146	146	146	146	146
Affect_2	Pearson Correlation	,510**	,686**	1	,044	,029	,109	,313**	,279**	,289**
	Sig. (2-tailed)	,000	,000		,598	,726	,190	,000	,001	,000
	N	146	146	146	146	146	146	146	146	146
BrandKnowledge1	Pearson Correlation	,009	,049	,044	1	,845**	,564**	,437**	,102	,034
	Sig. (2-tailed)	,910	,556	,598		,000	,000	,000	,220	,686
	N	146	146	146	146	146	146	146	146	146
BrandKnowledge2	Pearson Correlation	-,054	-,006	,029	,845**	1	,701**	,470**	,046	,023
	Sig. (2-tailed)	,515	,939	,726	,000		,000	,000	,581	,787
	N	146	146	146	146	146	146	146	146	146
BrandAttitude1	Pearson Correlation	,047	,046	,109	,564**	,701**	1	,500**	,067	,108
	Sig. (2-tailed)	,575	,582	,190	,000	,000		,000	,424	,196
	N	146	146	146	146	146	146	146	146	146
BrandAttitude2	Pearson Correlation	,213**	,310**	,313**	,437**	,470**	,500**	1	,261**	,215**
	Sig. (2-tailed)	,010	,000	,000	,000	,000	,000		,001	,009
	N	146	146	146	146	146	146	146	146	146
Recognition_1	Pearson Correlation	,309**	,306**	,279**	,102	,046	,067	,261**	1	,838**
	Sig. (2-tailed)	,000	,000	,001	,220	,581	,424	,001		,000
	N	146	146	146	146	146	146	146	146	146
Recognition_2	Pearson Correlation	,220**	,219**	,289**	,034	,023	,108	,215**	,838**	1
	Sig. (2-tailed)	,008	,008	,000	,686	,787	,196	,009	,000	
	N	146	146	146	146	146	146	146	146	146

**. Correlation is significant at the 0.01 level (2-tailed).

DANISH CROWN

DC Audio Visual / Correlation analysis

Correlations

		Likeability	Affect_1	Affect_2	Brand Knowledge1	Brand Knowledge2	BrandAttitude 1	BrandAttitude 2	Recognition_ 1	Recognition_ 2
Likeability	Pearson Correlation	1	,733**	,488**	,323**	,340**	,293**	,477**	,236**	,196*
	Sig. (2-tailed)		,000	,000	,000	,000	,000	,000	,003	,015
	N	153	153	153	153	153	153	153	153	153
Affect_1	Pearson Correlation	,733**	1	,629**	,238**	,240**	,253**	,406**	,199*	,177*
	Sig. (2-tailed)	,000		,000	,003	,003	,002	,000	,014	,028
	N	153	153	153	153	153	153	153	153	153
Affect_2	Pearson Correlation	,488**	,629**	1	,224**	,221**	,150	,295**	,402**	,360**
	Sig. (2-tailed)	,000	,000		,005	,006	,064	,000	,000	,000
	N	153	153	153	153	153	153	153	153	153
BrandKnowledge1	Pearson Correlation	,323**	,238**	,224**	1	,804**	,584**	,682**	,275**	,195*
	Sig. (2-tailed)	,000	,003	,005		,000	,000	,000	,001	,016
	N	153	153	153	153	153	153	153	153	153
BrandKnowledge2	Pearson Correlation	,340**	,240**	,221**	,804**	1	,679**	,836**	,162*	,112
	Sig. (2-tailed)	,000	,003	,006	,000		,000	,000	,045	,169
	N	153	153	153	153	153	153	153	153	153
BrandAttitude1	Pearson Correlation	,293**	,253**	,150	,584**	,679**	1	,756**	,198*	,133
	Sig. (2-tailed)	,000	,002	,064	,000	,000		,000	,014	,101
	N	153	153	153	153	153	153	153	153	153
BrandAttitude2	Pearson Correlation	,477**	,406**	,295**	,682**	,836**	,756**	1	,226**	,153
	Sig. (2-tailed)	,000	,000	,000	,000	,000	,000		,005	,060
	N	153	153	153	153	153	153	153	153	153
Recognition_1	Pearson Correlation	,236**	,199*	,402**	,275**	,162*	,198*	,226**	1	,867**
	Sig. (2-tailed)	,003	,014	,000	,001	,045	,014	,005		,000
	N	153	153	153	153	153	153	153	153	153
Recognition_2	Pearson Correlation	,196*	,177*	,360**	,195*	,112	,133	,153	,867**	1
	Sig. (2-tailed)	,015	,028	,000	,016	,169	,101	,060	,000	
	N	153	153	153	153	153	153	153	153	153

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

DANISH CROWN

DC Visual / Correlation analysis

Correlations

		Likeability	Affect_1	Affect_2	Brand Knowledge1	Brand Knowledge2	BrandAttitude 1	BrandAttitude 2	Recognition_ 1	Recognition_ 2
Likeability	Pearson Correlation	1	,672**	,684**	,362**	,430**	,480**	,586**	,403**	,489**
	Sig. (2-tailed)		,000	,000	,000	,000	,000	,000	,000	,000
	N	167	167	167	167	167	167	167	167	167
Affect_1	Pearson Correlation	,672**	1	,790**	,245**	,298**	,371**	,558**	,402**	,422**
	Sig. (2-tailed)	,000		,000	,001	,000	,000	,000	,000	,000
	N	167	167	167	167	167	167	167	167	167
Affect_2	Pearson Correlation	,684**	,790**	1	,190*	,247**	,417**	,500**	,356**	,406**
	Sig. (2-tailed)	,000	,000		,014	,001	,000	,000	,000	,000
	N	167	167	167	167	167	167	167	167	167
BrandKnowledge1	Pearson Correlation	,362**	,245**	,190*	1	,699**	,414**	,410**	,633**	,599**
	Sig. (2-tailed)	,000	,001	,014		,000	,000	,000	,000	,000
	N	167	167	167	167	167	167	167	167	167
BrandKnowledge2	Pearson Correlation	,430**	,298**	,247**	,699**	1	,672**	,648**	,525**	,457**
	Sig. (2-tailed)	,000	,000	,001	,000		,000	,000	,000	,000
	N	167	167	167	167	167	167	167	167	167
BrandAttitude1	Pearson Correlation	,480**	,371**	,417**	,414**	,672**	1	,738**	,371**	,280**
	Sig. (2-tailed)	,000	,000	,000	,000	,000		,000	,000	,000
	N	167	167	167	167	167	167	167	167	167
BrandAttitude2	Pearson Correlation	,586**	,558**	,500**	,410**	,648**	,738**	1	,413**	,394**
	Sig. (2-tailed)	,000	,000	,000	,000	,000	,000		,000	,000
	N	167	167	167	167	167	167	167	167	167
Recognition_1	Pearson Correlation	,403**	,402**	,356**	,633**	,525**	,371**	,413**	1	,818**
	Sig. (2-tailed)	,000	,000	,000	,000	,000	,000	,000		,000
	N	167	167	167	167	167	167	167	167	167
Recognition_2	Pearson Correlation	,489**	,422**	,406**	,599**	,457**	,280**	,394**	,818**	1
	Sig. (2-tailed)	,000	,000	,000	,000	,000	,000	,000	,000	
	N	167	167	167	167	167	167	167	167	167

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

DS Audio / Correlation analysis

Correlations

		Likeability	Affect_1	Affect_2	Brand Knowledge1	Brand Knowledge2	BrandAttitude 1	BrandAttitude 2	Recognition_ 1	Recognition_ 2
Likeability	Pearson Correlation	1	,696**	,586**	,294**	,178*	,297**	,465**	,482**	,418**
	Sig. (2-tailed)		,000	,000	,000	,019	,000	,000	,000	,000
	N	173	173	173	173	173	173	173	173	173
Affect_1	Pearson Correlation	,696**	1	,759**	,153*	,097	,130	,282**	,342**	,300**
	Sig. (2-tailed)	,000		,000	,044	,205	,088	,000	,000	,000
	N	173	173	173	173	173	173	173	173	173
Affect_2	Pearson Correlation	,586**	,759**	1	,138	,109	,133	,300**	,290**	,248**
	Sig. (2-tailed)	,000	,000		,070	,152	,080	,000	,000	,001
	N	173	173	173	173	173	173	173	173	173
BrandKnowledge1	Pearson Correlation	,294**	,153*	,138	1	,626**	,425**	,610**	,324**	,282**
	Sig. (2-tailed)	,000	,044	,070		,000	,000	,000	,000	,000
	N	173	173	173	173	173	173	173	173	173
BrandKnowledge2	Pearson Correlation	,178*	,097	,109	,626**	1	,707**	,621**	,220**	,182*
	Sig. (2-tailed)	,019	,205	,152	,000		,000	,000	,004	,016
	N	173	173	173	173	173	173	173	173	173
BrandAttitude1	Pearson Correlation	,297**	,130	,133	,425**	,707**	1	,660**	,230**	,172*
	Sig. (2-tailed)	,000	,088	,080	,000	,000		,000	,002	,024
	N	173	173	173	173	173	173	173	173	173
BrandAttitude2	Pearson Correlation	,465**	,282**	,300**	,610**	,621**	,660**	1	,334**	,246**
	Sig. (2-tailed)	,000	,000	,000	,000	,000	,000		,000	,001
	N	173	173	173	173	173	173	173	173	173
Recognition_1	Pearson Correlation	,482**	,342**	,290**	,324**	,220**	,230**	,334**	1	,858**
	Sig. (2-tailed)	,000	,000	,000	,000	,004	,002	,000		,000
	N	173	173	173	173	173	173	173	173	173
Recognition_2	Pearson Correlation	,418**	,300**	,248**	,282**	,182*	,172*	,246**	,858**	1
	Sig. (2-tailed)	,000	,000	,001	,000	,016	,024	,001	,000	
	N	173	173	173	173	173	173	173	173	173

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

DS Audio Visual / Correlation analysis

Correlations

		Likeability	Affect_1	Affect_2	Brand Knowledge1	Brand Knowledge2	BrandAttitude 1	BrandAttitude 2	Recognition_ 1	Recognition_ 2
Likeability	Pearson Correlation	1	,753**	,736**	,341**	,279**	,414**	,560**	,594**	,554**
	Sig. (2-tailed)		,000	,000	,000	,000	,000	,000	,000	,000
	N	182	182	182	182	182	182	182	182	182
Affect_1	Pearson Correlation	,753**	1	,844**	,373**	,255**	,387**	,497**	,591**	,553**
	Sig. (2-tailed)	,000		,000	,000	,001	,000	,000	,000	,000
	N	182	182	182	182	182	182	182	182	182
Affect_2	Pearson Correlation	,736**	,844**	1	,277**	,195**	,346**	,447**	,572**	,540**
	Sig. (2-tailed)	,000	,000		,000	,008	,000	,000	,000	,000
	N	182	182	182	182	182	182	182	182	182
BrandKnowledge1	Pearson Correlation	,341**	,373**	,277**	1	,586**	,484**	,534**	,496**	,454**
	Sig. (2-tailed)	,000	,000	,000		,000	,000	,000	,000	,000
	N	182	182	182	182	182	182	182	182	182
BrandKnowledge2	Pearson Correlation	,279**	,255**	,195**	,586**	1	,733**	,647**	,318**	,209**
	Sig. (2-tailed)	,000	,001	,008	,000		,000	,000	,000	,005
	N	182	182	182	182	182	182	182	182	182
BrandAttitude1	Pearson Correlation	,414**	,387**	,346**	,484**	,733**	1	,723**	,376**	,284**
	Sig. (2-tailed)	,000	,000	,000	,000	,000		,000	,000	,000
	N	182	182	182	182	182	182	182	182	182
BrandAttitude2	Pearson Correlation	,560**	,497**	,447**	,534**	,647**	,723**	1	,459**	,365**
	Sig. (2-tailed)	,000	,000	,000	,000	,000	,000		,000	,000
	N	182	182	182	182	182	182	182	182	182
Recognition_1	Pearson Correlation	,594**	,591**	,572**	,496**	,318**	,376**	,459**	1	,871**
	Sig. (2-tailed)	,000	,000	,000	,000	,000	,000	,000		,000
	N	182	182	182	182	182	182	182	182	182
Recognition_2	Pearson Correlation	,554**	,553**	,540**	,454**	,209**	,284**	,365**	,871**	1
	Sig. (2-tailed)	,000	,000	,000	,000	,005	,000	,000	,000	
	N	182	182	182	182	182	182	182	182	182

**. Correlation is significant at the 0.01 level (2-tailed).

DS visual/ Correlation analysis

Correlations

		Likeability	Affect_1	Affect_2	Brand Knowledge1	Brand Knowledge2	BrandAttitude 1	BrandAttitude 2	Recognition_ 1	Recognition_ 2
Likeability	Pearson Correlation	1	,666**	,609**	,411**	,464**	,477**	,661**	,403**	,351**
	Sig. (2-tailed)		,000	,000	,000	,000	,000	,000	,000	,000
	N	162	162	162	162	162	162	162	162	162
Affect_1	Pearson Correlation	,666**	1	,811**	,314**	,410**	,457**	,577**	,362**	,267**
	Sig. (2-tailed)	,000		,000	,000	,000	,000	,000	,000	,001
	N	162	162	162	162	162	162	162	162	162
Affect_2	Pearson Correlation	,609**	,811**	1	,238**	,298**	,365**	,509**	,258**	,208**
	Sig. (2-tailed)	,000	,000		,002	,000	,000	,000	,001	,008
	N	162	162	162	162	162	162	162	162	162
BrandKnowledge1	Pearson Correlation	,411**	,314**	,238**	1	,560**	,438**	,482**	,555**	,537**
	Sig. (2-tailed)	,000	,000	,002		,000	,000	,000	,000	,000
	N	162	162	162	162	162	162	162	162	162
BrandKnowledge2	Pearson Correlation	,464**	,410**	,298**	,560**	1	,707**	,690**	,414**	,295**
	Sig. (2-tailed)	,000	,000	,000	,000		,000	,000	,000	,000
	N	162	162	162	162	162	162	162	162	162
BrandAttitude1	Pearson Correlation	,477**	,457**	,365**	,438**	,707**	1	,697**	,336**	,220**
	Sig. (2-tailed)	,000	,000	,000	,000	,000		,000	,000	,005
	N	162	162	162	162	162	162	162	162	162
BrandAttitude2	Pearson Correlation	,661**	,577**	,509**	,482**	,690**	,697**	1	,391**	,282**
	Sig. (2-tailed)	,000	,000	,000	,000	,000	,000		,000	,000
	N	162	162	162	162	162	162	162	162	162
Recognition_1	Pearson Correlation	,403**	,362**	,258**	,555**	,414**	,336**	,391**	1	,831**
	Sig. (2-tailed)	,000	,000	,001	,000	,000	,000	,000		,000
	N	162	162	162	162	162	162	162	162	162
Recognition_2	Pearson Correlation	,351**	,267**	,208**	,537**	,295**	,220**	,282**	,831**	1
	Sig. (2-tailed)	,000	,001	,008	,000	,000	,005	,000	,000	
	N	162	162	162	162	162	162	162	162	162

**. Correlation is significant at the 0.01 level (2-tailed).

FEMINA

FE Audio / Corre analysis

Correlations

		Likeability	Affect_1	Affect_2	Brand Knowledge1	Brand Knowledge2	BrandAttitude 1	BrandAttitude 2	Recognition_ 1	Recognition_ 2
Likeability	Pearson Correlation	1	,595**	,498**	,081	,053	,141	,559**	,262**	,247**
	Sig. (2-tailed)		,000	,000	,304	,500	,073	,000	,001	,002
	N	162	162	162	162	162	162	162	162	162
Affect_1	Pearson Correlation	,595**	1	,568**	-,095	-,158*	-,098	,299**	,137	,120
	Sig. (2-tailed)	,000		,000	,228	,045	,216	,000	,081	,127
	N	162	162	162	162	162	162	162	162	162
Affect_2	Pearson Correlation	,498**	,568**	1	-,089	-,119	,014	,292**	,150	,200*
	Sig. (2-tailed)	,000	,000		,260	,132	,855	,000	,056	,011
	N	162	162	162	162	162	162	162	162	162
BrandKnowledge1	Pearson Correlation	,081	-,095	-,089	1	,757**	,506**	,373**	,083	,078
	Sig. (2-tailed)	,304	,228	,260		,000	,000	,000	,293	,326
	N	162	162	162	162	162	162	162	162	162
BrandKnowledge2	Pearson Correlation	,053	-,158*	-,119	,757**	1	,678**	,383**	-,012	-,009
	Sig. (2-tailed)	,500	,045	,132	,000		,000	,000	,878	,906
	N	162	162	162	162	162	162	162	162	162
BrandAttitude1	Pearson Correlation	,141	-,098	,014	,506**	,678**	1	,475**	-,010	,005
	Sig. (2-tailed)	,073	,216	,855	,000	,000		,000	,902	,945
	N	162	162	162	162	162	162	162	162	162
BrandAttitude2	Pearson Correlation	,559**	,299**	,292**	,373**	,383**	,475**	1	,152	,203**
	Sig. (2-tailed)	,000	,000	,000	,000	,000	,000		,054	,009
	N	162	162	162	162	162	162	162	162	162
Recognition_1	Pearson Correlation	,262**	,137	,150	,083	-,012	-,010	,152	1	,865**
	Sig. (2-tailed)	,001	,081	,056	,293	,878	,902	,054		,000
	N	162	162	162	162	162	162	162	162	162
Recognition_2	Pearson Correlation	,247**	,120	,200*	,078	-,009	,005	,203**	,865**	1
	Sig. (2-tailed)	,002	,127	,011	,326	,906	,945	,009	,000	
	N	162	162	162	162	162	162	162	162	162

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

FEMINA

FE Audio Visual / Corre analysis

Correlations

		Likeability	Affect_1	Affect_2	Brand Knowledge1	Brand Knowledge2	BrandAttitude 1	BrandAttitude 2	Recognition_ 1	Recognition_ 2
Likeability	Pearson Correlation	1	,630**	,524**	,196**	,207**	,193*	,398**	,469**	,364**
	Sig. (2-tailed)		,000	,000	,010	,006	,011	,000	,000	,000
	N	173	173	173	173	173	173	173	173	173
Affect_1	Pearson Correlation	,630**	1	,713**	,182*	,130	,071	,286**	,264**	,243**
	Sig. (2-tailed)	,000		,000	,016	,087	,352	,000	,000	,001
	N	173	173	173	173	173	173	173	173	173
Affect_2	Pearson Correlation	,524**	,713**	1	,150*	,141	,091	,215**	,252**	,243**
	Sig. (2-tailed)	,000	,000		,049	,065	,231	,005	,001	,001
	N	173	173	173	173	173	173	173	173	173
BrandKnowledge1	Pearson Correlation	,196**	,182*	,150*	1	,698**	,501**	,561**	,196**	,217**
	Sig. (2-tailed)	,010	,016	,049		,000	,000	,000	,010	,004
	N	173	173	173	173	173	173	173	173	173
BrandKnowledge2	Pearson Correlation	,207**	,130	,141	,698**	1	,780**	,586**	,219**	,284**
	Sig. (2-tailed)	,006	,087	,065	,000		,000	,000	,004	,000
	N	173	173	173	173	173	173	173	173	173
BrandAttitude1	Pearson Correlation	,193*	,071	,091	,501**	,780**	1	,605**	,207**	,184*
	Sig. (2-tailed)	,011	,352	,231	,000	,000		,000	,006	,016
	N	173	173	173	173	173	173	173	173	173
BrandAttitude2	Pearson Correlation	,398**	,286**	,215**	,561**	,586**	,605**	1	,282**	,272**
	Sig. (2-tailed)	,000	,000	,005	,000	,000	,000		,000	,000
	N	173	173	173	173	173	173	173	173	173
Recognition_1	Pearson Correlation	,469**	,264**	,252**	,196**	,219**	,207**	,282**	1	,795**
	Sig. (2-tailed)	,000	,000	,001	,010	,004	,006	,000		,000
	N	173	173	173	173	173	173	173	173	173
Recognition_2	Pearson Correlation	,364**	,243**	,243**	,217**	,284**	,184*	,272**	,795**	1
	Sig. (2-tailed)	,000	,001	,001	,004	,000	,016	,000	,000	
	N	173	173	173	173	173	173	173	173	173

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

FEMINA

FE Visual / Correlation analysis

Correlations

		Likeability	Affect_1	Affect_2	Brand Knowledge1	Brand Knowledge2	BrandAttitude 1	BrandAttitude 2	Recognition_ 1	Recognition_ 2
Likeability	Pearson Correlation	1	,636**	,633**	,369**	,381**	,368**	,543**	,436**	,369**
	Sig. (2-tailed)		,000	,000	,000	,000	,000	,000	,000	,000
	N	183	183	183	183	183	183	183	183	183
Affect_1	Pearson Correlation	,636**	1	,712**	,351**	,300**	,318**	,500**	,363**	,360**
	Sig. (2-tailed)	,000		,000	,000	,000	,000	,000	,000	,000
	N	183	183	183	183	183	183	183	183	183
Affect_2	Pearson Correlation	,633**	,712**	1	,239**	,252**	,283**	,427**	,257**	,254**
	Sig. (2-tailed)	,000	,000		,001	,001	,000	,000	,000	,001
	N	183	183	183	183	183	183	183	183	183
BrandKnowledge1	Pearson Correlation	,369**	,351**	,239**	1	,638**	,437**	,587**	,593**	,453**
	Sig. (2-tailed)	,000	,000	,001		,000	,000	,000	,000	,000
	N	183	183	183	183	183	183	183	183	183
BrandKnowledge2	Pearson Correlation	,381**	,300**	,252**	,638**	1	,675**	,638**	,425**	,272**
	Sig. (2-tailed)	,000	,000	,001	,000		,000	,000	,000	,000
	N	183	183	183	183	183	183	183	183	183
BrandAttitude1	Pearson Correlation	,368**	,318**	,283**	,437**	,675**	1	,597**	,296**	,129
	Sig. (2-tailed)	,000	,000	,000	,000	,000		,000	,000	,082
	N	183	183	183	183	183	183	183	183	183
BrandAttitude2	Pearson Correlation	,543**	,500**	,427**	,587**	,638**	,597**	1	,424**	,283**
	Sig. (2-tailed)	,000	,000	,000	,000	,000	,000		,000	,000
	N	183	183	183	183	183	183	183	183	183
Recognition_1	Pearson Correlation	,436**	,363**	,257**	,593**	,425**	,296**	,424**	1	,754**
	Sig. (2-tailed)	,000	,000	,000	,000	,000	,000	,000		,000
	N	183	183	183	183	183	183	183	183	183
Recognition_2	Pearson Correlation	,369**	,360**	,254**	,453**	,272**	,129	,283**	,754**	1
	Sig. (2-tailed)	,000	,000	,001	,000	,000	,082	,000	,000	
	N	183	183	183	183	183	183	183	183	183

**. Correlation is significant at the 0.01 level (2-tailed).

MW Audio / Correlation analysis

Correlations

		Likeability	Affect_1	Affect_2	Brand Knowledge1	Brand Knowledge2	BrandAttitude 1	BrandAttitude 2	Recognition_ 1	Recognition_ 2
Likeability	Pearson Correlation	1	,636**	,633**	,369**	,381**	,368**	,543**	,436**	,369**
	Sig. (2-tailed)		,000	,000	,000	,000	,000	,000	,000	,000
	N	183	183	183	183	183	183	183	183	183
Affect_1	Pearson Correlation	,636**	1	,712**	,351**	,300**	,318**	,500**	,363**	,360**
	Sig. (2-tailed)	,000		,000	,000	,000	,000	,000	,000	,000
	N	183	183	183	183	183	183	183	183	183
Affect_2	Pearson Correlation	,633**	,712**	1	,239**	,252**	,283**	,427**	,257**	,254**
	Sig. (2-tailed)	,000	,000		,001	,001	,000	,000	,000	,001
	N	183	183	183	183	183	183	183	183	183
BrandKnowledge1	Pearson Correlation	,369**	,351**	,239**	1	,638**	,437**	,587**	,593**	,453**
	Sig. (2-tailed)	,000	,000	,001		,000	,000	,000	,000	,000
	N	183	183	183	183	183	183	183	183	183
BrandKnowledge2	Pearson Correlation	,381**	,300**	,252**	,638**	1	,675**	,638**	,425**	,272**
	Sig. (2-tailed)	,000	,000	,001	,000		,000	,000	,000	,000
	N	183	183	183	183	183	183	183	183	183
BrandAttitude1	Pearson Correlation	,368**	,318**	,283**	,437**	,675**	1	,597**	,296**	,129
	Sig. (2-tailed)	,000	,000	,000	,000	,000		,000	,000	,082
	N	183	183	183	183	183	183	183	183	183
BrandAttitude2	Pearson Correlation	,543**	,500**	,427**	,587**	,638**	,597**	1	,424**	,283**
	Sig. (2-tailed)	,000	,000	,000	,000	,000	,000		,000	,000
	N	183	183	183	183	183	183	183	183	183
Recognition_1	Pearson Correlation	,436**	,363**	,257**	,593**	,425**	,296**	,424**	1	,754**
	Sig. (2-tailed)	,000	,000	,000	,000	,000	,000	,000		,000
	N	183	183	183	183	183	183	183	183	183
Recognition_2	Pearson Correlation	,369**	,360**	,254**	,453**	,272**	,129	,283**	,754**	1
	Sig. (2-tailed)	,000	,000	,001	,000	,000	,082	,000	,000	
	N	183	183	183	183	183	183	183	183	183

**. Correlation is significant at the 0.01 level (2-tailed).

MW Audio Visual / Correlation analysis

Correlations

		Likeability	Affect_1	Affect_2	Brand Knowledge1	Brand Knowledge2	BrandAttitude 1	BrandAttitude 2	Recognition_ 1	Recognition_ 2
Likeability	Pearson Correlation	1	,710**	,554**	,129	,047	,343**	,678**	,272**	,242**
	Sig. (2-tailed)		,000	,000	,121	,574	,000	,000	,001	,003
	N	146	146	146	146	146	146	146	146	146
Affect_1	Pearson Correlation	,710**	1	,740**	,162	,070	,297**	,516**	,339**	,391**
	Sig. (2-tailed)	,000		,000	,051	,400	,000	,000	,000	,000
	N	146	146	146	146	146	146	146	146	146
Affect_2	Pearson Correlation	,554**	,740**	1	,252**	,174*	,294**	,392**	,334**	,361**
	Sig. (2-tailed)	,000	,000		,002	,035	,000	,000	,000	,000
	N	146	146	146	146	146	146	146	146	146
BrandKnowledge1	Pearson Correlation	,129	,162	,252**	1	,872**	,434**	,199*	,591**	,459**
	Sig. (2-tailed)	,121	,051	,002		,000	,000	,016	,000	,000
	N	146	146	146	146	146	146	146	146	146
BrandKnowledge2	Pearson Correlation	,047	,070	,174*	,872**	1	,443**	,160	,481**	,418**
	Sig. (2-tailed)	,574	,400	,035	,000		,000	,054	,000	,000
	N	146	146	146	146	146	146	146	146	146
BrandAttitude1	Pearson Correlation	,343**	,297**	,294**	,434**	,443**	1	,385**	,246**	,253**
	Sig. (2-tailed)	,000	,000	,000	,000	,000		,000	,003	,002
	N	146	146	146	146	146	146	146	146	146
BrandAttitude2	Pearson Correlation	,678**	,516**	,392**	,199*	,160	,385**	1	,134	,244**
	Sig. (2-tailed)	,000	,000	,000	,016	,054	,000		,107	,003
	N	146	146	146	146	146	146	146	146	146
Recognition_1	Pearson Correlation	,272**	,339**	,334**	,591**	,481**	,246**	,134	1	,682**
	Sig. (2-tailed)	,001	,000	,000	,000	,000	,003	,107		,000
	N	146	146	146	146	146	146	146	146	146
Recognition_2	Pearson Correlation	,242**	,391**	,361**	,459**	,418**	,253**	,244**	,682**	1
	Sig. (2-tailed)	,003	,000	,000	,000	,000	,002	,003	,000	
	N	146	146	146	146	146	146	146	146	146

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

MW Visual / Correlation analysis

Correlations

		Likeability	Affect_1	Affect_2	Brand Knowledge1	Brand Knowledge2	BrandAttitude 1	BrandAttitude 2	Recognition_ 1	Recognition_ 2
Likeability	Pearson Correlation	1	,693**	,718**	,132	,126	,299**	,594**	,259**	,320**
	Sig. (2-tailed)		,000	,000	,105	,121	,000	,000	,001	,000
	N	153	153	153	153	153	153	153	153	153
Affect_1	Pearson Correlation	,693**	1	,855**	,125	,114	,247**	,546**	,339**	,387**
	Sig. (2-tailed)	,000		,000	,124	,160	,002	,000	,000	,000
	N	153	153	153	153	153	153	153	153	153
Affect_2	Pearson Correlation	,718**	,855**	1	,067	,078	,274**	,551**	,303**	,371**
	Sig. (2-tailed)	,000	,000		,413	,340	,001	,000	,000	,000
	N	153	153	153	153	153	153	153	153	153
BrandKnowledge1	Pearson Correlation	,132	,125	,067	1	,935**	,490**	,256**	,549**	,346**
	Sig. (2-tailed)	,105	,124	,413		,000	,000	,001	,000	,000
	N	153	153	153	153	153	153	153	153	153
BrandKnowledge2	Pearson Correlation	,126	,114	,078	,935**	1	,509**	,275**	,543**	,340**
	Sig. (2-tailed)	,121	,160	,340	,000		,000	,001	,000	,000
	N	153	153	153	153	153	153	153	153	153
BrandAttitude1	Pearson Correlation	,299**	,247**	,274**	,490**	,509**	1	,510**	,251**	,201*
	Sig. (2-tailed)	,000	,002	,001	,000	,000		,000	,002	,013
	N	153	153	153	153	153	153	153	153	153
BrandAttitude2	Pearson Correlation	,594**	,546**	,551**	,256**	,275**	,510**	1	,249**	,243**
	Sig. (2-tailed)	,000	,000	,000	,001	,001	,000		,002	,002
	N	153	153	153	153	153	153	153	153	153
Recognition_1	Pearson Correlation	,259**	,339**	,303**	,549**	,543**	,251**	,249**	1	,685**
	Sig. (2-tailed)	,001	,000	,000	,000	,000	,002	,002		,000
	N	153	153	153	153	153	153	153	153	153
Recognition_2	Pearson Correlation	,320**	,387**	,371**	,346**	,340**	,201*	,243**	,685**	1
	Sig. (2-tailed)	,000	,000	,000	,000	,000	,013	,002	,000	
	N	153	153	153	153	153	153	153	153	153

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

OD Audio / Correlation analysis

Correlations

		Likeability	Affect_1	Affect_2	Brand Knowledge1	Brand Knowledge2	BrandAttitude 1	BrandAttitude 2	Recognition_ 1	Recognition_ 2
Likeability	Pearson Correlation	1	,708**	,652**	,064	,223**	,282**	,461**	,365**	,421**
	Sig. (2-tailed)		,000	,000	,430	,005	,000	,000	,000	,000
	N	153	153	153	153	153	153	153	153	152
Affect_1	Pearson Correlation	,708**	1	,793**	,134	,163*	,187*	,363**	,430**	,499**
	Sig. (2-tailed)	,000		,000	,097	,044	,021	,000	,000	,000
	N	153	153	153	153	153	153	153	153	152
Affect_2	Pearson Correlation	,652**	,793**	1	,111	,120	,178*	,356**	,398**	,477**
	Sig. (2-tailed)	,000	,000		,172	,141	,028	,000	,000	,000
	N	153	153	153	153	153	153	153	153	152
BrandKnowledge1	Pearson Correlation	,064	,134	,111	1	,518**	,477**	,429**	,317**	,310**
	Sig. (2-tailed)	,430	,097	,172		,000	,000	,000	,000	,000
	N	153	153	153	153	153	153	153	153	152
BrandKnowledge2	Pearson Correlation	,223**	,163*	,120	,518**	1	,734**	,537**	,136	,158
	Sig. (2-tailed)	,005	,044	,141	,000		,000	,000	,093	,052
	N	153	153	153	153	153	153	153	153	152
BrandAttitude1	Pearson Correlation	,282**	,187*	,178*	,477**	,734**	1	,551**	,225**	,214**
	Sig. (2-tailed)	,000	,021	,028	,000	,000		,000	,005	,008
	N	153	153	153	153	153	153	153	153	152
BrandAttitude2	Pearson Correlation	,461**	,363**	,356**	,429**	,537**	,551**	1	,347**	,423**
	Sig. (2-tailed)	,000	,000	,000	,000	,000	,000		,000	,000
	N	153	153	153	153	153	153	153	153	152
Recognition_1	Pearson Correlation	,365**	,430**	,398**	,317**	,136	,225**	,347**	1	,874**
	Sig. (2-tailed)	,000	,000	,000	,000	,093	,005	,000		,000
	N	153	153	153	153	153	153	153	153	152
Recognition_2	Pearson Correlation	,421**	,499**	,477**	,310**	,158	,214**	,423**	,874**	1
	Sig. (2-tailed)	,000	,000	,000	,000	,052	,008	,000	,000	
	N	152	152	152	152	152	152	152	152	152

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

OD Audio Visual / Correlation analysis

Correlations

		Likeability	Affect_1	Affect_2	Brand Knowledge1	Brand Knowledge2	BrandAttitude 1	BrandAttitude 2	Recognition_ 1	Recognition_ 2
Likeability	Pearson Correlation	1	,674**	,541**	,349**	,357**	,447**	,640**	,556**	,544**
	Sig. (2-tailed)		,000	,000	,000	,000	,000	,000	,000	,000
	N	167	167	167	167	167	167	167	167	167
Affect_1	Pearson Correlation	,674**	1	,753**	,282**	,196*	,262**	,499**	,403**	,428**
	Sig. (2-tailed)	,000		,000	,000	,011	,001	,000	,000	,000
	N	167	167	167	167	167	167	167	167	167
Affect_2	Pearson Correlation	,541**	,753**	1	,222**	,178*	,256**	,416**	,346**	,391**
	Sig. (2-tailed)	,000	,000		,004	,022	,001	,000	,000	,000
	N	167	167	167	167	167	167	167	167	167
BrandKnowledge1	Pearson Correlation	,349**	,282**	,222**	1	,578**	,484**	,537**	,592**	,554**
	Sig. (2-tailed)	,000	,000	,004		,000	,000	,000	,000	,000
	N	167	167	167	167	167	167	167	167	167
BrandKnowledge2	Pearson Correlation	,357**	,196*	,178*	,578**	1	,821**	,609**	,393**	,410**
	Sig. (2-tailed)	,000	,011	,022	,000		,000	,000	,000	,000
	N	167	167	167	167	167	167	167	167	167
BrandAttitude1	Pearson Correlation	,447**	,262**	,256**	,484**	,821**	1	,691**	,327**	,332**
	Sig. (2-tailed)	,000	,001	,001	,000	,000		,000	,000	,000
	N	167	167	167	167	167	167	167	167	167
BrandAttitude2	Pearson Correlation	,640**	,499**	,416**	,537**	,609**	,691**	1	,478**	,490**
	Sig. (2-tailed)	,000	,000	,000	,000	,000	,000		,000	,000
	N	167	167	167	167	167	167	167	167	167
Recognition_1	Pearson Correlation	,556**	,403**	,346**	,592**	,393**	,327**	,478**	1	,914**
	Sig. (2-tailed)	,000	,000	,000	,000	,000	,000	,000		,000
	N	167	167	167	167	167	167	167	167	167
Recognition_2	Pearson Correlation	,544**	,428**	,391**	,554**	,410**	,332**	,490**	,914**	1
	Sig. (2-tailed)	,000	,000	,000	,000	,000	,000	,000	,000	
	N	167	167	167	167	167	167	167	167	167

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

OD Visual / Correlation analysis

Correlations

		Likeability	Affect_1	Affect_2	Brand Knowledge1	Brand Knowledge2	BrandAttitude 1	BrandAttitude 2	Recognition_ 1	Recognition_ 2
Likeability	Pearson Correlation	1	,675**	,660**	,377**	,321**	,427**	,654**	,400**	,346**
	Sig. (2-tailed)		,000	,000	,000	,000	,000	,000	,000	,000
	N	146	146	146	146	146	146	146	146	146
Affect_1	Pearson Correlation	,675**	1	,722**	,273**	,126	,387**	,581**	,358**	,320**
	Sig. (2-tailed)	,000		,000	,001	,129	,000	,000	,000	,000
	N	146	146	146	146	146	146	146	146	146
Affect_2	Pearson Correlation	,660**	,722**	1	,226**	,147	,376**	,531**	,253**	,221**
	Sig. (2-tailed)	,000	,000		,006	,077	,000	,000	,002	,007
	N	146	146	146	146	146	146	146	146	146
BrandKnowledge1	Pearson Correlation	,377**	,273**	,226**	1	,492**	,426**	,545**	,677**	,673**
	Sig. (2-tailed)	,000	,001	,006		,000	,000	,000	,000	,000
	N	146	146	146	146	146	146	146	146	146
BrandKnowledge2	Pearson Correlation	,321**	,126	,147	,492**	1	,740**	,468**	,344**	,266**
	Sig. (2-tailed)	,000	,129	,077	,000		,000	,000	,000	,001
	N	146	146	146	146	146	146	146	146	146
BrandAttitude1	Pearson Correlation	,427**	,387**	,376**	,426**	,740**	1	,571**	,279**	,180*
	Sig. (2-tailed)	,000	,000	,000	,000	,000		,000	,001	,030
	N	146	146	146	146	146	146	146	146	146
BrandAttitude2	Pearson Correlation	,654**	,581**	,531**	,545**	,468**	,571**	1	,468**	,442**
	Sig. (2-tailed)	,000	,000	,000	,000	,000	,000		,000	,000
	N	146	146	146	146	146	146	146	146	146
Recognition_1	Pearson Correlation	,400**	,358**	,253**	,677**	,344**	,279**	,468**	1	,819**
	Sig. (2-tailed)	,000	,000	,002	,000	,000	,001	,000		,000
	N	146	146	146	146	146	146	146	146	146
Recognition_2	Pearson Correlation	,346**	,320**	,221**	,673**	,266**	,180*	,442**	,819**	1
	Sig. (2-tailed)	,000	,000	,007	,000	,001	,030	,000	,000	
	N	146	146	146	146	146	146	146	146	146

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Q8 Audio / Correlation analysis

Correlations

		Likeability	Affect_1	Affect_2	Brand Knowledge1	Brand Knowledge2	BrandAttitude 1	BrandAttitude 2	Recognition_ 1	Recognition_ 2
Likeability	Pearson Correlation	1	,742**	,603**	,179*	,191*	,349**	,487**	,360**	,302**
	Sig. (2-tailed)		,000	,000	,016	,010	,000	,000	,000	,000
	N	181	181	181	181	181	181	181	181	181
Affect_1	Pearson Correlation	,742**	1	,733**	,300**	,253**	,285**	,470**	,320**	,227**
	Sig. (2-tailed)	,000		,000	,000	,001	,000	,000	,000	,002
	N	181	181	181	181	181	181	181	181	181
Affect_2	Pearson Correlation	,603**	,733**	1	,204**	,201**	,291**	,395**	,299**	,165*
	Sig. (2-tailed)	,000	,000		,006	,007	,000	,000	,000	,027
	N	181	181	181	181	181	181	181	181	181
BrandKnowledge1	Pearson Correlation	,179*	,300**	,204**	1	,812**	,491**	,499**	,210**	,202**
	Sig. (2-tailed)	,016	,000	,006		,000	,000	,000	,004	,006
	N	181	181	181	181	181	181	181	181	181
BrandKnowledge2	Pearson Correlation	,191*	,253**	,201**	,812**	1	,571**	,490**	,219**	,189*
	Sig. (2-tailed)	,010	,001	,007	,000		,000	,000	,003	,011
	N	181	181	181	181	181	181	181	181	181
BrandAttitude1	Pearson Correlation	,349**	,285**	,291**	,491**	,571**	1	,551**	,380**	,362**
	Sig. (2-tailed)	,000	,000	,000	,000	,000		,000	,000	,000
	N	181	181	181	181	181	181	181	181	181
BrandAttitude2	Pearson Correlation	,487**	,470**	,395**	,499**	,490**	,551**	1	,280**	,311**
	Sig. (2-tailed)	,000	,000	,000	,000	,000	,000		,000	,000
	N	181	181	181	181	181	181	181	181	181
Recognition_1	Pearson Correlation	,360**	,320**	,299**	,210**	,219**	,380**	,280**	1	,810**
	Sig. (2-tailed)	,000	,000	,000	,004	,003	,000	,000		,000
	N	181	181	181	181	181	181	181	181	181
Recognition_2	Pearson Correlation	,302**	,227**	,165*	,202**	,189*	,362**	,311**	,810**	1
	Sig. (2-tailed)	,000	,002	,027	,006	,011	,000	,000	,000	
	N	181	181	181	181	181	181	181	181	181

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Q8 Audio Visual / Correlation analysis

Correlations

		Likeability	Affect_1	Affect_2	Brand Knowledge1	Brand Knowledge2	BrandAttitude 1	BrandAttitude 2	Recognition_ 1	Recognition_ 2
Likeability	Pearson Correlation	1	,760**	,699**	,128	,150	,198*	,489**	,482**	,470**
	Sig. (2-tailed)		,000	,000	,105	,057	,012	,000	,000	,000
	N	162	162	162	162	162	162	162	162	162
Affect_1	Pearson Correlation	,760**	1	,835**	,157*	,112	,151	,471**	,388**	,322**
	Sig. (2-tailed)	,000		,000	,046	,154	,055	,000	,000	,000
	N	162	162	162	162	162	162	162	162	162
Affect_2	Pearson Correlation	,699**	,835**	1	,153	,109	,213**	,427**	,332**	,306**
	Sig. (2-tailed)	,000	,000		,051	,169	,006	,000	,000	,000
	N	162	162	162	162	162	162	162	162	162
BrandKnowledge1	Pearson Correlation	,128	,157*	,153	1	,642**	,419**	,452**	,361**	,265**
	Sig. (2-tailed)	,105	,046	,051		,000	,000	,000	,000	,001
	N	162	162	162	162	162	162	162	162	162
BrandKnowledge2	Pearson Correlation	,150	,112	,109	,642**	1	,634**	,499**	,178*	,096
	Sig. (2-tailed)	,057	,154	,169	,000		,000	,000	,023	,226
	N	162	162	162	162	162	162	162	162	162
BrandAttitude1	Pearson Correlation	,198*	,151	,213**	,419**	,634**	1	,477**	,375**	,221**
	Sig. (2-tailed)	,012	,055	,006	,000	,000		,000	,000	,005
	N	162	162	162	162	162	162	162	162	162
BrandAttitude2	Pearson Correlation	,489**	,471**	,427**	,452**	,499**	,477**	1	,332**	,296**
	Sig. (2-tailed)	,000	,000	,000	,000	,000	,000		,000	,000
	N	162	162	162	162	162	162	162	162	162
Recognition_1	Pearson Correlation	,482**	,388**	,332**	,361**	,178*	,375**	,332**	1	,847**
	Sig. (2-tailed)	,000	,000	,000	,000	,023	,000	,000		,000
	N	162	162	162	162	162	162	162	162	162
Recognition_2	Pearson Correlation	,470**	,322**	,306**	,265**	,096	,221**	,296**	,847**	1
	Sig. (2-tailed)	,000	,000	,000	,001	,226	,005	,000	,000	
	N	162	162	162	162	162	162	162	162	162

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Q8 Visual / Correlation analysis

Correlations

		Likeability	Affect_1	Affect_2	Brand Knowledge1	Brand Knowledge2	BrandAttitude 1	BrandAttitude 2	Recognition_ 1	Recognition_ 2
Likeability	Pearson Correlation	1	,760**	,699**	,128	,150	,198*	,489**	,482**	,470**
	Sig. (2-tailed)		,000	,000	,105	,057	,012	,000	,000	,000
	N	162	162	162	162	162	162	162	162	162
Affect_1	Pearson Correlation	,760**	1	,835**	,157*	,112	,151	,471**	,388**	,322**
	Sig. (2-tailed)	,000		,000	,046	,154	,055	,000	,000	,000
	N	162	162	162	162	162	162	162	162	162
Affect_2	Pearson Correlation	,699**	,835**	1	,153	,109	,213**	,427**	,332**	,306**
	Sig. (2-tailed)	,000	,000		,051	,169	,006	,000	,000	,000
	N	162	162	162	162	162	162	162	162	162
BrandKnowledge1	Pearson Correlation	,128	,157*	,153	1	,642**	,419**	,452**	,361**	,265**
	Sig. (2-tailed)	,105	,046	,051		,000	,000	,000	,000	,001
	N	162	162	162	162	162	162	162	162	162
BrandKnowledge2	Pearson Correlation	,150	,112	,109	,642**	1	,634**	,499**	,178*	,096
	Sig. (2-tailed)	,057	,154	,169	,000		,000	,000	,023	,226
	N	162	162	162	162	162	162	162	162	162
BrandAttitude1	Pearson Correlation	,198*	,151	,213**	,419**	,634**	1	,477**	,375**	,221**
	Sig. (2-tailed)	,012	,055	,006	,000	,000		,000	,000	,005
	N	162	162	162	162	162	162	162	162	162
BrandAttitude2	Pearson Correlation	,489**	,471**	,427**	,452**	,499**	,477**	1	,332**	,296**
	Sig. (2-tailed)	,000	,000	,000	,000	,000	,000		,000	,000
	N	162	162	162	162	162	162	162	162	162
Recognition_1	Pearson Correlation	,482**	,388**	,332**	,361**	,178*	,375**	,332**	1	,847**
	Sig. (2-tailed)	,000	,000	,000	,000	,023	,000	,000		,000
	N	162	162	162	162	162	162	162	162	162
Recognition_2	Pearson Correlation	,470**	,322**	,306**	,265**	,096	,221**	,296**	,847**	1
	Sig. (2-tailed)	,000	,000	,000	,001	,226	,005	,000	,000	
	N	162	162	162	162	162	162	162	162	162

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Corr across all modalities and brands

Correlations

		Likeability	Affect_1	Affect_2	Brand Knowledge1	Brand Knowledge2	BrandAttitude 1	BrandAttitude 2	Recognition_ 1	Recognition_ 2
Likeability	Pearson Correlation	1	,675**	,578**	,155**	,176**	,285**	,519**	,354**	,331**
	Sig. (2-tailed)		,000	,000	,000	,000	,000	,000	,000	,000
	N	2949	2949	2949	2949	2949	2949	2949	2949	2948
Affect_1	Pearson Correlation	,675**	1	,751**	,183**	,133**	,202**	,412**	,314**	,300**
	Sig. (2-tailed)	,000		,000	,000	,000	,000	,000	,000	,000
	N	2949	2958	2949	2949	2949	2949	2949	2949	2948
Affect_2	Pearson Correlation	,578**	,751**	1	,203**	,171**	,238**	,387**	,318**	,316**
	Sig. (2-tailed)	,000	,000		,000	,000	,000	,000	,000	,000
	N	2949	2949	2949	2949	2949	2949	2949	2949	2948
BrandKnowledge1	Pearson Correlation	,155**	,183**	,203**	1	,745**	,500**	,446**	,540**	,503**
	Sig. (2-tailed)	,000	,000	,000		,000	,000	,000	,000	,000
	N	2949	2949	2949	2949	2949	2949	2949	2949	2948
BrandKnowledge2	Pearson Correlation	,176**	,133**	,171**	,745**	1	,698**	,532**	,387**	,348**
	Sig. (2-tailed)	,000	,000	,000	,000		,000	,000	,000	,000
	N	2949	2949	2949	2949	2949	2949	2949	2949	2948
BrandAttitude1	Pearson Correlation	,285**	,202**	,238**	,500**	,698**	1	,599**	,315**	,273**
	Sig. (2-tailed)	,000	,000	,000	,000	,000		,000	,000	,000
	N	2949	2949	2949	2949	2949	2949	2949	2949	2948
BrandAttitude2	Pearson Correlation	,519**	,412**	,387**	,446**	,532**	,599**	1	,332**	,311**
	Sig. (2-tailed)	,000	,000	,000	,000	,000	,000		,000	,000
	N	2949	2949	2949	2949	2949	2949	2949	2949	2948
Recognition_1	Pearson Correlation	,354**	,314**	,318**	,540**	,387**	,315**	,332**	1	,894**
	Sig. (2-tailed)	,000	,000	,000	,000	,000	,000	,000		,000
	N	2949	2949	2949	2949	2949	2949	2949	2949	2948
Recognition_2	Pearson Correlation	,331**	,300**	,316**	,503**	,348**	,273**	,311**	,894**	1
	Sig. (2-tailed)	,000	,000	,000	,000	,000	,000	,000	,000	
	N	2948	2948	2948	2948	2948	2948	2948	2948	2948

**. Correlation is significant at the 0.01 level (2-tailed).

APPENDIX E

Regression analysis data

Regression analyses

- Model constructs per brand & modality
  - Likeability, Affect, Brand knowledge, Brand attitude, Recognition

Brand	Modality	Cases	N	Value	Label
Danish Crown	Audio	0001 – 0146	146	1	DC_A
	A/V	0147 – 0299	153	2	DC-AV
	Visual	0300 - 0466	167	3	DC_V
Danske Spil	Audio	0467 – 0639	173	4	DS_A
	A/V	0640 – 0821	182	5	DS_AV
	Visual	0822 – 0983	162	6	DS_V
Femina	Audio	0984 – 1145	162	7	FE_A
	A/V	1146 – 1318	173	8	FE_AV
	Visual	1319 - 1501	183	9	FE_V
Mental Workout	Audio	1501 – 1668	167	10	MW_A
	A/V	1669 – 1814	146	11	MW_AV
	Visual	1815 – 1967	153	12	MW_V
Oddset	Audio	1968 – 2120	153	13	OD_A
	A/V	2121 – 2287	167	14	OD_AV
	Visual	2288 – 2433	143	15	OD_V
Q8	Audio	2434 – 2614	181	16	Q8_A
	A/V	2615 – 2776	162	17	Q8_AV
	Visual	2777 - 2949	173	18	Q8_V

DANISH CROWN

DC Audio Regression

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-,446	,607		-,735	,463
	Likeability	-,104	,131	-,077	-,795	,428
	affect_DCA	,388	,156	,246	2,482	,014
	knowledge_DCA	-,078	,097	-,079	-,805	,422
	attitude_DCA	,522	,146	,364	3,574	,000
	recognition_DCA	,220	,088	,194	2,497	,014

a. Dependent Variable: General_fit

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,509[a]	,259	,233	1,620

a. Predictors: (Constant), recognition_DCA, knowledge_DCA, Likeability, affect_DCA, attitude_DCA

DANISH CROWN

DC Audio Visual / regression

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-,815	,461		-1,769	,079
	Likeability	,237	,114	,174	2,074	,040
	affect_DCAV	,627	,138	,380	4,548	,000
	knowldege_DCAV	,083	,109	,073	,762	,447
	attitude_DCAV	-,112	,123	-,089	-,910	,364
	recognition_DCAV	,352	,066	,340	5,366	,000

a. Dependent Variable: General_fit

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,693[a]	,481	,463	1,370

a. Predictors: (Constant), recognition_DCAV, attitude_DCAV, affect_DCAV, Likeability, knowldege_DCAV

DANISH CROWN

DC Visual / regression

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1,121	,619		1,811	,072
	Likeability	,218	,146	,169	1,498	,136
	affect_DCV	,281	,187	,168	1,506	,134
	knowledge_DCV	,226	,133	,194	1,694	,092
	attitude_DCV	,045	,129	,038	,348	,728
	recognition_DCV	-,130	,124	-,106	-1,045	,298

a. Dependent Variable: General_fit

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,395[a]	,156	,130	1,474

a. Predictors: (Constant), recognition_DCV, attitude_DCV, affect_DCV, Likeability, knowledge_DCV

DS Audio / regression

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1,022	,509		2,005	,047
	Likeability	,378	,110	,339	3,433	,001
	affect_DSA	,119	,133	,079	,895	,372
	knowledge_DSA	,040	,096	,039	,414	,679
	attitude_DSA	,061	,121	,050	,505	,614
	recognition_DSA	,218	,080	,202	2,729	,007

a. Dependent Variable: General_fit

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,560[a]	,313	,293	1,499

a. Predictors: (Constant), recognition_DSA, attitude_DSA, affect_DSA, knowledge_DSA, Likeability

DS Audio Visual / regression

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,446	,360		1,240	,216
	Likeability	,484	,088	,432	5,521	,000
	affect_DSAV	,235	,105	,172	2,237	,027
	knowledge_DSAV	-,081	,073	-,079	-1,109	,269
	attitude_DSAV	,037	,082	,034	,443	,658
	recognition_DSAV	,265	,054	,305	4,894	,000

a. Dependent Variable: General_fit

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,791[a]	,625	,615	1,025

a. Predictors: (Constant), recognition_DSAV, knowledge_DSAV, Likeability, attitude_DSAV, affect_DSAV

DS Visual / regression

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1,591	,702		2,266	,025
	Likeability	,270	,133	,222	2,033	,044
	affect_DSV	,182	,162	,114	1,124	,263
	knowledge_DSV	-,051	,135	-,044	-,376	,708
	attitude_DSV	,115	,135	,105	,855	,394
	recognition_DSV	,157	,114	,120	1,376	,171

a. Dependent Variable: General_fit

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,421[a]	,177	,151	1,549

a. Predictors: (Constant), recognition_DSV, affect_DSV, knowledge_DSV, Likeability, attitude_DSV

FEMINA

FE Audio / Regression

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1,661	,664		2,501	,013
	Likeability	,303	,122	,262	2,490	,014
	affect_FEA	,018	,156	,011	,115	,909
	knowledge_FEA	,105	,094	,107	1,109	,269
	attitude_FEA	,127	,147	,090	,862	,390
	recognition_FEA	,044	,069	,049	,635	,527

a. Dependent Variable: General_fit

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,372[a]	,139	,111	1,482

a. Predictors: (Constant), recognition_FEA, knowledge_FEA, affect_FEA, attitude_FEA, Likeability

FEMINA

FE Audio Visual / Regression

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1,165	,414		2,813	,005
	Likeability	,415	,095	,381	4,368	,000
	affect_FEAV	,040	,110	,029	,365	,715
	knowledge_FEAV	,033	,087	,035	,374	,709
	attitude_FEAV	,118	,119	,095	,996	,321
	recognition_FEAV	,209	,066	,223	3,156	,002

a. Dependent Variable: General_fit

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,592[a]	,351	,331	1,296

a. Predictors: (Constant), recognition_FEAV, knowledge_FEAV, affect_FEAV, Likeability, attitude_FEAV

FEMINA

FE Visual / Regression

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2,540	,516		4,925	,000
	Likeability	,111	,122	,097	,911	,364
	affect_FEV	,039	,156	,025	,249	,804
	knowledge_FEV	,042	,106	,046	,398	,691
	attittude_FEV	,160	,134	,137	1,196	,233
	recognition_FEV	,033	,088	,033	,372	,710

a. Dependent Variable: General_fit

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,272[a]	,074	,048	1,405

a. Predictors: (Constant), recognition_FEV, attittude_FEV, affect_FEV, Likeability, knowledge_FEV

MW Audio / Regression

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1,309	,548		2,388	,018
	Likeability	-,002	,119	-,001	-,014	,989
	affect	,317	,140	,218	2,266	,025
	knowledge	-,033	,234	-,011	-,142	,887
	attitude	,457	,125	,309	3,646	,000
	recognition	-,035	,091	-,030	-,381	,703

a. Dependent Variable: General_fit

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,432[a]	,187	,162	1,587

a. Predictors: (Constant), recognition, Likeability, knowledge, attitude, affect

MW Audio Visual / Regression

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1,486	,388		3,829	,000
	Likeability	,323	,104	,330	3,095	,002
	affect_MWAV	,169	,119	,138	1,416	,159
	knowledge_MWAV	-,220	,178	-,109	-1,233	,220
	attitude_MWAV	,302	,134	,216	2,258	,025
	recognition_MWAV	,078	,105	,065	,736	,463

a. Dependent Variable: General_fit

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,600[a]	,360	,337	1,396

a. Predictors: (Constant), recognition_MWAV, Likeability, knowledge_MWAV, attitude_MWAV, affect_MWAV

MW Visual / Regression

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2,590	,417		6,213	,000
	Likeability	-,165	,116	-,160	-1,420	,158
	affect_MWV	,460	,157	,339	2,927	,004
	knowledge_MWV	-,512	,202	-,239	-2,543	,012
	attitude_MWV	,414	,143	,287	2,897	,004
	recognition_MWV	,157	,135	,107	1,168	,245

a. Dependent Variable: General_fit

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,455[a]	,207	,180	1,677

a. Predictors: (Constant), recognition_MWV, attitude_MWV, Likeability, knowledge_MWV, affect_MWV

OD Audio / Regression

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,976	,545		1,791	,075
	Likeability	,189	,130	,159	1,457	,147
	affect_ODA	-,039	,144	-,029	-,272	,786
	knowledge_ODA	,157	,118	,137	1,331	,185
	attitude_ODA	,379	,158	,272	2,401	,018
	recognition_ODA	,119	,091	,111	1,307	,193

a. Dependent Variable: General_fit

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,507[a]	,257	,232	1,661

a. Predictors: (Constant), recognition_ODA, knowledge_ODA, Likeability, affect_ODA, attitude_ODA

OD Audio Visual / Regression

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,383	,356		1,075	,284
	Likeability	,478	,085	,460	5,608	,000
	affect_ODAV	,096	,090	,073	1,075	,284
	knowledge_ODAV	,067	,087	,069	,770	,443
	attitude_ODAV	,090	,107	,078	,845	,399
	recognition_ODAV	,214	,066	,230	3,242	,001

a. Dependent Variable: General_fit

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,758[a]	,574	,561	1,178

a. Predictors: (Constant), recognition_ODAV, affect_ODAV, attitude_ODAV, Likeability, knowledge_ODAV

OD Visual / Regression

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-,001	,687		-,001	,999
	Likeability	,142	,156	,100	,908	,365
	affect_ODV	,357	,199	,204	1,790	,076
	knowledge_ODV	,269	,153	,221	1,762	,080
	attitude_ODV	,106	,180	,078	,588	,558
	recognition_ODV	,166	,130	,114	1,275	,204

a. Dependent Variable: General_fit

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,545[a]	,297	,272	1,650

a. Predictors: (Constant), recognition_ODV, affect_ODV, knowledge_ODV, Likeability, attitude_ODV

Q8 Audio / Regression

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1,370	,472		2,906	,004
	Likeability	,379	,103	,377	3,671	,000
	affect_Q8A	-,078	,148	-,052	-,529	,597
	knowledge_Q8A	,073	,079	,079	,918	,360
	attitude_Q8A	,167	,122	,134	1,368	,173
	recognition_Q8A	,030	,070	,032	,424	,672

a. Dependent Variable: General_fit

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,466[a]	,217	,195	1,448

a. Predictors: (Constant), recognition_Q8A, knowledge_Q8A, affect_Q8A, attitude_Q8A, Likeability

Q8 Audio Visual / Regression

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,404	,443		,912	,363
	Likeability	,582	,112	,508	5,196	,000
	affect_Q8AV	,052	,130	,037	,401	,689
	knowledge_Q8AV	-,092	,088	-,081	-1,038	,301
	attitude_Q8AV	,185	,127	,123	1,454	,148
	recognition_Q8AV	,169	,069	,170	2,449	,015

a. Dependent Variable: General_fit

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,681[a]	,464	,447	1,282

a. Predictors: (Constant), recognition_Q8AV, knowledge_Q8AV, affect_Q8AV, attitude_Q8AV, Likeability

Q8 Visual / Regression

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2,530	,818		3,091	,002
	Likeability	,019	,129	,014	,144	,886
	affect_Q8V	,081	,196	,040	,411	,682
	knowledge_Q8V	-,069	,158	-,052	-,439	,662
	attitude_Q8V	,479	,145	,348	3,313	,001
	recognition_Q8V	-,182	,152	-,119	-1,203	,231

a. Dependent Variable: General_fit

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,335[a]	,112	,086	1,712

a. Predictors: (Constant), recognition_Q8V, affect_Q8V, attitude_Q8V, Likeability, knowledge_Q8V

APPENDIX F

PCA Brand personality analysis

Brand personality analysis

- PCA per modality & brand
- Modality means in spider plot per brand

Brand	Modality	Cases	N	Value	Label
Danish Crown	Audio	0001 – 0146	146	1	DC_A
	A/V	0147 – 0299	153	2	DC-AV
	Visual	0300 - 0466	167	3	DC_V
Danske Spil	Audio	0467 – 0639	173	4	DS_A
	A/V	0640 – 0821	182	5	DS_AV
	Visual	0822 – 0983	162	6	DS_V
Femina	Audio	0984 – 1145	162	7	FE_A
	A/V	1146 – 1318	173	8	FE_AV
	Visual	1319 - 1501	183	9	FE_V
Mental Workout	Audio	1501 – 1668	167	10	MW_A
	A/V	1669 – 1814	146	11	MW_AV
	Visual	1815 – 1967	153	12	MW_V
Oddset	Audio	1968 – 2120	153	13	OD_A
	A/V	2121 – 2287	167	14	OD_AV
	Visual	2288 – 2433	143	15	OD_V
Q8	Audio	2434 – 2614	181	16	Q8_A
	A/V	2615 – 2776	162	17	Q8_AV
	Visual	2777 - 2949	173	18	Q8_V

DANISH CROWN

DC_Audio / PCA analysis

explained variance: 67.62%

Rotated Component Matrix[a]

	Component		
	1	2	3
M2_Blid	,847	,319	-,091
M2_Venlig	,831	,392	,012
M3_Fredfuld	,787	,348	-,081
M1_Nede-pa-jorden	,775	-,030	,273
M2_Palidelig	,667	,431	,308
M3_Nem	,577	,061	,197
M3_Sikker	,571	,227	,435
M3_Teknisk	,020	,782	,082
M2_Moderne	,370	,718	,238
M1_Fantasifuld	,285	,686	,422
M3_Spaendende	,323	,607	,482
M1_Unik	,324	,536	,495
M2_Elegant	,502	,530	,362
M1_Vovet	,111	,282	,815
M2_Temperamentsfuld	-,173	,153	,793
M1_aerlig	,554	,118	,619
M1_Passioneret	,490	,278	,589
M3_Glamouros	,408	,424	,438

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

explained variance: 72.78%

Rotated Component Matrix[a]

	Component		
	1	2	3
QF1_Fantasifuld	,812	,143	,283
QF2_Moderne	,774	,337	,159
QF1_Vovet	,758	,052	,299
QF2_Temperamentsfuld	,758	,203	,105
QF1_Unik	,751	,336	,286
QF3_Spaendende	,747	,369	,301
QF3_Teknisk	,744	,294	,003
QF3_Glamouros	,635	,062	,559
QF2_Elegant	,608	,338	,459
QF1_Passioneret	,530	,493	,277
QF1_Nede-pa-jorden	,128	,822	,018
QF1_aerlig	,311	,781	,246
QF2_Palidelig	,328	,773	,332
QF3_Sikker	,354	,754	,337
QF2_Venlig	,218	,634	,601
QF3_Nem	,151	,551	,502
QF2_Blid	,222	,261	,838
QF3_Fredfuld	,326	,281	,798

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

DC_AudioVisual / PCA analysis

explained variance: 71.02%

Rotated Component Matrix[a]

	Component			
	1	2	3	4
M2_Blid	,899	,046	,149	,124
M2_Venlig	,838	,151	,300	,183
M3_Fredfuld	,804	,177	,191	,109
M2_Elegant	,576	,491	,277	,182
M3_Glamouros	,525	,447	,287	,262
M2_Temperamentsfuld	-,139	,734	,345	,272
M3_Teknisk	,157	,725	-,077	,191
M2_Moderne	,230	,682	,077	,428
M3_Nem	,308	,634	,413	-,156
M3_Sikker	,403	,524	,453	,181
M3_Spaendende	,314	,507	,382	,454
M1_aerlig	,170	,100	,856	,183
M1_Nede-pa-jorden	,373	,138	,746	,108
M1_Passioneret	,290	,324	,548	,441
M2_Palidelig	,503	,195	,518	,325
M1_Vovet	-,018	,113	,157	,836
M1_Unik	,276	,203	,088	,733
M1_Fantasifuld	,336	,317	,234	,614

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

explained variance: 69.80%

Rotated Component Matrix[a]

	Component	
	1	2
QF1_Nede-pa-jorden	,868	,111
QF3_Nem	,829	,201
QF2_Venlig	,828	,256
QF2_Palidelig	,746	,366
QF3_Fredfuld	,710	,414
QF2_Blid	,698	,378
QF3_Sikker	,696	,505
QF1_aerlig	,645	,441
QF1_Passioneret	,616	,561
QF1_Vovet	,049	,857
QF2_Temperamentsfuld	,220	,825
QF1_Fantasifuld	,270	,797
QF3_Glamouros	,412	,747
QF2_Elegant	,499	,716
QF3_Spaendende	,541	,700
QF1_Unik	,409	,669
QF2_Moderne	,490	,649
QF3_Teknisk	,443	,605

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

DC_Visual / Factor analysis

explained variance: 61.46%

Rotated Component Matrix[a]

	Component	
	1	2
M3_Spaendende	,867	,208
M2_Temperamentsfuld	,841	,009
M1_Fantasifuld	,786	,112
M1_Vovet	,772	,100
M3_Glamouros	,756	,223
M1_Passioneret	,738	,260
M2_Moderne	,719	,251
M1_Unik	,667	,277
M2_Elegant	,568	,487
M3_Teknisk	,517	,234
M3_Sikker	,206	,856
M2_Palidelig	,223	,839
M2_Venlig	,326	,810
M3_Nem	-,002	,740
M1_aerlig	,289	,731
M3_Fredfuld	,298	,726
M1_Nede-pa-jorden	,029	,665
M2_Blid	,412	,648

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

explained variance: 72.09%

Rotated Component Matrix[a]

	Component	
	1	2
QF3_Sikker	,890	,221
QF2_Venlig	,874	,239
QF2_Palidelig	,862	,251
QF3_Nem	,851	,261
QF1_Nede-pa-jorden	,785	,195
QF1_aerlig	,763	,335
QF3_Fredfuld	,720	,349
QF2_Blid	,671	,316
QF1_Vovet	,095	,882
QF2_Temperamentsfuld	,044	,873
QF1_Fantasifuld	,306	,835
QF2_Moderne	,332	,814
QF3_Spaendende	,389	,801
QF3_Glamouros	,389	,729
QF1_Unik	,458	,697
QF1_Passioneret	,437	,672
QF2_Elegant	,528	,660
QF3_Teknisk	,456	,568

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

DS_Audio / PCA analysis

explained variance: 70.38%

Rotated Component Matrix[a]

	Component		
	1	2	3
M1_Unik	,795	,168	,209
M1_Fantasifuld	,777	,192	,288
M3_Spaendende	,773	,315	,249
M2_Elegant	,751	,374	,149
M1_Passioneret	,731	,111	,371
M2_Moderne	,719	,275	,335
M3_Glamouros	,675	,160	,366
M1_Vovet	,650	,003	,568
M2_Venlig	,617	,603	-,175
M2_Blid	,602	,572	-,242
M3_Fredfuld	,578	,569	-,121
M3_Nem	-,165	,814	,120
M1_Nede-pa-jorden	,212	,776	,125
M2_Palidelig	,506	,723	,089
M3_Sikker	,311	,722	,244
M1_aerlig	,447	,596	,314
M2_Temperamentsfuld	,337	,050	,770
M3_Teknisk	,138	,171	,754

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 14 iterations.

explained variance: 70.12%

Rotated Component Matrix[a]

	Component		
	1	2	3
QF1_Vovet	,804	,092	,231
QF2_Temperamentsfuld	,788	,067	,223
QF2_Moderne	,716	,325	,224
QF3_Spaendende	,691	,462	,091
QF1_Unik	,683	,333	,222
QF1_Fantasifuld	,656	,385	,238
QF3_Teknisk	,651	,204	,080
QF1_Passioneret	,645	,439	,261
QF2_Palidelig	,358	,809	,194
QF1_aerlig	,321	,774	,126
QF3_Sikker	,316	,751	,213
QF1_Nede-pa-jorden	,132	,731	,332
QF2_Venlig	,293	,728	,375
QF3_Nem	,130	,705	,136
QF3_Fredfuld	,183	,437	,798
QF2_Blid	,181	,494	,750
QF3_Glamouros	,480	,056	,739
QF2_Elegant	,525	,342	,622

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

DS_AudioVisual / PCA analysis

explained variance: 68.59%

Rotated Component Matrix[a]

	Component	
	1	2
M2_Venlig	,852	,291
M2_Blid	,840	,213
M3_Fredfuld	,799	,227
M3_Nem	,772	,140
M1_Nede-pa-jorden	,759	,164
M2_Palidelig	,739	,450
M3_Sikker	,719	,433
M2_Elegant	,671	,485
M1_aerlig	,614	,500
M2_Temperamentsfuld	,138	,818
M1_Vovet	,311	,816
M3_Spaendende	,417	,749
M3_Teknisk	-,009	,734
M1_Passioneret	,453	,731
M3_Glamouros	,320	,720
M1_Fantasifuld	,422	,705
M2_Moderne	,512	,654
M1_Unik	,498	,645

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

explained variance: 68.74%

Rotated Component Matrix[a]

	Component	
	1	2
QF2_Venlig	,874	,264
QF1_aerlig	,827	,247
QF2_Palidelig	,819	,322
QF1_Nede-pa-jorden	,791	,260
QF3_Sikker	,786	,365
QF3_Nem	,759	,269
QF2_Blid	,759	,328
QF3_Fredfuld	,661	,409
QF1_Vovet	,209	,820
QF2_Temperamentsfuld	,158	,787
QF1_Fantasifuld	,344	,777
QF3_Glamouros	,283	,757
QF1_Passioneret	,362	,732
QF2_Elegant	,465	,695
QF3_Teknisk	,212	,678
QF1_Unik	,463	,671
QF3_Spaendende	,496	,669
QF2_Moderne	,538	,619

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

DS_Visual / PCA analysis

explained variance: 62.05%

Rotated Component Matrix[a]

	Component	
	1	2
M3_Sikker	,847	,225
M2_Palidelig	,804	,285
M1_aerlig	,787	,280
M2_Blid	,754	,213
M2_Venlig	,752	,326
M3_Fredfuld	,723	,239
M3_Nem	,709	,210
M1_Nede-pa-jorden	,642	,288
M2_Elegant	,563	,505
M2_Temperamentsfuld	,126	,846
M1_Vovet	,226	,778
M3_Spaendende	,384	,757
M3_Teknisk	,091	,708
M2_Moderne	,346	,694
M1_Fantasifuld	,339	,678
M1_Passioneret	,398	,662
M3_Glamouros	,405	,650
M1_Unik	,453	,561

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

explained variance: 65.10%

Rotated Component Matrix[a]

	Component	
	1	2
QF2_Venlig	,844	,232
QF1_Nede-pa-jorden	,808	,058
QF2_Blid	,753	,175
QF1_aerlig	,737	,395
QF2_Palidelig	,728	,423
QF1_Unik	,689	,375
QF3_Fredfuld	,669	,377
QF3_Sikker	,661	,420
QF3_Nem	,599	,297
QF1_Vovet	,230	,877
QF2_Temperamentsfuld	,083	,808
QF1_Passioneret	,356	,779
QF3_Glamouros	,270	,715
QF3_Teknisk	,214	,706
QF2_Moderne	,480	,675
QF3_Spaendende	,496	,668
QF2_Elegant	,464	,662
QF1_Fantasifuld	,506	,626

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

FEMINA

FE_Audio / PCA analysis

explained variance: 65.60%

Rotated Component Matrix[a]

	Component		
	1	2	3
M2_Venlig	,778	,381	-,157
M3_Sikker	,759	,239	,301
M3_Fredfuld	,742	,335	-,025
M3_Nem	,733	-,120	,163
M2_Blid	,708	,394	-,213
M2_Palidelig	,691	,426	,167
M1_Nede-pa-jorden	,688	,115	,078
M1_aerlig	,657	,402	,084
M2_Elegant	,641	,494	,236
M1_Fantasifuld	,324	,779	-,065
M1_Vovet	,014	,765	,224
M1_Passioneret	,384	,693	,177
M1_Unik	,358	,692	,100
M3_Spaendende	,393	,628	,289
M3_Glamouros	,256	,559	,503
M2_Moderne	,364	,554	,328
M3_Teknisk	,139	,099	,839
M2_Temperamentsfuld	-,192	,519	,632

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

explained variance: 68.67%

Rotated Component Matrix[a]

	Component	
	1	2
QF1_Vovet	,853	,008
QF1_Fantasifuld	,813	,309
QF3_Spaendende	,809	,368
QF3_Glamouros	,792	,259
QF2_Temperamentsfuld	,785	-,015
QF1_Unik	,779	,324
QF2_Moderne	,766	,391
QF1_Passioneret	,723	,410
QF2_Elegant	,685	,508
QF3_Teknisk	,611	,171
QF2_Venlig	,306	,832
QF3_Fredfuld	,275	,815
QF2_Blid	,272	,805
QF3_Sikker	,319	,768
QF3_Nem	-,080	,758
QF1_Nede-pa-jorden	,138	,746
QF2_Palidelig	,480	,694
QF1_aerlig	,508	,662

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

FEMINA

FE_AudioVisual / PCA analysis

explained variance: 63.85%

Rotated Component Matrix[a]

	Component	
	1	2
M2_Blid	,835	-,033
M2_Venlig	,827	,197
M3_Fredfuld	,804	,130
M2_Palidelig	,748	,365
M1_Nede-pa-jorden	,713	,128
M3_Sikker	,691	,359
M1_aerlig	,671	,468
M2_Elegant	,642	,560
M3_Nem	,605	-,008
M1_Vovet	,040	,829
M2_Temperamentsfuld	-,081	,808
M3_Glamouros	,356	,736
M1_Passioneret	,374	,730
M3_Spaendende	,458	,725
M1_Fantasifuld	,410	,720
M2_Moderne	,450	,712
M1_Unik	,428	,639
M3_Teknisk	-,155	,621

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

explained variance: 72.57%

Rotated Component Matrix[a]

	Component		
	1	2	3
QF2_Temperamentsfuld	,863	-,044	,110
QF1_Vovet	,845	,147	,070
QF3_Glamouros	,786	,289	,019
QF1_Fantasifuld	,779	,347	,172
QF3_Spaendende	,778	,349	,136
QF1_Unik	,757	,356	,138
QF2_Moderne	,692	,455	,205
QF1_Passioneret	,670	,283	,339
QF3_Teknisk	,639	-,341	,285
QF2_Elegant	,637	,565	,243
QF2_Venlig	,213	,807	,377
QF2_Blid	,195	,779	,254
QF3_Fredfuld	,145	,738	,319
QF2_Palidelig	,295	,707	,352
QF1_Nede-pa-jorden	,008	,320	,801
QF3_Nem	,144	,286	,797
QF3_Sikker	,367	,334	,712
QF1_aerlig	,354	,536	,551

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

FEMINA

FE_Visual / PCA analysis

explained variance: 67.44%

Rotated Component Matrix[a]

	Component		
	1	2	3
M2_Temperamentsfuld	,840	,115	-,025
M1_Vovet	,820	-,034	,233
M3_Glamouros	,809	,021	,248
M3_Spaendende	,777	,146	,318
M1_Fantasifuld	,773	-,014	,261
M3_Teknisk	,731	,150	-,244
M2_Moderne	,721	,406	,056
M1_Passioneret	,695	,113	,429
M2_Elegant	,661	,367	,281
M1_Unik	,657	,026	,462
M3_Sikker	,178	,801	,201
M3_Nem	,069	,784	-,078
M1_aerlig	,091	,758	,267
M1_Nede-pa-jorden	-,075	,746	,223
M2_Palidelig	,209	,702	,347
M2_Blid	,190	,289	,795
M3_Fredfuld	,222	,380	,658
M2_Venlig	,285	,466	,605

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

explained variance: 68.0%

Rotated Component Matrix[a]

	Component	
	1	2
QF1_Vovet	,874	,158
QF2_Temperamentsfuld	,864	,104
QF3_Spaendende	,844	,275
QF1_Fantasifuld	,817	,270
QF1_Unik	,756	,263
QF3_Glamouros	,749	,267
QF2_Moderne	,741	,380
QF1_Passioneret	,740	,381
QF3_Teknisk	,722	-,033
QF2_Elegant	,672	,479
QF2_Venlig	,224	,860
QF3_Fredfuld	,149	,841
QF1_Nede-pa-jorden	,064	,817
QF2_Blid	,159	,785
QF2_Palidelig	,271	,778
QF1_aerlig	,317	,749
QF3_Sikker	,356	,717
QF3_Nem	,191	,675

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

MW_Audio / PCA analysis

explained variance: 70.64%

Rotated Component Matrix[a]

	Component	
	1	2
M3_Fredfuld	,906	,057
M2_Blid	,899	-,023
M2_Venlig	,875	,159
M2_Palidelig	,797	,422
M2_Elegant	,697	,529
M1_aerlig	,682	,519
M1_Nede-pa-jorden	,668	,341
M3_Sikker	,658	,539
M3_Nem	,653	,310
M1_Vovet	,013	,847
M2_Temperamentsfuld	-,095	,836
M3_Spaendende	,372	,790
M1_Unik	,488	,730
M3_Teknisk	,204	,709
M1_Passioneret	,428	,703
M3_Glamouros	,459	,697
M1_Fantasifuld	,460	,693
M2_Moderne	,478	,609

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

explained variance: 75.45%

Rotated Component Matrix[a]

	Component	
	1	2
QF1_Vovet	,886	,041
QF1_Unik	,848	,283
QF3_Spaendende	,837	,349
QF1_Fantasifuld	,802	,299
QF2_Moderne	,787	,325
QF3_Teknisk	,785	,205
QF2_Temperamentsfuld	,754	,035
QF1_Passioneret	,705	,496
QF2_Blid	,002	,921
QF3_Fredfuld	,041	,896
QF2_Venlig	,222	,891
QF3_Nem	,241	,824
QF1_Nede-pa-jorden	,305	,763
QF2_Palidelig	,500	,751
QF3_Sikker	,524	,732
QF2_Elegant	,567	,691
QF1_aerlig	,538	,671
QF3_Glamouros	,573	,587

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

MW_AudioVisual / PCA analysis

explained variance: 74.21%

Rotated Component Matrix[a]

	Component		
	1	2	3
M2_Venlig	,883	,226	,034
M2_Blid	,838	,277	-,140
M3_Fredfuld	,810	,385	-,050
M2_Palidelig	,782	,287	,265
M1_Nede-pa-jorden	,782	-,070	,188
M2_Elegant	,744	,399	,200
M3_Nem	,743	,051	,274
M3_Sikker	,702	,337	,343
M1_aerlig	,701	,315	,348
M1_Passioneret	,555	,470	,371
M1_Fantasifuld	,282	,849	,149
M1_Unik	,292	,829	,143
M1_Vovet	,010	,798	,394
M2_Moderne	,260	,770	,315
M3_Spaendende	,426	,601	,449
M2_Temperamentsfuld	,036	,242	,858
M3_Teknisk	,220	,411	,647
M3_Glamouros	,471	,389	,546

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

explained variance: 77.89%

Rotated Component Matrix[a]

	Component	
	1	2
QF2_Blid	,921	,177
QF2_Venlig	,919	,225
QF3_Fredfuld	,874	,246
QF2_Palidelig	,837	,438
QF2_Elegant	,789	,459
QF3_Nem	,784	,378
QF1_aerlig	,772	,491
QF1_Nede-pa-jorden	,734	,245
QF3_Sikker	,708	,568
QF1_Vovet	,181	,855
QF2_Temperamentsfuld	,091	,822
QF3_Teknisk	,333	,792
QF2_Moderne	,379	,768
QF1_Unik	,378	,761
QF1_Fantasifuld	,473	,754
QF3_Spaendende	,478	,743
QF1_Passioneret	,600	,626
QF3_Glamouros	,594	,599

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

MW_Visual / PCA analysis

explained variance: 71.38%

Rotated Component Matrix[a]

	Component	
	1	2
M3_Fredfuld	,856	,219
M2_Blid	,837	,216
M3_Nem	,826	,104
M2_Venlig	,820	,353
M1_Nede-pa-jorden	,805	,097
M2_Palidelig	,746	,457
M3_Glamouros	,740	,337
M1_aerlig	,692	,500
M2_Elegant	,689	,459
M3_Sikker	,668	,559
M1_Unik	,214	,859
M1_Vovet	,054	,856
M1_Fantasifuld	,266	,841
M2_Moderne	,292	,818
M3_Teknisk	,214	,741
M3_Spaendende	,505	,718
M1_Passioneret	,551	,615
M2_Temperamentsfuld	,355	,591

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

explained variance: 70.93%

Rotated Component Matrix[a]

	Component	
	1	2
QF3_Fredfuld	,913	,052
QF2_Blid	,911	,054
QF2_Venlig	,910	,178
QF3_Nem	,775	,327
QF1_Nede-pa-jorden	,726	,115
QF2_Palidelig	,710	,497
QF3_Sikker	,688	,549
QF2_Elegant	,677	,450
QF3_Glamouros	,551	,486
QF1_Vovet	,003	,827
QF2_Temperamentsfuld	-,039	,794
QF1_Fantasifuld	,376	,772
QF3_Teknisk	,102	,745
QF2_Moderne	,477	,736
QF3_Spaendende	,488	,720
QF1_Unik	,409	,719
QF1_Passioneret	,479	,703

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

OD_Audio / PCA analysis

explained variance: 66.25%

Rotated Component Matrix[a]

	Component	
	1	2
M3_Glamouros	,853	,180
M2_Moderne	,827	,282
M1_Vovet	,811	,084
M3_Spaendende	,802	,379
M2_Temperamentsfuld	,773	,031
M2_Elegant	,746	,354
M3_Teknisk	,735	,211
M1_Passioneret	,674	,513
M1_Fantasifuld	,670	,475
M1_Unik	,580	,459
M1_Nede-pa-jorden	,005	,809
M2_Venlig	,184	,806
M2_Blid	,194	,744
M1_aerlig	,332	,743
M3_Nem	,124	,720
M2_Palidelig	,429	,713
M3_Sikker	,447	,667
M3_Fredfuld	,503	,656

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

explained variance: 72.25%

Rotated Component Matrix[a]

	Component		
	1	2	3
QF1_Vovet	,856	,125	,118
QF1_Passioneret	,842	,139	,200
QF2_Temperamentsfuld	,782	,286	,172
QF2_Moderne	,721	,354	,291
QF1_Unik	,710	,286	,280
QF1_Fantasifuld	,674	,327	,213
QF3_Spaendende	,653	,375	,345
QF3_Teknisk	,605	,156	,425
QF2_Blid	,194	,781	,395
QF3_Fredfuld	,253	,760	,389
QF2_Elegant	,541	,710	,159
QF3_Glamouros	,577	,692	,025
QF1_Nede-pa-jorden	,197	,001	,872
QF3_Nem	,099	,403	,675
QF2_Venlig	,226	,507	,673
QF1_aerlig	,487	,327	,636
QF2_Palidelig	,455	,375	,604
QF3_Sikker	,386	,467	,498

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 7 iterations.

OD_AudioVisual / PCA analysis

explained variance: 67.96%

Rotated Component Matrix[a]

	Component		
	1	2	3
M1_Passioneret	,757	,164	,303
M2_Moderne	,730	,208	,358
M1_Fantasifuld	,697	,340	,289
M1_Unik	,693	,416	,197
M3_Spaendende	,633	,209	,549
M3_Sikker	,611	,472	,247
M1_Vovet	,594	,098	,408
M2_Palidelig	,559	,553	,248
M2_Blid	,087	,798	,386
M2_Venlig	,474	,738	,094
M3_Fredfuld	,043	,736	,465
M1_Nede-pa-jorden	,138	,732	,035
M3_Nem	,359	,680	,014
M1_aerlig	,480	,633	,198
M3_Glamouros	,214	,131	,890
M2_Elegant	,350	,314	,673
M2_Temperamentsfuld	,431	,134	,632
M3_Teknisk	,380	,153	,632

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 10 iterations.

explained variance: 69.28%

Rotated Component Matrix[a]

	Component	
	1	2
QF2_Temperamentsfuld	,857	,083
QF1_Vovet	,852	,204
QF1_Passioneret	,835	,291
QF3_Glamouros	,766	,308
QF1_Fantasifuld	,746	,323
QF1_Unik	,742	,424
QF2_Moderne	,709	,315
QF3_Spaendende	,688	,473
QF2_Elegant	,681	,436
QF3_Teknisk	,604	,360
QF2_Venlig	,327	,832
QF2_Blid	,243	,800
QF3_Sikker	,328	,792
QF3_Nem	,210	,786
QF2_Palidelig	,381	,783
QF3_Fredfuld	,299	,769
QF1_Nede-pa-jorden	,187	,751
QF1_aerlig	,438	,732

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

OD_Visual / PCA analysis

explained variance: 65.83%

Rotated Component Matrix[a]

	Component	
	1	2
M1_Vovet	,861	,163
M1_Fantasifuld	,854	,199
M2_Temperamentsfuld	,818	,147
M3_Spaendende	,789	,261
M3_Glamouros	,754	,221
M1_Passioneret	,752	,293
M2_Moderne	,725	,405
M2_Elegant	,705	,456
M1_Unik	,692	,334
M3_Teknisk	,633	,158
M3_Sikker	,246	,829
M3_Nem	,107	,771
M2_Venlig	,423	,769
M1_Nede-pa-jorden	,128	,757
M2_Palidelig	,364	,746
M1_aerlig	,388	,737
M2_Blid	,252	,731
M3_Fredfuld	,189	,722

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

explained variance: 67.62%

Rotated Component Matrix[a]

	Component	
	1	2
QF2_Moderne	,830	,284
QF1_Vovet	,814	,231
QF2_Temperamentsfuld	,803	,145
QF1_Passioneret	,796	,265
QF3_Teknisk	,782	,158
QF2_Elegant	,743	,334
QF1_Fantasifuld	,740	,315
QF3_Glamouros	,737	,246
QF1_Unik	,731	,326
QF3_Spaendende	,684	,416
QF2_Venlig	,256	,837
QF3_Nem	,200	,823
QF1_Nede-pa-jorden	,145	,784
QF2_Blid	,229	,776
QF2_Palidelig	,448	,727
QF1_aerlig	,446	,716
QF3_Fredfuld	,196	,716
QF3_Sikker	,472	,704

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

Q8_Audio / PCA analysis

explained variance: 69.39%

Rotated Component Matrix[a]

	Component	
	1	2
M2_Venlig	,840	,276
M3_Fredfuld	,840	,227
M2_Blid	,829	,220
M3_Nem	,813	,222
M2_Palidelig	,808	,402
M3_Sikker	,781	,366
M1_Nede-pa-jorden	,775	,128
M1_aerlig	,768	,428
M2_Elegant	,636	,501
M1_Vovet	,175	,845
M1_Fantasifuld	,265	,819
M2_Temperamentsfuld	,153	,778
M1_Unik	,229	,777
M3_Spaendende	,415	,755
M2_Moderne	,392	,691
M1_Passioneret	,534	,673
M3_Teknisk	,209	,670
M3_Glamouros	,508	,517

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

explained variance: 71.89%

Rotated Component Matrix[a]

	Component	
	1	2
QF1_Vovet	,847	,153
QF2_Temperamentsfuld	,823	,119
QF3_Spaendende	,811	,359
QF1_Fantasifuld	,795	,270
QF1_Unik	,775	,247
QF2_Moderne	,751	,350
QF3_Glamouros	,750	,299
QF2_Elegant	,743	,402
QF1_Passioneret	,725	,436
QF3_Teknisk	,662	,207
QF2_Venlig	,337	,852
QF2_Palidelig	,331	,847
QF3_Nem	,206	,844
QF1_Nede-pa-jorden	,148	,834
QF3_Sikker	,297	,820
QF2_Blid	,310	,807
QF3_Fredfuld	,338	,793

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

Q8_AudioVisual / PCA analysis

explained variance: 69.35%

Rotated Component Matrix[a]

	Component	
	1	2
M3_Fredfuld	,860	,187
M2_Venlig	,829	,349
M2_Blid	,829	,302
M2_Palidelig	,828	,343
M3_Nem	,813	,256
M3_Sikker	,786	,393
M1_aerlig	,783	,371
M1_Nede-pa-jorden	,777	,244
M2_Elegant	,663	,484
M1_Vovet	,181	,805
M2_Temperamentsfuld	,151	,778
M1_Fantasifuld	,448	,740
M2_Moderne	,464	,688
M1_Passioneret	,507	,675
M3_Spaendende	,565	,649
M3_Teknisk	,170	,645
M1_Unik	,480	,570
M3_Glamouros	,504	,528

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

explained variance: 72.68%

Rotated Component Matrix[a]

	Component	
	1	2
QF1_Vovet	,833	,239
QF3_Glamouros	,801	,136
QF1_Fantasifuld	,800	,358
QF3_Spaendende	,799	,418
QF2_Temperamentsfuld	,794	,226
QF1_Unik	,760	,330
QF2_Elegant	,716	,436
QF1_Passioneret	,674	,490
QF2_Moderne	,655	,529
QF3_Teknisk	,561	,422
QF2_Palidelig	,320	,871
QF3_Nem	,223	,867
QF3_Sikker	,303	,860
QF1_Nede-pa-jorden	,253	,854
QF2_Venlig	,341	,828
QF1_aerlig	,369	,804
QF3_Fredfuld	,488	,624
QF2_Blid	,486	,622

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

Q8_Visual / PCA analysis

explained variance: 69.45%

Rotated Component Matrix[a]

	Component		
	1	2	3
M3_Glamouros	,833	,326	,001
M2_Temperamentsfuld	,815	,093	,143
M1_Vovet	,778	,223	,305
M3_Spaendende	,689	,353	,410
M3_Teknisk	,662	,098	,247
M1_Passioneret	,618	,266	,437
M2_Elegant	,560	,398	,462
M1_Nede-pa-jorden	-,076	,779	,288
M3_Sikker	,281	,777	,109
M2_Venlig	,279	,753	,202
M2_Palidelig	,309	,748	,287
M3_Fredfuld	,489	,708	,010
M3_Nem	,026	,662	,151
M2_Blid	,507	,657	,003
M1_aerlig	,343	,652	,302
M1_Unik	,103	,241	,833
M1_Fantasifuld	,451	,221	,755
M2_Moderne	,551	,215	,620

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

explained variance: 69.97%

Rotated Component Matrix[a]

	Component	
	1	2
QF2_Venlig	,834	,337
QF2_Palidelig	,828	,343
QF3_Sikker	,812	,329
QF1_Nede-pa-jorden	,809	,156
QF1_aerlig	,795	,406
QF3_Nem	,792	,201
QF3_Fredfuld	,765	,356
QF2_Blid	,755	,391
QF1_Vovet	,182	,840
QF2_Temperamentsfuld	,066	,781
QF3_Glamouros	,333	,778
QF2_Moderne	,412	,742
QF1_Fantasifuld	,463	,725
QF2_Elegant	,498	,683
QF1_Passioneret	,497	,675
QF3_Spaendende	,544	,658
QF1_Unik	,298	,655
QF3_Teknisk	,272	,605

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

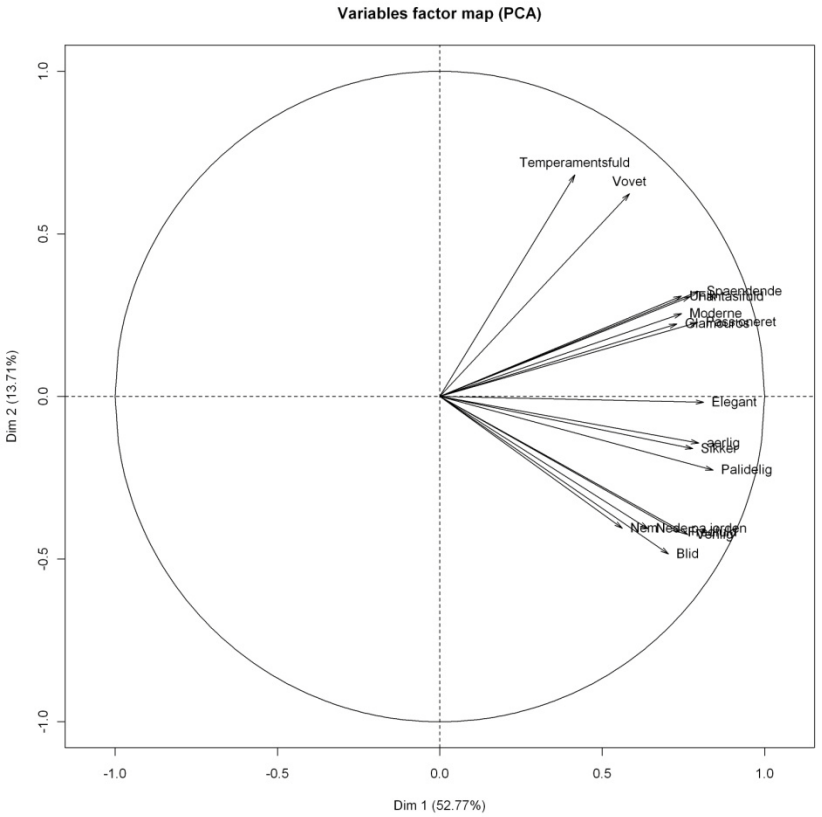
APPENDIX G

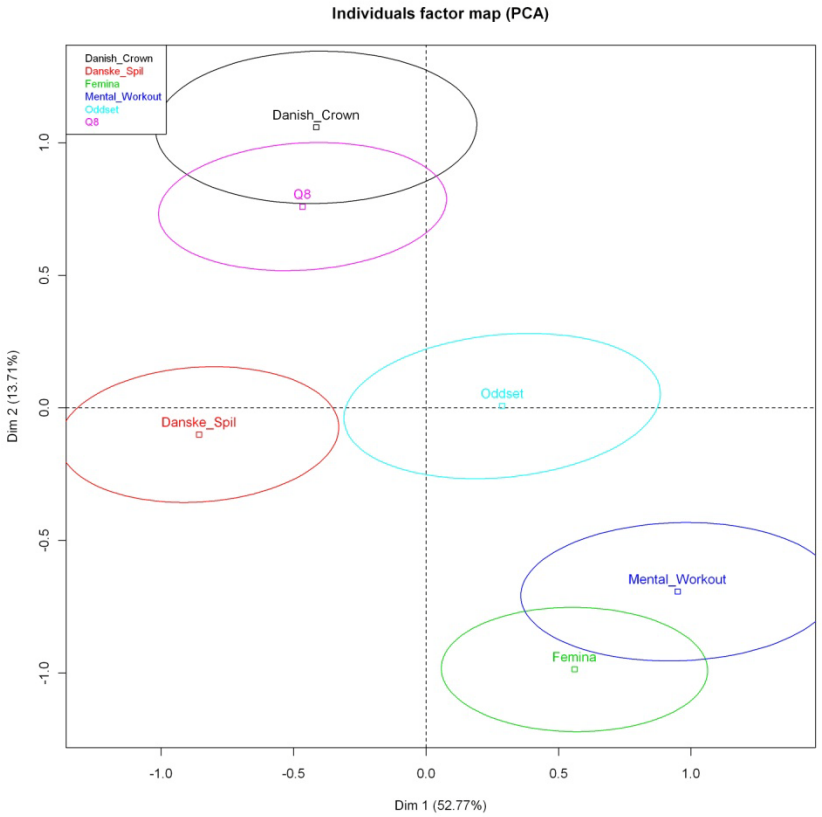
PCA Variable factor maps

Brand personality clusters

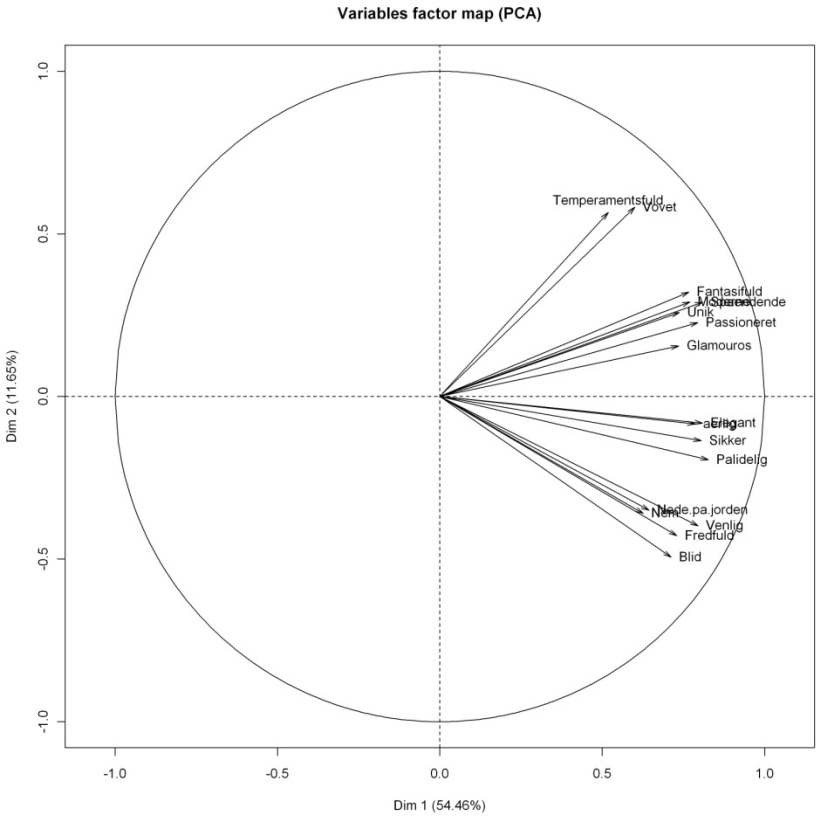
Variable factor maps

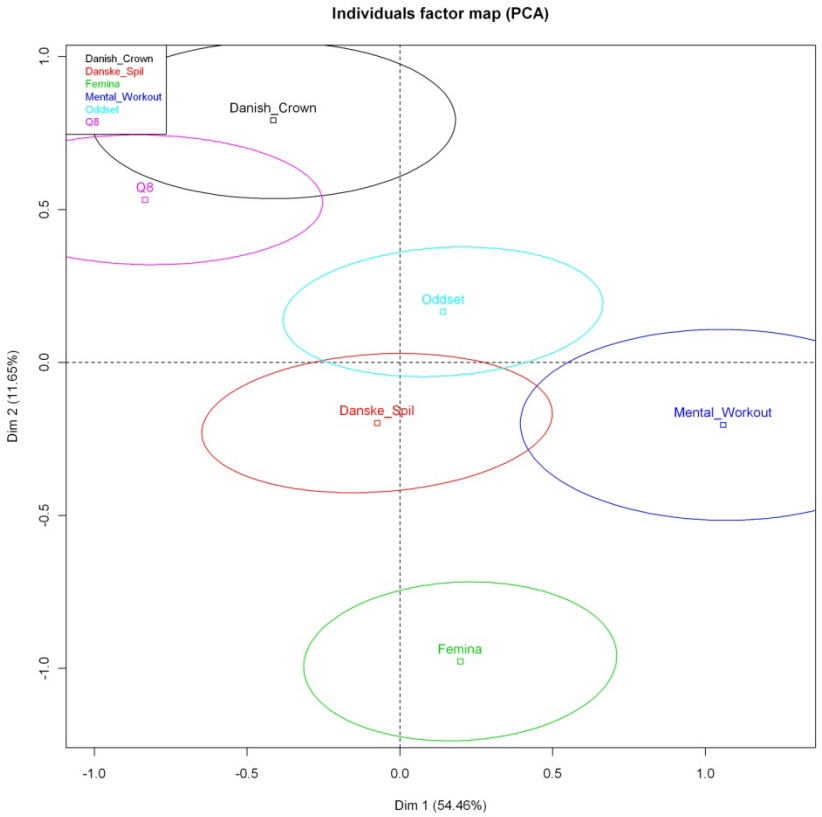
Audio


Variables factor map (PCA)
Temperamentsfuld
Vovet
Spaendende
Moderne
Elegant
Sikker
Palidelig
Blid
Dim 2 (13.71%)
Dim 1 (52.77%)
1.0
0.5
0.0
-0.5
-1.0

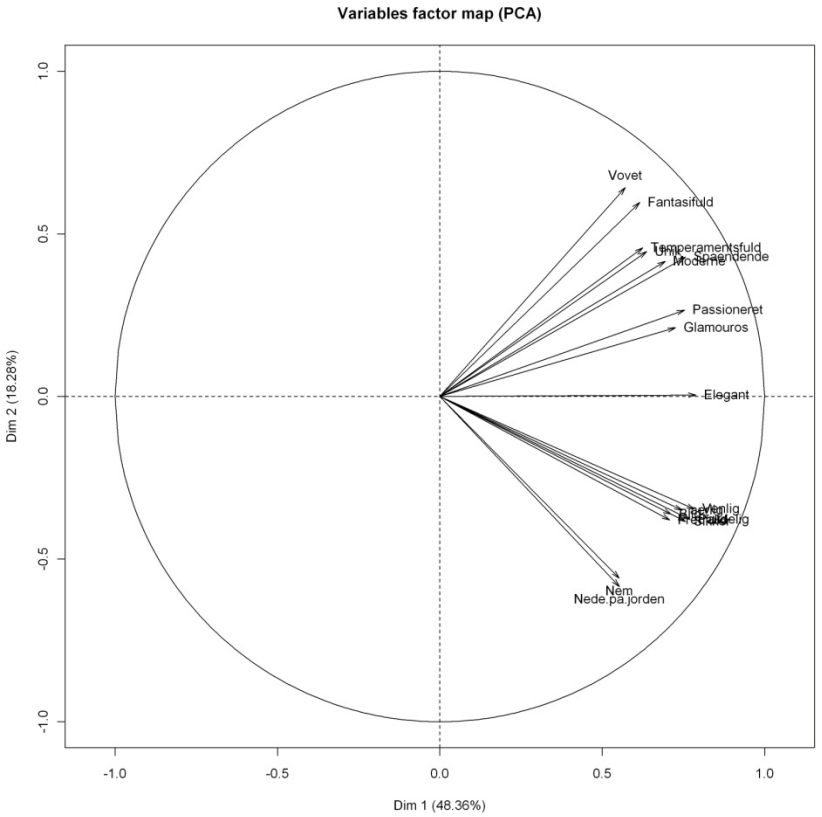

Individuals factor map (PCA)
Danish_Crown
Danske_Spil
Femina
Mental_Workout
Oddset
Q8
Dim 2 (13.71%)
Dim 1 (52.77%)
1.0
0.5
0.0
-0.5
-1.0

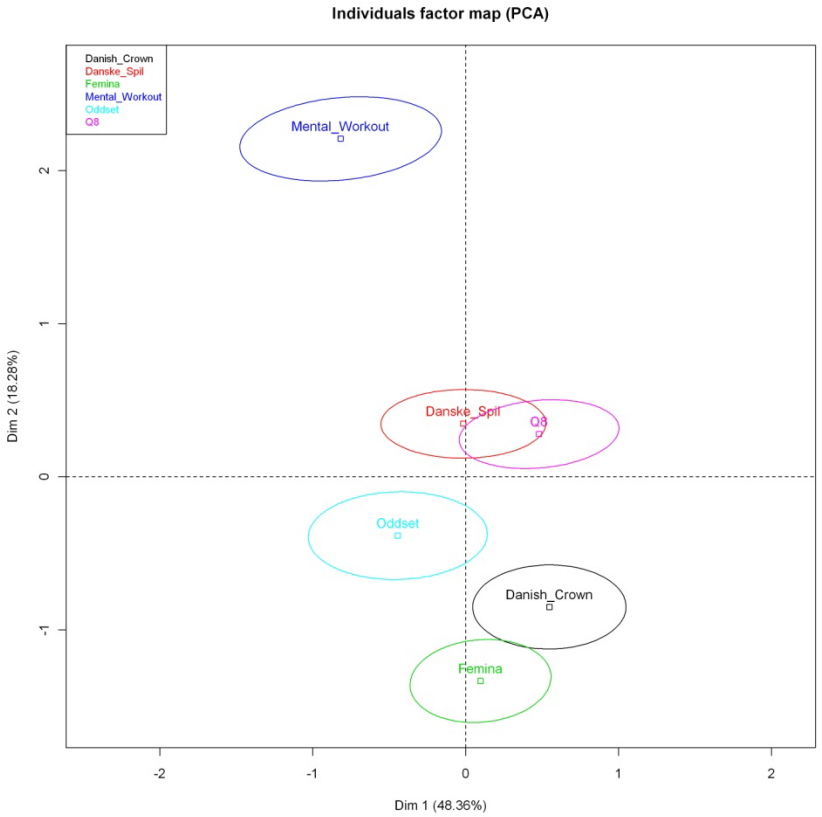
AudioVisual





Visual


Variables factor map (PCA)
Vovet
Fantasifuld
Temperamentsfuld
Moderne
Passioneret
Glamouros
Elegant
Nem
Nede.pa.jorden
Dim 1 (48.36%)
Dim 2 (18.28%)


Individuals factor map (PCA)
Danish_Crown
Danske_Spil
Femina
Mental_Workout
Oddset
Q8
Mental_Workout
Danske_Spil
Q8
Oddset
Danish_Crown
Femina
Dim 1 (48.36%)
Dim 2 (18.28%)

APPENDIX H

Paired samples t-test

Paired samples t-test analysis

- Logo & brand meaning personality attributes

Brand	Modality	Cases	N	Value	Label
Danish Crown	Audio	0001 – 0146	146	1	DC_A
	A/V	0147 – 0299	153	2	DC-AV
	Visual	0300 - 0466	167	3	DC_V
Danske Spil	Audio	0467 – 0639	173	4	DS_A
	A/V	0640 – 0821	182	5	DS_AV
	Visual	0822 – 0983	162	6	DS_V
Femina	Audio	0984 – 1145	162	7	FE_A
	A/V	1146 – 1318	173	8	FE_AV
	Visual	1319 - 1501	183	9	FE_V
Mental Workout	Audio	1501 – 1668	167	10	MW_A
	A/V	1669 – 1814	146	11	MW_AV
	Visual	1815 – 1967	153	12	MW_V
Oddset	Audio	1968 – 2120	153	13	OD_A
	A/V	2121 – 2287	167	14	OD_AV
	Visual	2288 – 2433	143	15	OD_V
Q8	Audio	2434 – 2614	181	16	Q8_A
	A/V	2615 – 2776	162	17	Q8_AV
	Visual	2777 - 2949	173	18	Q8_V

DANISH CROWN

DC Audio

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	M1_aerlig & QF1_aerlig	146	,443	,000
Pair 2	M1_Fantasifuld & QF1_Fantasifuld	146	,378	,000
Pair 3	M1_Nedepajorden & QF1_Nede-pa-jorden	146	,295	,000
Pair 4	M1_Passioneret & QF1_Passioneret	146	,380	,000
Pair 5	M1_Unik & QF1_Unik	146	,420	,000
Pair 6	M1_Vovet & QF1_Vovet	146	,403	,000
Pair 7	M2_Blid & QF2_Blid	146	,450	,000
Pair 8	M2_Elegant & QF2_Elegant	146	,309	,000
Pair 9	M2_Moderne & QF2_Moderne	146	,398	,000
Pair 10	M2_Palidelig & QF2_Palidelig	146	,408	,000
Pair 11	M2_Temperamentsfuld & QF2_Temperamentsfuld	146	,328	,000
Pair 12	M2_Venlig & QF2_Venlig	146	,309	,000
Pair 13	M3_Fredfuld & QF3_Fredfuld	146	,400	,000
Pair 14	M3_Glamouros & QF3_Glamouros	146	,439	,000
Pair 15	M3_Nem & QF3_Nem	146	,440	,000
Pair 16	M3_Sikker & QF3_Sikker	146	,327	,000
Pair 17	M3_Spaendende & QF3_Spaendende	146	,456	,000
Pair 18	M3_Teknisk & QF3_Teknisk	146	,440	,000

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	M1_aerlig	3,38	146	1,501	,124
	QF1_aerlig	3,95	146	1,356	,112
Pair 2	M1_Fantasifuld	3,82	146	1,583	,131
	QF1_Fantasifuld	3,29	146	1,482	,123
Pair 3	M1_Nedepajorden	3,18	146	1,489	,123
	QF1_Nede-pa-jorden	4,11	146	1,495	,124
Pair 4	M1_Passioneret	3,29	146	1,580	,131
	QF1_Passioneret	3,47	146	1,505	,125
Pair 5	M1_Unik	3,75	146	1,591	,132
	QF1_Unik	3,47	146	1,505	,125
Pair 6	M1_Vovet	3,45	146	1,632	,135
	QF1_Vovet	2,95	146	1,450	,120
Pair 7	M2_Blid	3,26	146	1,710	,142
	QF2_Blid	3,18	146	1,525	,126
Pair 8	M2_Elegant	3,75	146	1,634	,135
	QF2_Elegant	3,28	146	1,530	,127
Pair 9	M2_Moderne	3,94	146	1,645	,136
	QF2_Moderne	3,64	146	1,597	,132
Pair 10	M2_Palidelig	3,32	146	1,521	,126
	QF2_Palidelig	4,03	146	1,573	,130
Pair 11	M2_Temperamentsfuld	3,84	146	1,676	,139
	QF2_Temperamentsfuld	3,24	146	1,473	,122
Pair 12	M2_Venlig	3,36	146	1,726	,143
	QF2_Venlig	3,77	146	1,518	,126
Pair 13	M3_Fredfuld	3,12	146	1,745	,144
	QF3_Fredfuld	3,18	146	1,470	,122
Pair 14	M3_Glamouros	3,12	146	1,588	,131
	QF3_Glamouros	2,66	146	1,506	,125
Pair 15	M3_Nem	3,62	146	1,581	,131
	QF3_Nem	3,79	146	1,510	,125
Pair 16	M3_Sikker	3,70	146	1,629	,135
	QF3_Sikker	3,98	146	1,502	,124
Pair 17	M3_Spaendende	3,84	146	1,726	,143
	QF3_Spaendende	3,42	146	1,631	,135
Pair 18	M3_Teknisk	4,03	146	1,606	,133
	QF3_Teknisk	3,58	146	1,626	,135

DC Audio / means comparison

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper			
Pair 1	M1_aerlig - QF1_aerlig	-,568	1,513	,125	-,816	-,321	-4,541	145	,000
Pair 2	M1_Fantasifuld - QF1_Fantasifuld	,527	1,711	,142	,248	,807	3,725	145	,000
Pair 3	M1_Nedepajorden - QF1_Nede-pa-jorden	-,932	1,772	,147	-1,221	-,642	-6,352	145	,000
Pair 4	M1_Passioneret - QF1_Passioneret	-,185	1,718	,142	-,466	,096	-1,301	145	,195
Pair 5	M1_Unik - QF1_Unik	,288	1,669	,138	,015	,561	2,083	145	,039
Pair 6	M1_Vovet - QF1_Vovet	,493	1,691	,140	,217	,770	3,524	145	,001
Pair 7	M2_Blid - QF2_Blid	,082	1,704	,141	-,197	,361	,583	145	,561
Pair 8	M2_Elegant - QF2_Elegant	,473	1,861	,154	,168	,777	3,068	145	,003
Pair 9	M2_Moderne - QF2_Moderne	,301	1,779	,147	,010	,592	2,047	145	,042
Pair 10	M2_Palidelig - QF2_Palidelig	-,719	1,685	,139	-,995	-,444	-5,158	145	,000
Pair 11	M2_Temperamentsfuld - QF2_Temperamentsfuld	,603	1,833	,152	,303	,902	3,974	145	,000
Pair 12	M2_Venlig - QF2_Venlig	-,404	1,914	,158	-,717	-,091	-2,551	145	,012
Pair 13	M3_Fredfuld - QF3_Fredfuld	-,055	1,776	,147	-,345	,236	-,373	145	,710
Pair 14	M3_Glamouros - QF3_Glamouros	,466	1,641	,136	,197	,734	3,430	145	,001
Pair 15	M3_Nem - QF3_Nem	-,164	1,636	,135	-,432	,103	-1,214	145	,227
Pair 16	M3_Sikker - QF3_Sikker	-,281	1,818	,150	-,578	,017	-1,866	145	,064
Pair 17	M3_Spaendende - QF3_Spaendende	,411	1,753	,145	,124	,698	2,833	145	,005
Pair 18	M3_Teknisk - QF3_Teknisk	,445	1,710	,142	,165	,725	3,146	145	,002

DANISH CROWN

DC_Audio Visual

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	M1_aerlig & QF1_aerlig	153	,593	,000
Pair 2	M1_Fantasifuld & QF1_Fantasifuld	153	,392	,000
Pair 3	M1_Nedepajorden & QF1_Nede-pa-jorden	153	,520	,000
Pair 4	M1_Passioneret & QF1_Passioneret	153	,644	,000
Pair 5	M1_Unik & QF1_Unik	153	,456	,000
Pair 6	M1_Vovet & QF1_Vovet	153	,582	,000
Pair 7	M2_Blid & QF2_Blid	153	,542	,000
Pair 8	M2_Elegant & QF2_Elegant	153	,531	,000
Pair 9	M2_Moderne & QF2_Moderne	153	,613	,000
Pair 10	M2_Palidelig & QF2_Palidelig	153	,447	,000
Pair 11	M2_Temperamentsfuld & QF2_Temperamentsfuld	153	,647	,000
Pair 12	M2_Venlig & QF2_Venlig	153	,608	,000
Pair 13	M3_Fredfuld & QF3_Fredfuld	153	,620	,000
Pair 14	M3_Glamouros & QF3_Glamouros	153	,680	,000
Pair 15	M3_Nem & QF3_Nem	153	,509	,000
Pair 16	M3_Sikker & QF3_Sikker	153	,597	,000
Pair 17	M3_Spaendende & QF3_Spaendende	153	,591	,000
Pair 18	M3_Teknisk & QF3_Teknisk	153	,564	,000

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	M1_aerlig	3,50	153	1,627	,132
	QF1_aerlig	3,93	153	1,704	,138
Pair 2	M1_Fantasifuld	3,56	153	1,693	,137
	QF1_Fantasifuld	3,16	153	1,573	,127
Pair 3	M1_Nedepajorden	3,60	153	1,636	,132
	QF1_Nede-pa-jorden	3,93	153	1,633	,132
Pair 4	M1_Passioneret	3,18	153	1,624	,131
	QF1_Passioneret	3,44	153	1,597	,129
Pair 5	M1_Unik	3,65	153	1,680	,136
	QF1_Unik	3,41	153	1,579	,128
Pair 6	M1_Vovet	3,71	153	1,750	,141
	QF1_Vovet	3,13	153	1,665	,135
Pair 7	M2_Blid	3,11	153	1,688	,136
	QF2_Blid	2,98	153	1,498	,121
Pair 8	M2_Elegant	3,30	153	1,825	,148
	QF2_Elegant	3,16	153	1,612	,130
Pair 9	M2_Moderne	3,72	153	1,656	,134
	QF2_Moderne	3,59	153	1,636	,132
Pair 10	M2_Palidelig	3,30	153	1,518	,123
	QF2_Palidelig	3,75	153	1,651	,134
Pair 11	M2_Temperamentsfuld	3,42	153	1,584	,128
	QF2_Temperamentsfuld	3,19	153	1,621	,131
Pair 12	M2_Venlig	3,14	153	1,616	,131
	QF2_Venlig	3,49	153	1,675	,135
Pair 13	M3_Fredfuld	2,90	153	1,635	,132
	QF3_Fredfuld	3,03	153	1,612	,130
Pair 14	M3_Glamouros	2,75	153	1,532	,124
	QF3_Glamouros	2,67	153	1,538	,124
Pair 15	M3_Nem	3,71	153	1,742	,141
	QF3_Nem	3,76	153	1,606	,130
Pair 16	M3_Sikker	3,40	153	1,691	,137
	QF3_Sikker	3,67	153	1,701	,137
Pair 17	M3_Spaendende	3,49	153	1,777	,144
	QF3_Spaendende	3,22	153	1,631	,132
Pair 18	M3_Teknisk	3,75	153	1,676	,136
	QF3_Teknisk	3,37	153	1,588	,128

DC_Audio Visual / means comparison

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper			
Pair 1	M1_aerlig - QF1_aerlig	-,568	1,513	,125	-,816	-,321	-4,541	145	,000
Pair 2	M1_Fantasifuld - QF1_Fantasifuld	,527	1,711	,142	,248	,807	3,725	145	,000
Pair 3	M1_Nedepajorden - QF1_Nede-pa-jorden	-,932	1,772	,147	-1,221	-,642	-6,352	145	,000
Pair 4	M1_Passioneret - QF1_Passioneret	-,185	1,718	,142	-,466	,096	-1,301	145	,195
Pair 5	M1_Unik - QF1_Unik	,288	1,669	,138	,015	,561	2,083	145	,039
Pair 6	M1_Vovet - QF1_Vovet	,493	1,691	,140	,217	,770	3,524	145	,001
Pair 7	M2_Blid - QF2_Blid	,082	1,704	,141	-,197	,361	,583	145	,561
Pair 8	M2_Elegant - QF2_Elegant	,473	1,861	,154	,168	,777	3,068	145	,003
Pair 9	M2_Moderne - QF2_Moderne	,301	1,779	,147	,010	,592	2,047	145	,042
Pair 10	M2_Palidelig - QF2_Palidelig	-,719	1,685	,139	-,995	-,444	-5,158	145	,000
Pair 11	M2_Temperamentsfuld - QF2_Temperamentsfuld	,603	1,833	,152	,303	,902	3,974	145	,000
Pair 12	M2_Venlig - QF2_Venlig	-,404	1,914	,158	-,717	-,091	-2,551	145	,012
Pair 13	M3_Fredfuld - QF3_Fredfuld	-,055	1,776	,147	-,345	,236	-,373	145	,710
Pair 14	M3_Glamouros - QF3_Glamouros	,466	1,641	,136	,197	,734	3,430	145	,001
Pair 15	M3_Nem - QF3_Nem	-,164	1,636	,135	-,432	,103	-1,214	145	,227
Pair 16	M3_Sikker - QF3_Sikker	-,281	1,818	,150	-,578	,017	-1,866	145	,064
Pair 17	M3_Spaendende - QF3_Spaendende	,411	1,753	,145	,124	,698	2,833	145	,005
Pair 18	M3_Teknisk - QF3_Teknisk	,445	1,710	,142	,165	,725	3,146	145	,002

DANISH CROWN

DC Visual

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	M1_aerlig & QF1_aerlig	167	,652	,000
Pair 2	M1_Fantasifuld & QF1_Fantasifuld	167	,626	,000
Pair 3	M1_Nedepajorden & QF1_Nede-pa-jorden	167	,507	,000
Pair 4	M1_Passioneret & QF1_Passioneret	167	,639	,000
Pair 5	M1_Unik & QF1_Unik	167	,632	,000
Pair 6	M1_Vovet & QF1_Vovet	167	,626	,000
Pair 7	M2_Blid & QF2_Blid	167	,621	,000
Pair 8	M2_Elegant & QF2_Elegant	167	,631	,000
Pair 9	M2_Moderne & QF2_Moderne	167	,607	,000
Pair 10	M2_Palidelig & QF2_Palidelig	167	,640	,000
Pair 11	M2_Temperamentsfuld & QF2_Temperamentsfuld	167	,615	,000
Pair 12	M2_Venlig & QF2_Venlig	167	,644	,000
Pair 13	M3_Fredfuld & QF3_Fredfuld	167	,607	,000
Pair 14	M3_Glamouros & QF3_Glamouros	167	,660	,000
Pair 15	M3_Nem & QF3_Nem	167	,508	,000
Pair 16	M3_Sikker & QF3_Sikker	167	,642	,000
Pair 17	M3_Spaendende & QF3_Spaendende	167	,702	,000
Pair 18	M3_Teknisk & QF3_Teknisk	167	,539	,000

Paired Samples Statistics

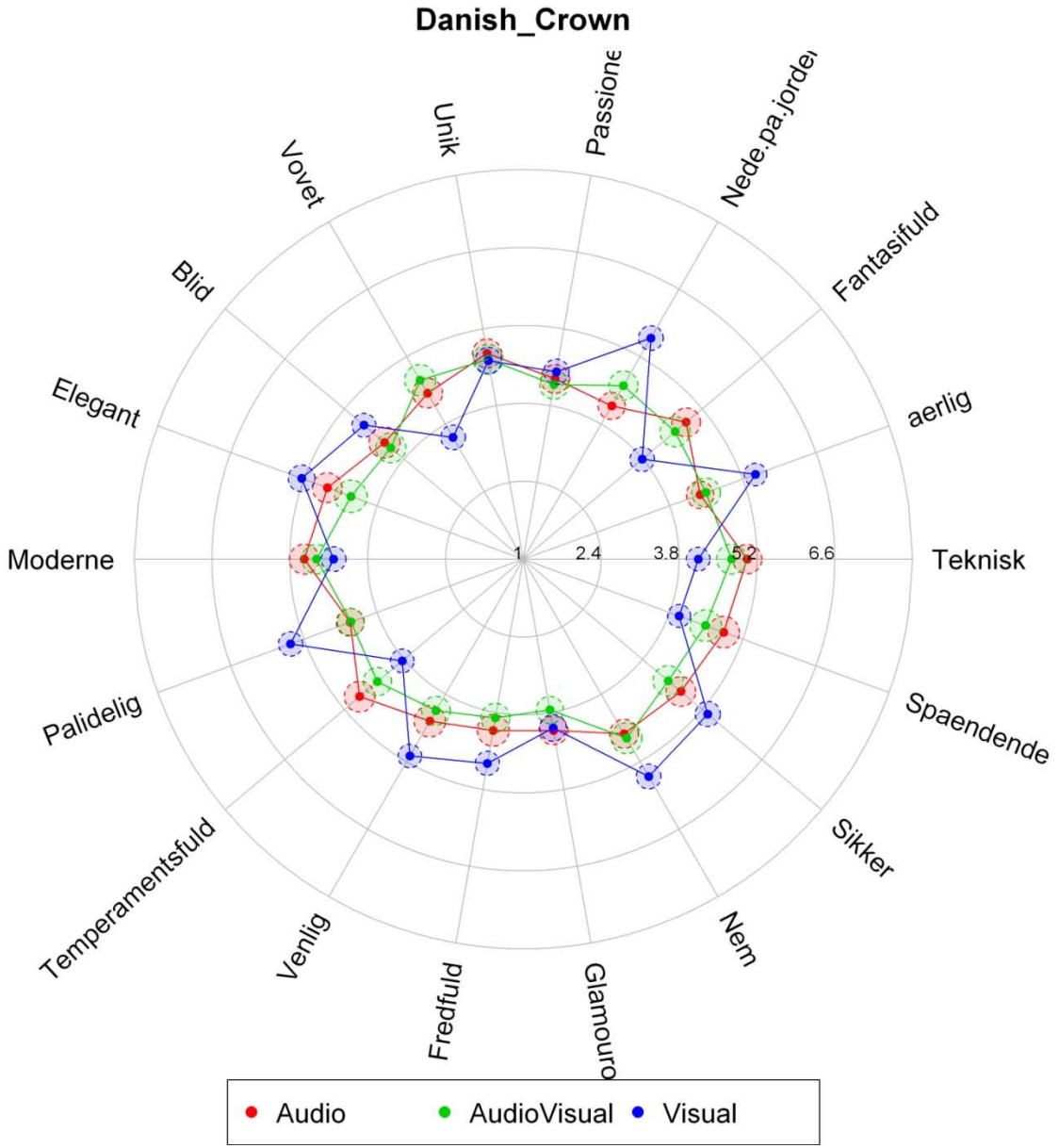
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	M1_aerlig	4,44	167	1,338	,104
	QF1_aerlig	3,96	167	1,620	,125
Pair 2	M1_Fantasifuld	2,79	167	1,439	,111
	QF1_Fantasifuld	3,14	167	1,478	,114
Pair 3	M1_Nedepajorden	4,59	167	1,449	,112
	QF1_Nede-pa-jorden	4,01	167	1,533	,119
Pair 4	M1_Passioneret	3,42	167	1,486	,115
	QF1_Passioneret	3,41	167	1,494	,116
Pair 5	M1_Unik	3,62	167	1,547	,120
	QF1_Unik	3,68	167	1,599	,124
Pair 6	M1_Vovet	2,53	167	1,455	,113
	QF1_Vovet	3,11	167	1,477	,114
Pair 7	M2_Blid	3,74	167	1,401	,108
	QF2_Blid	3,45	167	1,504	,116
Pair 8	M2_Elegant	4,25	167	1,566	,121
	QF2_Elegant	3,49	167	1,536	,119
Pair 9	M2_Moderne	3,41	167	1,457	,113
	QF2_Moderne	3,42	167	1,445	,112
Pair 10	M2_Palidelig	4,46	167	1,434	,111
	QF2_Palidelig	3,92	167	1,611	,125
Pair 11	M2_Temperamentsfuld	2,84	167	1,384	,107
	QF2_Temperamentsfuld	3,08	167	1,473	,114
Pair 12	M2_Venlig	4,08	167	1,382	,107
	QF2_Venlig	3,65	167	1,536	,119
Pair 13	M3_Fredfuld	3,72	167	1,417	,110
	QF3_Fredfuld	3,41	167	1,526	,118
Pair 14	M3_Glamouros	3,08	167	1,572	,122
	QF3_Glamouros	3,04	167	1,494	,116
Pair 15	M3_Nem	4,51	167	1,456	,113
	QF3_Nem	3,90	167	1,578	,122
Pair 16	M3_Sikker	4,33	167	1,483	,115
	QF3_Sikker	3,89	167	1,564	,121
Pair 17	M3_Spaendende	2,98	167	1,351	,105
	QF3_Spaendende	3,21	167	1,426	,110
Pair 18	M3_Teknisk	3,14	167	1,394	,108
	QF3_Teknisk	3,20	167	1,324	,102

DC Visual / means comparison

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper			
Pair 1	M1_aerlig - QF1_aerlig	,479	1,260	,098	,286	,672	4,912	166	,000
Pair 2	M1_Fantasifuld - QF1_Fantasifuld	-,353	1,261	,098	-,546	-,161	-3,619	166	,000
Pair 3	M1_Nedepajorden - QF1_Nede-pa-jorden	,575	1,482	,115	,348	,801	5,011	166	,000
Pair 4	M1_Passioneret - QF1_Passioneret	,012	1,266	,098	-,181	,205	,122	166	,903
Pair 5	M1_Unik - QF1_Unik	-,054	1,350	,104	-,260	,152	-,516	166	,607
Pair 6	M1_Vovet - QF1_Vovet	-,581	1,267	,098	-,774	-,387	-5,922	166	,000
Pair 7	M2_Blid - QF2_Blid	,293	1,267	,098	,100	,487	2,992	166	,003
Pair 8	M2_Elegant - QF2_Elegant	,754	1,333	,103	,551	,958	7,315	166	,000
Pair 9	M2_Moderne - QF2_Moderne	-,006	1,287	,100	-,203	,191	-,060	166	,952
Pair 10	M2_Palidelig - QF2_Palidelig	,539	1,302	,101	,340	,738	5,348	166	,000
Pair 11	M2_Temperamentsfuld - QF2_Temperamentsfuld	-,234	1,256	,097	-,425	-,042	-2,403	166	,017
Pair 12	M2_Venlig - QF2_Venlig	,431	1,239	,096	,242	,620	4,496	166	,000
Pair 13	M3_Fredfuld - QF3_Fredfuld	,317	1,308	,101	,117	,517	3,135	166	,002
Pair 14	M3_Glamouros - QF3_Glamouros	,036	1,265	,098	-,157	,229	,367	166	,714
Pair 15	M3_Nem - QF3_Nem	,611	1,508	,117	,380	,841	5,233	166	,000
Pair 16	M3_Sikker - QF3_Sikker	,437	1,292	,100	,240	,635	4,372	166	,000
Pair 17	M3_Spaendende - QF3_Spaendende	-,228	1,074	,083	-,392	-,064	-2,739	166	,007
Pair 18	M3_Teknisk - QF3_Teknisk	-,060	1,307	,101	-,260	,140	-,592	166	,554

DANISH CROWN



DS Audio

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	M1_aerlig & QF1_aerlig	173	,424	,000
Pair 2	M1_Fantasifuld & QF1_Fantasifuld	173	,489	,000
Pair 3	M1_Nedepajorden & QF1_Nede-pa-jorden	173	,572	,000
Pair 4	M1_Passioneret & QF1_Passioneret	173	,422	,000
Pair 5	M1_Unik & QF1_Unik	173	,538	,000
Pair 6	M1_Vovet & QF1_Vovet	173	,518	,000
Pair 7	M2_Blid & QF2_Blid	173	,559	,000
Pair 8	M2_Elegant & QF2_Elegant	173	,548	,000
Pair 9	M2_Moderne & QF2_Moderne	173	,498	,000
Pair 10	M2_Palidelig & QF2_Palidelig	173	,458	,000
Pair 11	M2_Temperamentsfuld & QF2_Temperamentsfuld	173	,620	,000
Pair 12	M2_Venlig & QF2_Venlig	173	,535	,000
Pair 13	M3_Fredfuld & QF3_Fredfuld	173	,551	,000
Pair 14	M3_Glamouros & QF3_Glamouros	173	,516	,000
Pair 15	M3_Nem & QF3_Nem	173	,444	,000
Pair 16	M3_Sikker & QF3_Sikker	173	,440	,000
Pair 17	M3_Spaendende & QF3_Spaendende	173	,513	,000
Pair 18	M3_Teknisk & QF3_Teknisk	173	,576	,000

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	M1_aerlig	3,61	173	1,433	,109
	QF1_aerlig	3,88	173	1,555	,118
Pair 2	M1_Fantasifuld	3,12	173	1,479	,112
	QF1_Fantasifuld	3,40	173	1,595	,121
Pair 3	M1_Nedepajorden	3,82	173	1,570	,119
	QF1_Nede-pa-jorden	3,78	173	1,490	,113
Pair 4	M1_Passioneret	3,01	173	1,527	,116
	QF1_Passioneret	3,39	173	1,557	,118
Pair 5	M1_Unik	3,12	173	1,645	,125
	QF1_Unik	3,45	173	1,511	,115
Pair 6	M1_Vovet	2,88	173	1,460	,111
	QF1_Vovet	3,18	173	1,506	,114
Pair 7	M2_Blid	3,36	173	1,628	,124
	QF2_Blid	3,31	173	1,461	,111
Pair 8	M2_Elegant	3,05	173	1,567	,119
	QF2_Elegant	3,03	173	1,452	,110
Pair 9	M2_Moderne	3,26	173	1,441	,110
	QF2_Moderne	3,49	173	1,457	,111
Pair 10	M2_Palidelig	3,72	173	1,468	,112
	QF2_Palidelig	3,85	173	1,614	,123
Pair 11	M2_Temperamentsfuld	3,06	173	1,643	,125
	QF2_Temperamentsfuld	3,01	173	1,512	,115
Pair 12	M2_Venlig	3,72	173	1,557	,118
	QF2_Venlig	3,80	173	1,441	,110
Pair 13	M3_Fredfuld	3,18	173	1,479	,112
	QF3_Fredfuld	3,12	173	1,514	,115
Pair 14	M3_Glamouros	2,59	173	1,355	,103
	QF3_Glamouros	2,62	173	1,387	,105
Pair 15	M3_Nem	4,39	173	1,550	,118
	QF3_Nem	4,20	173	1,540	,117
Pair 16	M3_Sikker	3,75	173	1,514	,115
	QF3_Sikker	3,76	173	1,610	,122
Pair 17	M3_Spaendende	3,08	173	1,506	,114
	QF3_Spaendende	3,50	173	1,546	,118
Pair 18	M3_Teknisk	3,27	173	1,588	,121
	QF3_Teknisk	3,42	173	1,498	,114

DS Audio / means comparison

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper			
Pair 1	M1_aerlig - QF1_aerlig	-,272	1,607	,122	-,513	-,031	-2,223	172	,027
Pair 2	M1_Fantasifuld - QF1_Fantasifuld	-,277	1,556	,118	-,511	-,044	-2,345	172	,020
Pair 3	M1_Nedepajorden - QF1_Nede-pa-jorden	,035	1,418	,108	-,178	,247	,322	172	,748
Pair 4	M1_Passioneret - QF1_Passioneret	-,382	1,658	,126	-,630	-,133	-3,026	172	,003
Pair 5	M1_Unik - QF1_Unik	-,335	1,522	,116	-,564	-,107	-2,897	172	,004
Pair 6	M1_Vovet - QF1_Vovet	-,306	1,456	,111	-,525	-,088	-2,767	172	,006
Pair 7	M2_Blid - QF2_Blid	,046	1,458	,111	-,173	,265	,417	172	,677
Pair 8	M2_Elegant - QF2_Elegant	,023	1,438	,109	-,193	,239	,211	172	,833
Pair 9	M2_Moderne - QF2_Moderne	-,231	1,452	,110	-,449	-,013	-2,094	172	,038
Pair 10	M2_Palidelig - QF2_Palidelig	-,127	1,609	,122	-,369	,114	-1,040	172	,300
Pair 11	M2_Temperamentsfuld - QF2_Temperamentsfuld	,058	1,380	,105	-,149	,265	,551	172	,582
Pair 12	M2_Venlig - QF2_Venlig	-,087	1,450	,110	-,304	,131	-,786	172	,433
Pair 13	M3_Fredfuld - QF3_Fredfuld	,064	1,419	,108	-,149	,277	,589	172	,556
Pair 14	M3_Glamouros - QF3_Glamouros	-,029	1,349	,103	-,231	,173	-,282	172	,778
Pair 15	M3_Nem - QF3_Nem	,185	1,628	,124	-,059	,429	1,494	172	,137
Pair 16	M3_Sikker - QF3_Sikker	-,006	1,655	,126	-,254	,243	-,046	172	,963
Pair 17	M3_Spaendende - QF3_Spaendende	-,422	1,506	,115	-,648	-,196	-3,685	172	,000
Pair 18	M3_Teknisk - QF3_Teknisk	-,150	1,423	,108	-,364	,063	-1,390	172	,166

DS Audio Visual

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	M1_aerlig & QF1_aerlig	182	,676	,000
Pair 2	M1_Fantasifuld & QF1_Fantasifuld	182	,577	,000
Pair 3	M1_Nedepajorden & QF1_Nede-pa-jorden	182	,574	,000
Pair 4	M1_Passioneret & QF1_Passioneret	182	,625	,000
Pair 5	M1_Unik & QF1_Unik	182	,650	,000
Pair 6	M1_Vovet & QF1_Vovet	182	,732	,000
Pair 7	M2_Blid & QF2_Blid	182	,671	,000
Pair 8	M2_Elegant & QF2_Elegant	182	,759	,000
Pair 9	M2_Moderne & QF2_Moderne	182	,757	,000
Pair 10	M2_Palidelig & QF2_Palidelig	182	,657	,000
Pair 11	M2_Temperamentsfuld & QF2_Temperamentsfuld	182	,737	,000
Pair 12	M2_Venlig & QF2_Venlig	182	,690	,000
Pair 13	M3_Fredfuld & QF3_Fredfuld	182	,674	,000
Pair 14	M3_Glamouros & QF3_Glamouros	182	,757	,000
Pair 15	M3_Nem & QF3_Nem	182	,591	,000
Pair 16	M3_Sikker & QF3_Sikker	182	,619	,000
Pair 17	M3_Spaendende & QF3_Spaendende	182	,678	,000
Pair 18	M3_Teknisk & QF3_Teknisk	182	,707	,000

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	M1_aerlig	3,69	182	1,455	,108
	QF1_aerlig	3,92	182	1,592	,118
Pair 2	M1_Fantasifuld	3,30	182	1,702	,126
	QF1_Fantasifuld	3,46	182	1,680	,125
Pair 3	M1_Nedepajorden	3,94	182	1,517	,112
	QF1_Nede-pa-jorden	3,99	182	1,523	,113
Pair 4	M1_Passioneret	3,20	182	1,590	,118
	QF1_Passioneret	3,38	182	1,693	,126
Pair 5	M1_Unik	3,69	182	1,788	,133
	QF1_Unik	3,58	182	1,588	,118
Pair 6	M1_Vovet	2,98	182	1,604	,119
	QF1_Vovet	3,14	182	1,580	,117
Pair 7	M2_Blid	3,59	182	1,577	,117
	QF2_Blid	3,47	182	1,500	,111
Pair 8	M2_Elegant	3,10	182	1,589	,118
	QF2_Elegant	3,10	182	1,535	,114
Pair 9	M2_Moderne	3,46	182	1,547	,115
	QF2_Moderne	3,50	182	1,614	,120
Pair 10	M2_Palidelig	3,81	182	1,541	,114
	QF2_Palidelig	4,08	182	1,652	,122
Pair 11	M2_Temperamentsfuld	2,93	182	1,589	,118
	QF2_Temperamentsfuld	3,06	182	1,574	,117
Pair 12	M2_Venlig	4,07	182	1,531	,113
	QF2_Venlig	3,92	182	1,521	,113
Pair 13	M3_Fredfuld	3,42	182	1,622	,120
	QF3_Fredfuld	3,27	182	1,509	,112
Pair 14	M3_Glamouros	2,51	182	1,459	,108
	QF3_Glamouros	2,55	182	1,496	,111
Pair 15	M3_Nem	4,34	182	1,629	,121
	QF3_Nem	4,26	182	1,647	,122
Pair 16	M3_Sikker	3,99	182	1,571	,116
	QF3_Sikker	3,99	182	1,563	,116
Pair 17	M3_Spaendende	3,40	182	1,726	,128
	QF3_Spaendende	3,71	182	1,764	,131
Pair 18	M3_Teknisk	3,16	182	1,622	,120
	QF3_Teknisk	3,36	182	1,689	,125

DS Audio Visual / Means comparison

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper			
Pair 1	M1_aerlig - QF1_aerlig	-,236	1,232	,091	-,416	-,056	-2,587	181	,010
Pair 2	M1_Fantasifuld - QF1_Fantasifuld	-,154	1,555	,115	-,381	,074	-1,335	181	,184
Pair 3	M1_Nedepajorden - QF1_Nede-pa-jorden	-,049	1,404	,104	-,255	,156	-,475	181	,635
Pair 4	M1_Passioneret - QF1_Passioneret	-,181	1,424	,106	-,390	,027	-1,718	181	,088
Pair 5	M1_Unik - QF1_Unik	,115	1,423	,105	-,093	,324	1,094	181	,275
Pair 6	M1_Vovet - QF1_Vovet	-,159	1,167	,086	-,330	,011	-1,842	181	,067
Pair 7	M2_Blid - QF2_Blid	,115	1,249	,093	-,067	,298	1,246	181	,214
Pair 8	M2_Elegant - QF2_Elegant	,005	1,085	,080	-,153	,164	,068	181	,946
Pair 9	M2_Moderne - QF2_Moderne	-,038	1,104	,082	-,200	,123	-,470	181	,639
Pair 10	M2_Palidelig - QF2_Palidelig	-,269	1,325	,098	-,463	-,075	-2,741	181	,007
Pair 11	M2_Temperamentsfuld - QF2_Temperamentsfuld	-,126	1,147	,085	-,294	,041	-1,486	181	,139
Pair 12	M2_Venlig - QF2_Venlig	,148	1,201	,089	-,027	,324	1,667	181	,097
Pair 13	M3_Fredfuld - QF3_Fredfuld	,148	1,268	,094	-,037	,334	1,578	181	,116
Pair 14	M3_Glamouros - QF3_Glamouros	-,049	1,031	,076	-,200	,101	-,647	181	,519
Pair 15	M3_Nem - QF3_Nem	,077	1,481	,110	-,140	,294	,701	181	,484
Pair 16	M3_Sikker - QF3_Sikker	,005	1,369	,101	-,195	,206	,054	181	,957
Pair 17	M3_Spaendende - QF3_Spaendende	-,319	1,401	,104	-,524	-,114	-3,068	181	,002
Pair 18	M3_Teknisk - QF3_Teknisk	-,203	1,269	,094	-,389	-,018	-2,161	181	,032

DS Visual

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	M1_aerlig & QF1_aerlig	162	,541	,000
Pair 2	M1_Fantasifuld & QF1_Fantasifuld	162	,458	,000
Pair 3	M1_Nedepajorden & QF1_Nede-pa-jorden	162	,545	,000
Pair 4	M1_Passioneret & QF1_Passioneret	162	,559	,000
Pair 5	M1_Unik & QF1_Unik	162	,561	,000
Pair 6	M1_Vovet & QF1_Vovet	162	,620	,000
Pair 7	M2_Blid & QF2_Blid	162	,534	,000
Pair 8	M2_Elegant & QF2_Elegant	162	,506	,000
Pair 9	M2_Moderne & QF2_Moderne	162	,519	,000
Pair 10	M2_Palidelig & QF2_Palidelig	162	,691	,000
Pair 11	M2_Temperamentsfuld & QF2_Temperamentsfuld	162	,522	,000
Pair 12	M2_Venlig & QF2_Venlig	162	,595	,000
Pair 13	M3_Fredfuld & QF3_Fredfuld	162	,659	,000
Pair 14	M3_Glamouros & QF3_Glamouros	162	,711	,000
Pair 15	M3_Nem & QF3_Nem	162	,591	,000
Pair 16	M3_Sikker & QF3_Sikker	162	,642	,000
Pair 17	M3_Spaendende & QF3_Spaendende	162	,687	,000
Pair 18	M3_Teknisk & QF3_Teknisk	162	,631	,000

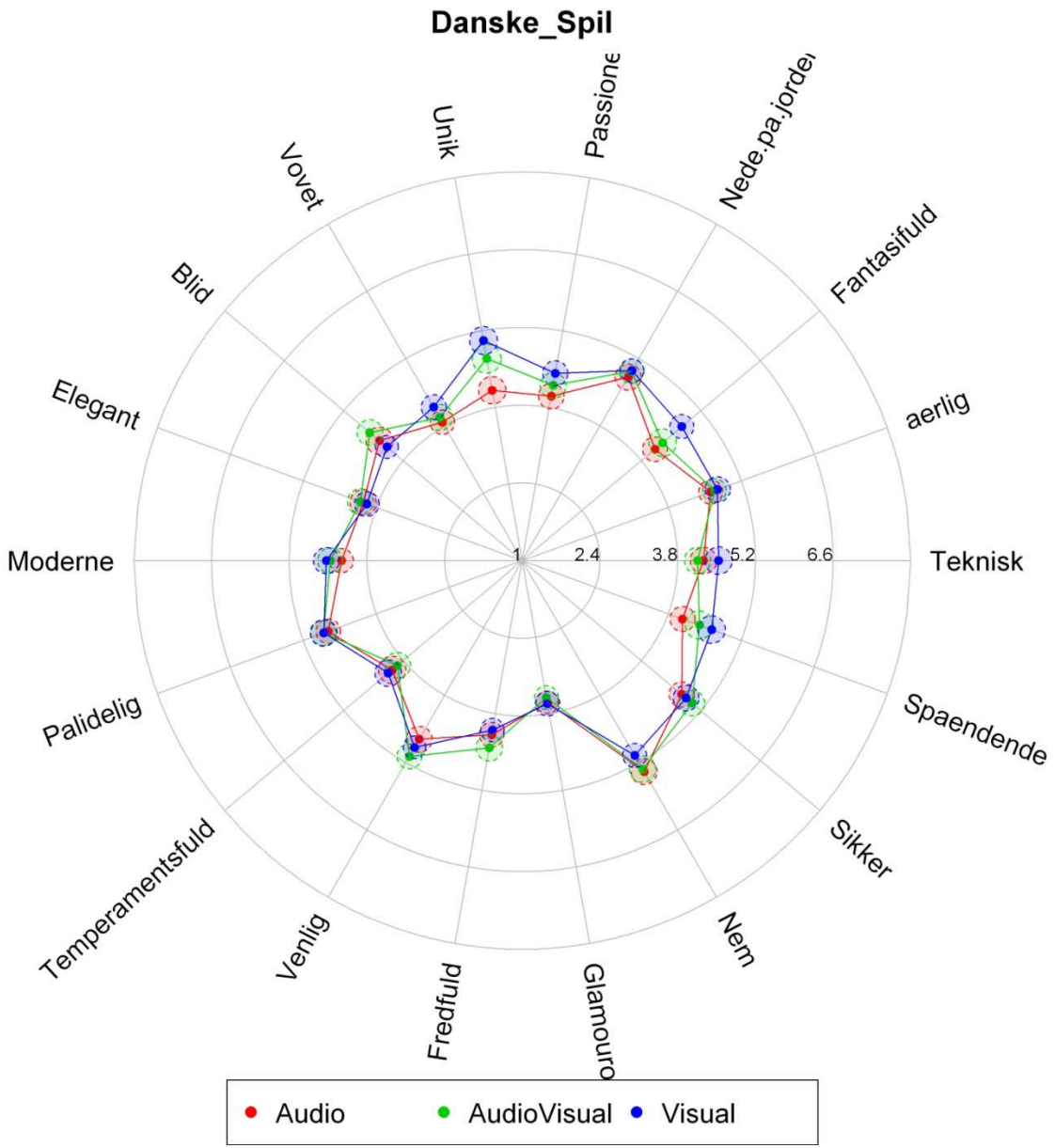
Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	M1_aerlig	3,75	162	1,472	,116
	QF1_aerlig	3,91	162	1,493	,117
Pair 2	M1_Fantasifuld	3,75	162	1,388	,109
	QF1_Fantasifuld	3,64	162	1,579	,124
Pair 3	M1_Nedepajorden	3,95	162	1,369	,108
	QF1_Nede-pa-jorden	4,04	162	1,585	,125
Pair 4	M1_Passioneret	3,43	162	1,448	,114
	QF1_Passioneret	3,51	162	1,616	,127
Pair 5	M1_Unik	4,02	162	1,623	,127
	QF1_Unik	3,91	162	1,634	,128
Pair 6	M1_Vovet	3,19	162	1,447	,114
	QF1_Vovet	3,34	162	1,458	,115
Pair 7	M2_Blid	3,19	162	1,325	,104
	QF2_Blid	3,41	162	1,473	,116
Pair 8	M2_Elegant	2,98	162	1,425	,112
	QF2_Elegant	3,36	162	1,527	,120
Pair 9	M2_Moderne	3,53	162	1,508	,119
	QF2_Moderne	3,67	162	1,382	,109
Pair 10	M2_Palidelig	3,81	162	1,551	,122
	QF2_Palidelig	4,04	162	1,607	,126
Pair 11	M2_Temperamentsfuld	3,15	162	1,535	,121
	QF2_Temperamentsfuld	3,06	162	1,616	,127
Pair 12	M2_Venlig	3,88	162	1,311	,103
	QF2_Venlig	4,19	162	1,446	,114
Pair 13	M3_Fredfuld	3,10	162	1,366	,107
	QF3_Fredfuld	3,27	162	1,528	,120
Pair 14	M3_Glamouros	2,62	162	1,419	,112
	QF3_Glamouros	2,71	162	1,490	,117
Pair 15	M3_Nem	4,05	162	1,391	,109
	QF3_Nem	4,33	162	1,536	,121
Pair 16	M3_Sikker	3,85	162	1,492	,117
	QF3_Sikker	4,11	162	1,508	,118
Pair 17	M3_Spaendende	3,63	162	1,603	,126
	QF3_Spaendende	3,78	162	1,576	,124
Pair 18	M3_Teknisk	3,54	162	1,596	,125
	QF3_Teknisk	3,49	162	1,545	,121

DS Visual / Means comparison

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper			
Pair 1	M1_aerlig - QF1_aerlig	-,167	1,420	,112	-,387	,054	-1,494	161	,137
Pair 2	M1_Fantasifuld - QF1_Fantasifuld	,111	1,552	,122	-,130	,352	,911	161	,364
Pair 3	M1_Nedepajorden - QF1_Nede-pa-jorden	-,093	1,422	,112	-,313	,128	-,829	161	,409
Pair 4	M1_Passioneret - QF1_Passioneret	-,086	1,446	,114	-,311	,138	-,761	161	,448
Pair 5	M1_Unik - QF1_Unik	,117	1,526	,120	-,119	,354	,978	161	,329
Pair 6	M1_Vovet - QF1_Vovet	-,148	1,267	,100	-,345	,048	-1,488	161	,139
Pair 7	M2_Blid - QF2_Blid	-,228	1,357	,107	-,439	-,018	-2,142	161	,034
Pair 8	M2_Elegant - QF2_Elegant	-,377	1,470	,116	-,605	-,148	-3,260	161	,001
Pair 9	M2_Moderne - QF2_Moderne	-,142	1,422	,112	-,363	,079	-1,270	161	,206
Pair 10	M2_Palidelig - QF2_Palidelig	-,228	1,242	,098	-,421	-,036	-2,340	161	,021
Pair 11	M2_Temperamentsfuld - QF2_Temperamentsfuld	,099	1,541	,121	-,140	,338	,816	161	,416
Pair 12	M2_Venlig - QF2_Venlig	-,302	1,247	,098	-,496	-,109	-3,088	161	,002
Pair 13	M3_Fredfuld - QF3_Fredfuld	-,173	1,203	,095	-,360	,014	-1,828	161	,069
Pair 14	M3_Glamouros - QF3_Glamouros	-,093	1,108	,087	-,264	,079	-1,064	161	,289
Pair 15	M3_Nem - QF3_Nem	-,284	1,330	,105	-,490	-,078	-2,717	161	,007
Pair 16	M3_Sikker - QF3_Sikker	-,259	1,269	,100	-,456	-,062	-2,601	161	,010
Pair 17	M3_Spaendende - QF3_Spaendende	-,148	1,257	,099	-,343	,047	-1,500	161	,136
Pair 18	M3_Teknisk - QF3_Teknisk	,049	1,350	,106	-,160	,259	,465	161	,642


Danske_Spil
Unik
Passione
Nede.pa.jorde
Fantasifuld
aerlig
Teknisk
Spaendende
Sikker
Nem
Glamouro
Fredfuld
Venlig
Temperamentsfuld
Palidelig
Moderne
Elegant
Blid
Vovet
1
2.4
3.8
5.2
6.6
Audio
AudioVisual
Visual

FEMINA

FE Audio

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	M1_aerlig & QF1_aerlig	162	,466	,000
Pair 2	M1_Fantasifuld & QF1_Fantasifuld	162	,421	,000
Pair 3	M1_Nedepajorden & QF1_Nede-pa-jorden	162	,355	,000
Pair 4	M1_Passioneret & QF1_Passioneret	162	,423	,000
Pair 5	M1_Unik & QF1_Unik	162	,365	,000
Pair 6	M1_Vovet & QF1_Vovet	162	,288	,000
Pair 7	M2_Blid & QF2_Blid	162	,468	,000
Pair 8	M2_Elegant & QF2_Elegant	162	,573	,000
Pair 9	M2_Moderne & QF2_Moderne	162	,603	,000
Pair 10	M2_Palidelig & QF2_Palidelig	162	,558	,000
Pair 11	M2_Temperamentsfuld & QF2_Temperamentsfuld	162	,481	,000
Pair 12	M2_Venlig & QF2_Venlig	162	,606	,000
Pair 13	M3_Fredfuld & QF3_Fredfuld	162	,555	,000
Pair 14	M3_Glamouros & QF3_Glamouros	162	,543	,000
Pair 15	M3_Nem & QF3_Nem	162	,273	,000
Pair 16	M3_Sikker & QF3_Sikker	162	,513	,000
Pair 17	M3_Spaendende & QF3_Spaendende	162	,512	,000
Pair 18	M3_Teknisk & QF3_Teknisk	162	,578	,000

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	M1_aerlig	4,08	162	1,410	,111
	QF1_aerlig	4,02	162	1,387	,109
Pair 2	M1_Fantasifuld	3,88	162	1,570	,123
	QF1_Fantasifuld	3,24	162	1,452	,114
Pair 3	M1_Nedepajorden	4,49	162	1,420	,112
	QF1_Nede-pa-jorden	4,28	162	1,451	,114
Pair 4	M1_Passioneret	3,36	162	1,422	,112
	QF1_Passioneret	3,50	162	1,471	,116
Pair 5	M1_Unik	3,37	162	1,503	,118
	QF1_Unik	3,16	162	1,342	,105
Pair 6	M1_Vovet	2,65	162	1,367	,107
	QF1_Vovet	2,77	162	1,335	,105
Pair 7	M2_Blid	4,64	162	1,514	,119
	QF2_Blid	4,37	162	1,265	,099
Pair 8	M2_Elegant	4,03	162	1,514	,119
	QF2_Elegant	3,78	162	1,483	,117
Pair 9	M2_Moderne	3,74	162	1,425	,112
	QF2_Moderne	3,62	162	1,517	,119
Pair 10	M2_Palidelig	4,12	162	1,344	,106
	QF2_Palidelig	4,10	162	1,393	,109
Pair 11	M2_Temperamentsfuld	2,49	162	1,306	,103
	QF2_Temperamentsfuld	2,64	162	1,317	,103
Pair 12	M2_Venlig	4,98	162	1,483	,116
	QF2_Venlig	4,47	162	1,411	,111
Pair 13	M3_Fredfuld	4,37	162	1,491	,117
	QF3_Fredfuld	4,14	162	1,391	,109
Pair 14	M3_Glamouros	2,86	162	1,313	,103
	QF3_Glamouros	3,17	162	1,463	,115
Pair 15	M3_Nem	5,01	162	1,321	,104
	QF3_Nem	4,41	162	1,439	,113
Pair 16	M3_Sikker	4,22	162	1,452	,114
	QF3_Sikker	4,02	162	1,372	,108
Pair 17	M3_Spaendende	3,48	162	1,475	,116
	QF3_Spaendende	3,23	162	1,459	,115
Pair 18	M3_Teknisk	3,27	162	1,461	,115
	QF3_Teknisk	2,81	162	1,430	,112

FE Audio / Means comparison

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper			
Pair 1	M1_aerlig - QF1_aerlig	,056	1,446	,114	-,169	,280	,489	161	,625
Pair 2	M1_Fantasifuld - QF1_Fantasifuld	,642	1,629	,128	,389	,895	5,016	161	,000
Pair 3	M1_Nedepajorden - QF1_Nede-pa-jorden	,204	1,631	,128	-,049	,457	1,590	161	,114
Pair 4	M1_Passioneret - QF1_Passioneret	-,136	1,554	,122	-,377	,105	-1,112	161	,268
Pair 5	M1_Unik - QF1_Unik	,210	1,609	,126	-,040	,460	1,660	161	,099
Pair 6	M1_Vovet - QF1_Vovet	-,117	1,613	,127	-,368	,133	-,926	161	,356
Pair 7	M2_Blid - QF2_Blid	,272	1,449	,114	,047	,496	2,386	161	,018
Pair 8	M2_Elegant - QF2_Elegant	,253	1,385	,109	,038	,468	2,327	161	,021
Pair 9	M2_Moderne - QF2_Moderne	,123	1,313	,103	-,080	,327	1,197	161	,233
Pair 10	M2_Palidelig - QF2_Palidelig	,019	1,288	,101	-,181	,218	,183	161	,855
Pair 11	M2_Temperamentsfuld - QF2_Temperamentsfuld	-,154	1,335	,105	-,362	,053	-1,471	161	,143
Pair 12	M2_Venlig - QF2_Venlig	,506	1,287	,101	,307	,706	5,008	161	,000
Pair 13	M3_Fredfuld - QF3_Fredfuld	,228	1,362	,107	,017	,440	2,135	161	,034
Pair 14	M3_Glamouros - QF3_Glamouros	-,309	1,334	,105	-,516	-,102	-2,945	161	,004
Pair 15	M3_Nem - QF3_Nem	,593	1,666	,131	,334	,851	4,526	161	,000
Pair 16	M3_Sikker - QF3_Sikker	,198	1,396	,110	-,019	,414	1,801	161	,074
Pair 17	M3_Spaendende - QF3_Spaendende	,247	1,449	,114	,022	,472	2,169	161	,032
Pair 18	M3_Teknisk - QF3_Teknisk	,457	1,329	,104	,251	,663	4,376	161	,000

FEMINA

FE Audio Visual

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	M1_aerlig & QF1_aerlig	173	,506	,000
Pair 2	M1_Fantasifuld & QF1_Fantasifuld	173	,543	,000
Pair 3	M1_Nedepajorden & QF1_Nede-pa-jorden	173	,409	,000
Pair 4	M1_Passioneret & QF1_Passioneret	173	,509	,000
Pair 5	M1_Unik & QF1_Unik	173	,518	,000
Pair 6	M1_Vovet & QF1_Vovet	173	,452	,000
Pair 7	M2_Blid & QF2_Blid	173	,537	,000
Pair 8	M2_Elegant & QF2_Elegant	173	,572	,000
Pair 9	M2_Moderne & QF2_Moderne	173	,614	,000
Pair 10	M2_Palidelig & QF2_Palidelig	173	,507	,000
Pair 11	M2_Temperamentsfuld & QF2_Temperamentsfuld	173	,572	,000
Pair 12	M2_Venlig & QF2_Venlig	173	,498	,000
Pair 13	M3_Fredfuld & QF3_Fredfuld	173	,451	,000
Pair 14	M3_Glamouros & QF3_Glamouros	173	,600	,000
Pair 15	M3_Nem & QF3_Nem	173	,385	,000
Pair 16	M3_Sikker & QF3_Sikker	173	,475	,000
Pair 17	M3_Spaendende & QF3_Spaendende	173	,607	,000
Pair 18	M3_Teknisk & QF3_Teknisk	173	,502	,000

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	M1_aerlig	3,62	173	1,416	,108
	QF1_aerlig	4,10	173	1,394	,106
Pair 2	M1_Fantasifuld	3,23	173	1,514	,115
	QF1_Fantasifuld	3,27	173	1,369	,104
Pair 3	M1_Nedepajorden	4,10	173	1,483	,113
	QF1_Nede-pa-jorden	4,32	173	1,422	,108
Pair 4	M1_Passioneret	3,13	173	1,508	,115
	QF1_Passioneret	3,36	173	1,394	,106
Pair 5	M1_Unik	3,21	173	1,557	,118
	QF1_Unik	3,13	173	1,421	,108
Pair 6	M1_Vovet	2,68	173	1,462	,111
	QF1_Vovet	2,82	173	1,398	,106
Pair 7	M2_Blid	4,62	173	1,542	,117
	QF2_Blid	4,34	173	1,399	,106
Pair 8	M2_Elegant	3,74	173	1,527	,116
	QF2_Elegant	3,68	173	1,470	,112
Pair 9	M2_Moderne	3,46	173	1,568	,119
	QF2_Moderne	3,58	173	1,406	,107
Pair 10	M2_Palidelig	3,81	173	1,395	,106
	QF2_Palidelig	4,09	173	1,380	,105
Pair 11	M2_Temperamentsfuld	2,40	173	1,405	,107
	QF2_Temperamentsfuld	2,61	173	1,354	,103
Pair 12	M2_Venlig	4,50	173	1,591	,121
	QF2_Venlig	4,47	173	1,349	,103
Pair 13	M3_Fredfuld	4,27	173	1,543	,117
	QF3_Fredfuld	4,13	173	1,429	,109
Pair 14	M3_Glamouros	2,99	173	1,431	,109
	QF3_Glamouros	3,09	173	1,464	,111
Pair 15	M3_Nem	4,49	173	1,469	,112
	QF3_Nem	4,31	173	1,366	,104
Pair 16	M3_Sikker	3,87	173	1,435	,109
	QF3_Sikker	3,98	173	1,318	,100
Pair 17	M3_Spaendende	3,09	173	1,515	,115
	QF3_Spaendende	3,18	173	1,462	,111
Pair 18	M3_Teknisk	3,20	173	1,535	,117
	QF3_Teknisk	2,72	173	1,399	,106

FE Audio Visual / Means comparison

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper			
Pair 1	M1_aerlig - QF1_aerlig	-,486	1,396	,106	-,695	-,276	-4,575	172	,000
Pair 2	M1_Fantasifuld - QF1_Fantasifuld	-,046	1,384	,105	-,254	,162	-,439	172	,661
Pair 3	M1_Nedepajorden - QF1_Nede-pa-jorden	-,220	1,581	,120	-,457	,018	-1,828	172	,069
Pair 4	M1_Passioneret - QF1_Passioneret	-,237	1,441	,110	-,453	-,021	-2,163	172	,032
Pair 5	M1_Unik - QF1_Unik	,087	1,466	,111	-,133	,307	,778	172	,438
Pair 6	M1_Vovet - QF1_Vovet	-,133	1,498	,114	-,358	,092	-1,167	172	,245
Pair 7	M2_Blid - QF2_Blid	,283	1,421	,108	,070	,496	2,622	172	,010
Pair 8	M2_Elegant - QF2_Elegant	,058	1,388	,106	-,151	,266	,548	172	,585
Pair 9	M2_Moderne - QF2_Moderne	-,127	1,315	,100	-,324	,070	-1,272	172	,205
Pair 10	M2_Palidelig - QF2_Palidelig	-,277	1,378	,105	-,484	-,071	-2,648	172	,009
Pair 11	M2_Temperamentsfuld - QF2_Temperamentsfuld	-,208	1,277	,097	-,400	-,016	-2,143	172	,033
Pair 12	M2_Venlig - QF2_Venlig	,029	1,488	,113	-,194	,252	,255	172	,799
Pair 13	M3_Fredfuld - QF3_Fredfuld	,139	1,560	,119	-,095	,373	1,170	172	,244
Pair 14	M3_Glamouros - QF3_Glamouros	-,104	1,294	,098	-,298	,090	-1,057	172	,292
Pair 15	M3_Nem - QF3_Nem	,173	1,575	,120	-,063	,410	1,448	172	,149
Pair 16	M3_Sikker - QF3_Sikker	-,116	1,414	,107	-,328	,097	-1,076	172	,284
Pair 17	M3_Spaendende - QF3_Spaendende	-,087	1,320	,100	-,285	,111	-,864	172	,389
Pair 18	M3_Teknisk - QF3_Teknisk	,474	1,469	,112	,254	,694	4,244	172	,000

FEMINA

FE Visual

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	M1_aerlig & QF1_aerlig	183	,532	,000
Pair 2	M1_Fantasifuld & QF1_Fantasifuld	183	,466	,000
Pair 3	M1_Nedepajorden & QF1_Nede-pa-jorden	183	,472	,000
Pair 4	M1_Passioneret & QF1_Passioneret	183	,666	,000
Pair 5	M1_Unik & QF1_Unik	183	,558	,000
Pair 6	M1_Vovet & QF1_Vovet	183	,682	,000
Pair 7	M2_Blid & QF2_Blid	183	,552	,000
Pair 8	M2_Elegant & QF2_Elegant	183	,649	,000
Pair 9	M2_Moderne & QF2_Moderne	183	,635	,000
Pair 10	M2_Palidelig & QF2_Palidelig	183	,590	,000
Pair 11	M2_Temperamentsfuld & QF2_Temperamentsfuld	183	,660	,000
Pair 12	M2_Venlig & QF2_Venlig	183	,593	,000
Pair 13	M3_Fredfuld & QF3_Fredfuld	183	,514	,000
Pair 14	M3_Glamouros & QF3_Glamouros	183	,757	,000
Pair 15	M3_Nem & QF3_Nem	183	,489	,000
Pair 16	M3_Sikker & QF3_Sikker	183	,558	,000
Pair 17	M3_Spaendende & QF3_Spaendende	183	,685	,000
Pair 18	M3_Teknisk & QF3_Teknisk	183	,663	,000

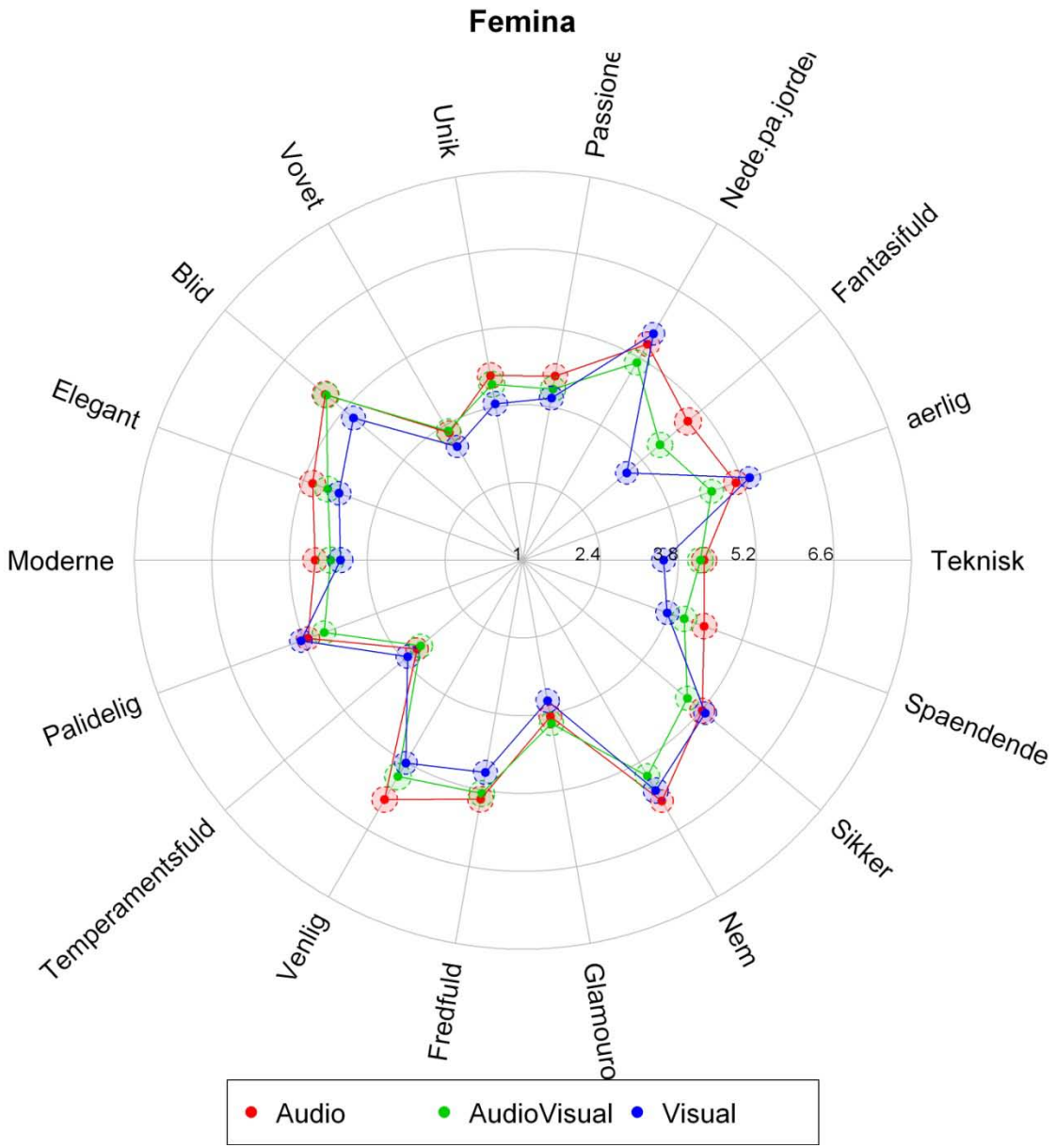
Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	M1_aerlig	4,34	183	1,345	,099
	QF1_aerlig	4,00	183	1,468	,108
Pair 2	M1_Fantasifuld	2,44	183	1,377	,102
	QF1_Fantasifuld	2,98	183	1,452	,107
Pair 3	M1_Nedepajorden	4,70	183	1,383	,102
	QF1_Nede-pa-jorden	4,42	183	1,552	,115
Pair 4	M1_Passioneret	2,96	183	1,476	,109
	QF1_Passioneret	3,13	183	1,430	,106
Pair 5	M1_Unik	2,86	183	1,501	,111
	QF1_Unik	3,02	183	1,467	,108
Pair 6	M1_Vovet	2,36	183	1,367	,101
	QF1_Vovet	2,58	183	1,384	,102
Pair 7	M2_Blid	3,98	183	1,467	,108
	QF2_Blid	4,16	183	1,485	,110
Pair 8	M2_Elegant	3,52	183	1,452	,107
	QF2_Elegant	3,40	183	1,569	,116
Pair 9	M2_Moderne	3,28	183	1,546	,114
	QF2_Moderne	3,34	183	1,561	,115
Pair 10	M2_Palidelig	4,25	183	1,396	,103
	QF2_Palidelig	4,02	183	1,477	,109
Pair 11	M2_Temperamentsfuld	2,70	183	1,441	,107
	QF2_Temperamentsfuld	2,59	183	1,391	,103
Pair 12	M2_Venlig	4,21	183	1,396	,103
	QF2_Venlig	4,28	183	1,474	,109
Pair 13	M3_Fredfuld	3,88	183	1,478	,109
	QF3_Fredfuld	4,10	183	1,484	,110
Pair 14	M3_Glamouros	2,57	183	1,450	,107
	QF3_Glamouros	2,84	183	1,492	,110
Pair 15	M3_Nem	4,79	183	1,553	,115
	QF3_Nem	4,35	183	1,561	,115
Pair 16	M3_Sikker	4,28	183	1,401	,104
	QF3_Sikker	4,00	183	1,426	,105
Pair 17	M3_Spaendende	2,77	183	1,449	,107
	QF3_Spaendende	3,05	183	1,516	,112
Pair 18	M3_Teknisk	2,54	183	1,467	,108
	QF3_Teknisk	2,67	183	1,502	,111

FE Visual / Means comparison

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper			
Pair 1	M1_aerlig - QF1_aerlig	,344	1,365	,101	,145	,543	3,411	182	,001
Pair 2	M1_Fantasifuld - QF1_Fantasifuld	-,536	1,463	,108	-,749	-,322	-4,952	182	,000
Pair 3	M1_Nedepajorden - QF1_Nede-pa-jorden	,290	1,515	,112	,069	,511	2,586	182	,010
Pair 4	M1_Passioneret - QF1_Passioneret	-,164	1,189	,088	-,337	,009	-1,866	182	,064
Pair 5	M1_Unik - QF1_Unik	-,164	1,397	,103	-,368	,040	-1,588	182	,114
Pair 6	M1_Vovet - QF1_Vovet	-,219	1,098	,081	-,379	-,058	-2,694	182	,008
Pair 7	M2_Blid - QF2_Blid	-,186	1,398	,103	-,390	,018	-1,798	182	,074
Pair 8	M2_Elegant - QF2_Elegant	,120	1,270	,094	-,065	,305	1,281	182	,202
Pair 9	M2_Moderne - QF2_Moderne	-,060	1,327	,098	-,254	,133	-,613	182	,541
Pair 10	M2_Palidelig - QF2_Palidelig	,235	1,303	,096	,045	,425	2,440	182	,016
Pair 11	M2_Temperamentsfuld - QF2_Temperamentsfuld	,115	1,169	,086	-,056	,285	1,328	182	,186
Pair 12	M2_Venlig - QF2_Venlig	-,071	1,297	,096	-,260	,118	-,741	182	,460
Pair 13	M3_Fredfuld - QF3_Fredfuld	-,224	1,460	,108	-,437	-,011	-2,076	182	,039
Pair 14	M3_Glamouros - QF3_Glamouros	-,268	1,027	,076	-,418	-,118	-3,528	182	,001
Pair 15	M3_Nem - QF3_Nem	,437	1,574	,116	,208	,667	3,757	182	,000
Pair 16	M3_Sikker - QF3_Sikker	,284	1,329	,098	,090	,478	2,893	182	,004
Pair 17	M3_Spaendende - QF3_Spaendende	-,279	1,179	,087	-,451	-,107	-3,199	182	,002
Pair 18	M3_Teknisk - QF3_Teknisk	-,131	1,220	,090	-,309	,047	-1,454	182	,148


Femina
Unik
Passione
Nede.på.jorden
Fantasifuld
ærlig
Teknisk
Spændende
Sikker
Nem
Glamourø
Fredfuld
Venlig
Temperamentsfuld
Palidelig
Moderne
Elegant
Blid
Vovet
1
2.4
3.8
5.2
6.6
Audio
AudioVisual
Visual

MW Audio

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	M1_aerlig & QF1_aerlig	167	,548	,000
Pair 2	M1_Fantasifuld & QF1_Fantasifuld	167	,487	,000
Pair 3	M1_Nedepajorden & QF1_Nede-pa-jorden	167	,452	,000
Pair 4	M1_Passioneret & QF1_Passioneret	167	,533	,000
Pair 5	M1_Unik & QF1_Unik	167	,505	,000
Pair 6	M1_Vovet & QF1_Vovet	167	,372	,000
Pair 7	M2_Blid & QF2_Blid	167	,494	,000
Pair 8	M2_Elegant & QF2_Elegant	167	,639	,000
Pair 9	M2_Moderne & QF2_Moderne	167	,547	,000
Pair 10	M2_Palidelig & QF2_Palidelig	167	,582	,000
Pair 11	M2_Temperamentsfuld & QF2_Temperamentsfuld	167	,470	,000
Pair 12	M2_Venlig & QF2_Venlig	167	,550	,000
Pair 13	M3_Fredfuld & QF3_Fredfuld	167	,521	,000
Pair 14	M3_Glamouros & QF3_Glamouros	167	,574	,000
Pair 15	M3_Nem & QF3_Nem	167	,492	,000
Pair 16	M3_Sikker & QF3_Sikker	167	,545	,000
Pair 17	M3_Spaendende & QF3_Spaendende	167	,560	,000
Pair 18	M3_Teknisk & QF3_Teknisk	167	,482	,000

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	M1_aerlig	4,08	167	1,454	,112
	QF1_aerlig	3,68	167	1,432	,111
Pair 2	M1_Fantasifuld	3,72	167	1,679	,130
	QF1_Fantasifuld	4,04	167	1,730	,134
Pair 3	M1_Nedepajorden	4,16	167	1,598	,124
	QF1_Nede-pa-jorden	3,38	167	1,570	,121
Pair 4	M1_Passioneret	3,67	167	1,600	,124
	QF1_Passioneret	3,63	167	1,558	,121
Pair 5	M1_Unik	3,76	167	1,680	,130
	QF1_Unik	4,02	167	1,730	,134
Pair 6	M1_Vovet	2,85	167	1,391	,108
	QF1_Vovet	3,74	167	1,764	,136
Pair 7	M2_Blid	5,18	167	1,573	,122
	QF2_Blid	4,07	167	1,713	,133
Pair 8	M2_Elegant	4,57	167	1,781	,138
	QF2_Elegant	3,84	167	1,691	,131
Pair 9	M2_Moderne	3,91	167	1,563	,121
	QF2_Moderne	4,12	167	1,668	,129
Pair 10	M2_Palidelig	4,29	167	1,478	,114
	QF2_Palidelig	3,76	167	1,526	,118
Pair 11	M2_Temperamentsfuld	2,57	167	1,429	,111
	QF2_Temperamentsfuld	3,21	167	1,536	,119
Pair 12	M2_Venlig	4,80	167	1,499	,116
	QF2_Venlig	4,00	167	1,541	,119
Pair 13	M3_Fredfuld	5,01	167	1,679	,130
	QF3_Fredfuld	3,99	167	1,702	,132
Pair 14	M3_Glamouros	3,75	167	1,689	,131
	QF3_Glamouros	3,41	167	1,510	,117
Pair 15	M3_Nem	4,14	167	1,431	,111
	QF3_Nem	3,68	167	1,518	,117
Pair 16	M3_Sikker	4,00	167	1,537	,119
	QF3_Sikker	3,60	167	1,468	,114
Pair 17	M3_Spaendende	3,68	167	1,661	,129
	QF3_Spaendende	3,83	167	1,657	,128
Pair 18	M3_Teknisk	3,31	167	1,551	,120
	QF3_Teknisk	3,59	167	1,568	,121

MW Audio / Means comparison

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper			
Pair 1	M1_aerlig - QF1_aerlig	,407	1,372	,106	,198	,617	3,836	166	,000
Pair 2	M1_Fantasifuld - QF1_Fantasifuld	-,323	1,726	,134	-,587	-,060	-2,421	166	,017
Pair 3	M1_Nedepajorden - QF1_Nede-pa-jorden	,778	1,659	,128	,525	1,032	6,064	166	,000
Pair 4	M1_Passioneret - QF1_Passioneret	,042	1,526	,118	-,191	,275	,355	166	,723
Pair 5	M1_Unik - QF1_Unik	-,257	1,697	,131	-,517	,002	-1,961	166	,052
Pair 6	M1_Vovet - QF1_Vovet	-,886	1,795	,139	-1,160	-,612	-6,380	166	,000
Pair 7	M2_Blid - QF2_Blid	1,108	1,658	,128	,855	1,361	8,637	166	,000
Pair 8	M2_Elegant - QF2_Elegant	,737	1,478	,114	,511	,962	6,442	166	,000
Pair 9	M2_Moderne - QF2_Moderne	-,210	1,540	,119	-,445	,026	-1,759	166	,080
Pair 10	M2_Palidelig - QF2_Palidelig	,533	1,374	,106	,323	,743	5,011	166	,000
Pair 11	M2_Temperamentsfuld - QF2_Temperamentsfuld	-,641	1,530	,118	-,874	-,407	-5,413	166	,000
Pair 12	M2_Venlig - QF2_Venlig	,796	1,442	,112	,576	1,017	7,138	166	,000
Pair 13	M3_Fredfuld - QF3_Fredfuld	1,018	1,655	,128	,765	1,271	7,946	166	,000
Pair 14	M3_Glamouros - QF3_Glamouros	,341	1,484	,115	,115	,568	2,972	166	,003
Pair 15	M3_Nem - QF3_Nem	,461	1,488	,115	,234	,688	4,005	166	,000
Pair 16	M3_Sikker - QF3_Sikker	,395	1,435	,111	,176	,614	3,559	166	,000
Pair 17	M3_Spaendende - QF3_Spaendende	-,144	1,557	,121	-,382	,094	-1,193	166	,235
Pair 18	M3_Teknisk - QF3_Teknisk	-,287	1,587	,123	-,530	-,045	-2,340	166	,020

MW Audio Visual

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	M1_aerlig & QF1_aerlig	146	,809	,000
Pair 2	M1_Fantasifuld & QF1_Fantasifuld	146	,698	,000
Pair 3	M1_Nedepajorden & QF1_Nede-pa-jorden	146	,693	,000
Pair 4	M1_Passioneret & QF1_Passioneret	146	,786	,000
Pair 5	M1_Unik & QF1_Unik	146	,738	,000
Pair 6	M1_Vovet & QF1_Vovet	146	,680	,000
Pair 7	M2_Blid & QF2_Blid	146	,750	,000
Pair 8	M2_Elegant & QF2_Elegant	146	,826	,000
Pair 9	M2_Moderne & QF2_Moderne	146	,815	,000
Pair 10	M2_Palidelig & QF2_Palidelig	146	,819	,000
Pair 11	M2_Temperamentsfuld & QF2_Temperamentsfuld	146	,654	,000
Pair 12	M2_Venlig & QF2_Venlig	146	,803	,000
Pair 13	M3_Fredfuld & QF3_Fredfuld	146	,787	,000
Pair 14	M3_Glamouros & QF3_Glamouros	146	,803	,000
Pair 15	M3_Nem & QF3_Nem	146	,685	,000
Pair 16	M3_Sikker & QF3_Sikker	146	,762	,000
Pair 17	M3_Spaendende & QF3_Spaendende	146	,751	,000
Pair 18	M3_Teknisk & QF3_Teknisk	146	,810	,000

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	M1_aerlig	3,91	146	1,627	,135
	QF1_aerlig	3,74	146	1,518	,126
Pair 2	M1_Fantasifuld	4,01	146	1,764	,146
	QF1_Fantasifuld	3,96	146	1,652	,137
Pair 3	M1_Nedepajorden	3,73	146	1,691	,140
	QF1_Nede-pa-jorden	3,58	146	1,618	,134
Pair 4	M1_Passioneret	3,74	146	1,690	,140
	QF1_Passioneret	3,71	146	1,614	,134
Pair 5	M1_Unik	4,18	146	1,789	,148
	QF1_Unik	4,06	146	1,747	,145
Pair 6	M1_Vovet	3,49	146	1,832	,152
	QF1_Vovet	3,58	146	1,664	,138
Pair 7	M2_Blid	4,72	146	1,737	,144
	QF2_Blid	4,23	146	1,797	,149
Pair 8	M2_Elegant	4,37	146	1,890	,156
	QF2_Elegant	4,11	146	1,754	,145
Pair 9	M2_Moderne	4,16	146	1,789	,148
	QF2_Moderne	4,15	146	1,662	,138
Pair 10	M2_Palidelig	3,99	146	1,531	,127
	QF2_Palidelig	3,91	146	1,494	,124
Pair 11	M2_Temperamentsfuld	2,53	146	1,468	,121
	QF2_Temperamentsfuld	3,03	146	1,497	,124
Pair 12	M2_Venlig	4,46	146	1,782	,147
	QF2_Venlig	4,16	146	1,726	,143
Pair 13	M3_Fredfuld	4,66	146	1,798	,149
	QF3_Fredfuld	4,36	146	1,733	,143
Pair 14	M3_Glamouros	3,45	146	1,636	,135
	QF3_Glamouros	3,53	146	1,715	,142
Pair 15	M3_Nem	3,71	146	1,585	,131
	QF3_Nem	3,59	146	1,456	,120
Pair 16	M3_Sikker	3,85	146	1,519	,126
	QF3_Sikker	3,73	146	1,460	,121
Pair 17	M3_Spaendende	3,78	146	1,736	,144
	QF3_Spaendende	3,82	146	1,701	,141
Pair 18	M3_Teknisk	3,31	146	1,583	,131
	QF3_Teknisk	3,45	146	1,532	,127

MW Audio Visual / Means comparison

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper			
Pair 1	M1_aerlig - QF1_aerlig	,171	,978	,081	,011	,331	2,115	145	,036
Pair 2	M1_Fantasifuld - QF1_Fantasifuld	,048	1,330	,110	-,170	,266	,435	145	,664
Pair 3	M1_Nedepajorden - QF1_Nede-pa-jorden	,151	1,299	,108	-,062	,363	1,402	145	,163
Pair 4	M1_Passioneret - QF1_Passioneret	,027	1,082	,090	-,150	,204	,306	145	,760
Pair 5	M1_Unik - QF1_Unik	,123	1,281	,106	-,086	,333	1,163	145	,247
Pair 6	M1_Vovet - QF1_Vovet	-,096	1,406	,116	-,326	,134	-,824	145	,411
Pair 7	M2_Blid - QF2_Blid	,486	1,250	,103	,282	,691	4,702	145	,000
Pair 8	M2_Elegant - QF2_Elegant	,260	1,083	,090	,083	,437	2,904	145	,004
Pair 9	M2_Moderne - QF2_Moderne	,014	1,057	,087	-,159	,187	,157	145	,876
Pair 10	M2_Palidelig - QF2_Palidelig	,075	,910	,075	-,074	,224	1,000	145	,319
Pair 11	M2_Temperamentsfuld - QF2_Temperamentsfuld	-,507	1,233	,102	-,709	-,305	-4,966	145	,000
Pair 12	M2_Venlig - QF2_Venlig	,295	1,103	,091	,114	,475	3,227	145	,002
Pair 13	M3_Fredfuld - QF3_Fredfuld	,308	1,154	,096	,119	,497	3,227	145	,002
Pair 14	M3_Glamouros - QF3_Glamouros	-,082	1,054	,087	-,255	,090	-,942	145	,348
Pair 15	M3_Nem - QF3_Nem	,116	1,212	,100	-,082	,315	1,161	145	,248
Pair 16	M3_Sikker - QF3_Sikker	,123	1,030	,085	-,045	,292	1,447	145	,150
Pair 17	M3_Spaendende - QF3_Spaendende	-,041	1,214	,100	-,240	,158	-,409	145	,683
Pair 18	M3_Teknisk - QF3_Teknisk	-,144	,961	,080	-,301	,013	-1,808	145	,073

MW Visual

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	M1_aerlig & QF1_aerlig	153	,671	,000
Pair 2	M1_Fantasifuld & QF1_Fantasifuld	153	,532	,000
Pair 3	M1_Nedepajorden & QF1_Nede-pa-jorden	153	,421	,000
Pair 4	M1_Passioneret & QF1_Passioneret	153	,504	,000
Pair 5	M1_Unik & QF1_Unik	153	,480	,000
Pair 6	M1_Vovet & QF1_Vovet	153	,407	,000
Pair 7	M2_Blid & QF2_Blid	153	,236	,003
Pair 8	M2_Elegant & QF2_Elegant	153	,590	,000
Pair 9	M2_Moderne & QF2_Moderne	153	,617	,000
Pair 10	M2_Palidelig & QF2_Palidelig	153	,651	,000
Pair 11	M2_Temperamentsfuld & QF2_Temperamentsfuld	153	,510	,000
Pair 12	M2_Venlig & QF2_Venlig	153	,455	,000
Pair 13	M3_Fredfuld & QF3_Fredfuld	153	,319	,000
Pair 14	M3_Glamouros & QF3_Glamouros	153	,679	,000
Pair 15	M3_Nem & QF3_Nem	153	,509	,000
Pair 16	M3_Sikker & QF3_Sikker	153	,689	,000
Pair 17	M3_Spaendende & QF3_Spaendende	153	,579	,000
Pair 18	M3_Teknisk & QF3_Teknisk	153	,546	,000

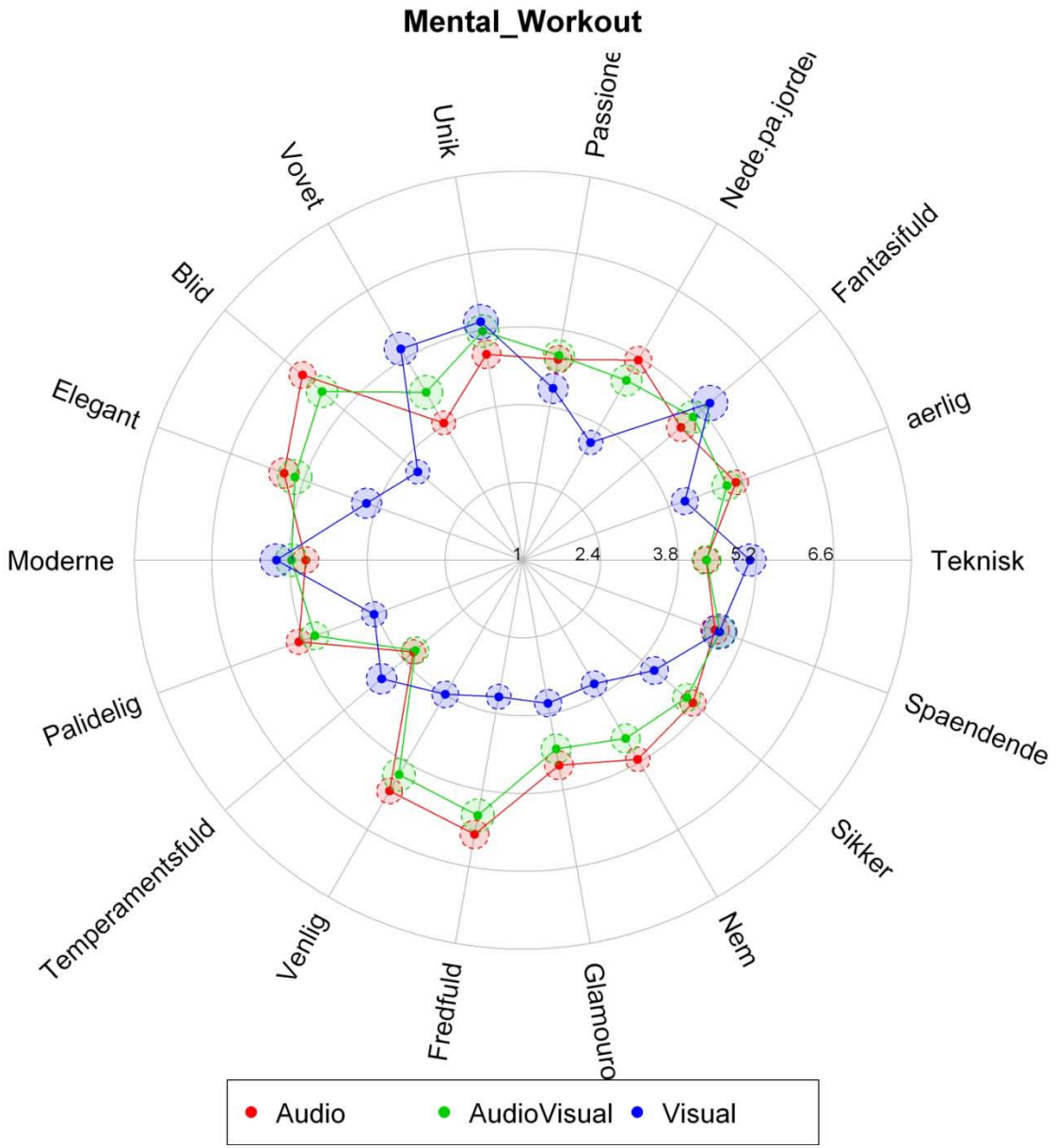
Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	M1_aerlig	3,10	153	1,509	,122
	QF1_aerlig	3,71	153	1,589	,128
Pair 2	M1_Fantasifuld	4,40	153	1,995	,161
	QF1_Fantasifuld	3,80	153	1,756	,142
Pair 3	M1_Nedepajorden	2,44	153	1,362	,110
	QF1_Nede-pa-jorden	3,63	153	1,713	,138
Pair 4	M1_Passioneret	3,14	153	1,690	,137
	QF1_Passioneret	3,56	153	1,610	,130
Pair 5	M1_Unik	4,35	153	1,952	,158
	QF1_Unik	3,83	153	1,716	,139
Pair 6	M1_Vovet	4,39	153	1,865	,151
	QF1_Vovet	3,32	153	1,600	,129
Pair 7	M2_Blid	2,47	153	1,353	,109
	QF2_Blid	4,37	153	1,902	,154
Pair 8	M2_Elegant	2,99	153	1,688	,136
	QF2_Elegant	3,85	153	1,809	,146
Pair 9	M2_Moderne	4,44	153	1,838	,149
	QF2_Moderne	4,12	153	1,682	,136
Pair 10	M2_Palidelig	2,85	153	1,404	,113
	QF2_Palidelig	3,66	153	1,635	,132
Pair 11	M2_Temperamentsfuld	3,32	153	1,708	,138
	QF2_Temperamentsfuld	2,66	153	1,540	,124
Pair 12	M2_Venlig	2,79	153	1,494	,121
	QF2_Venlig	4,22	153	1,811	,146
Pair 13	M3_Fredfuld	2,50	153	1,396	,113
	QF3_Fredfuld	4,25	153	1,928	,156
Pair 14	M3_Glamouros	2,61	153	1,522	,123
	QF3_Glamouros	3,13	153	1,685	,136
Pair 15	M3_Nem	2,57	153	1,445	,117
	QF3_Nem	3,44	153	1,572	,127
Pair 16	M3_Sikker	3,09	153	1,566	,127
	QF3_Sikker	3,53	153	1,606	,130
Pair 17	M3_Spaendende	3,76	153	1,942	,157
	QF3_Spaendende	3,63	153	1,681	,136
Pair 18	M3_Teknisk	4,09	153	1,815	,147
	QF3_Teknisk	3,42	153	1,600	,129

MW Visual / Means comparison

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper			
Pair 1	M1_aerlig - QF1_aerlig	-,601	1,258	,102	-,802	-,400	-5,911	152	,000
Pair 2	M1_Fantasifuld - QF1_Fantasifuld	,601	1,826	,148	,310	,893	4,074	152	,000
Pair 3	M1_Nedepajorden - QF1_Nede-pa-jorden	-1,183	1,680	,136	-1,451	-,915	-8,711	152	,000
Pair 4	M1_Passioneret - QF1_Passioneret	-,418	1,645	,133	-,681	-,156	-3,146	152	,002
Pair 5	M1_Unik - QF1_Unik	,523	1,882	,152	,222	,823	3,437	152	,001
Pair 6	M1_Vovet - QF1_Vovet	1,072	1,899	,154	,769	1,375	6,981	152	,000
Pair 7	M2_Blid - QF2_Blid	-1,902	2,058	,166	-2,231	-1,573	-11,434	152	,000
Pair 8	M2_Elegant - QF2_Elegant	-,856	1,587	,128	-1,110	-,603	-6,673	152	,000
Pair 9	M2_Moderne - QF2_Moderne	,320	1,546	,125	,073	,567	2,562	152	,011
Pair 10	M2_Palidelig - QF2_Palidelig	-,810	1,286	,104	-1,016	-,605	-7,793	152	,000
Pair 11	M2_Temperamentsfuld - QF2_Temperamentsfuld	,660	1,615	,131	,402	,918	5,057	152	,000
Pair 12	M2_Venlig - QF2_Venlig	-1,431	1,746	,141	-1,710	-1,152	-10,139	152	,000
Pair 13	M3_Fredfuld - QF3_Fredfuld	-1,758	1,987	,161	-2,076	-1,441	-10,945	152	,000
Pair 14	M3_Glamouros - QF3_Glamouros	-,516	1,293	,105	-,723	-,310	-4,939	152	,000
Pair 15	M3_Nem - QF3_Nem	-,869	1,499	,121	-1,109	-,630	-7,175	152	,000
Pair 16	M3_Sikker - QF3_Sikker	-,438	1,250	,101	-,638	-,238	-4,332	152	,000
Pair 17	M3_Spaendende - QF3_Spaendende	,137	1,678	,136	-,131	,405	1,012	152	,313
Pair 18	M3_Teknisk - QF3_Teknisk	,673	1,638	,132	,412	,935	5,085	152	,000


Mental_Workout
Unik
Passione
Nede.på.jorden
Fantasifuld
ærlig
Teknisk
Spændende
Sikker
Nem
Glamourø
Fredfuld
Venlig
Temperamentsfuld
Palidelig
Moderne
Elegant
Blid
Vovet
1
2.4
3.8
5.2
6.6
Audio
AudioVisual
Visual

OD Audio

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	M1_aerlig & QF1_aerlig	153	,398	,000
Pair 2	M1_Fantasifuld & QF1_Fantasifuld	153	,509	,000
Pair 3	M1_Nedepajorden & QF1_Nede-pa-jorden	153	,385	,000
Pair 4	M1_Passioneret & QF1_Passioneret	153	,499	,000
Pair 5	M1_Unik & QF1_Unik	153	,534	,000
Pair 6	M1_Vovet & QF1_Vovet	153	,492	,000
Pair 7	M2_Blid & QF2_Blid	153	,516	,000
Pair 8	M2_Elegant & QF2_Elegant	153	,689	,000
Pair 9	M2_Moderne & QF2_Moderne	153	,632	,000
Pair 10	M2_Palidelig & QF2_Palidelig	153	,408	,000
Pair 11	M2_Temperamentsfuld & QF2_Temperamentsfuld	153	,646	,000
Pair 12	M2_Venlig & QF2_Venlig	153	,463	,000
Pair 13	M3_Fredfuld & QF3_Fredfuld	153	,570	,000
Pair 14	M3_Glamouros & QF3_Glamouros	153	,725	,000
Pair 15	M3_Nem & QF3_Nem	153	,419	,000
Pair 16	M3_Sikker & QF3_Sikker	153	,519	,000
Pair 17	M3_Spaendende & QF3_Spaendende	153	,494	,000
Pair 18	M3_Teknisk & QF3_Teknisk	153	,596	,000

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	M1_aerlig	4,09	153	1,562	,126
	QF1_aerlig	3,67	153	1,521	,123
Pair 2	M1_Fantasifuld	4,10	153	1,712	,138
	QF1_Fantasifuld	3,45	153	1,610	,130
Pair 3	M1_Nedepajorden	4,47	153	1,631	,132
	QF1_Nede-pa-jorden	4,03	153	1,593	,129
Pair 4	M1_Passioneret	3,77	153	1,571	,127
	QF1_Passioneret	3,29	153	1,621	,131
Pair 5	M1_Unik	3,95	153	1,654	,134
	QF1_Unik	3,29	153	1,576	,127
Pair 6	M1_Vovet	3,27	153	1,626	,131
	QF1_Vovet	3,12	153	1,603	,130
Pair 7	M2_Blid	3,69	153	1,583	,128
	QF2_Blid	3,34	153	1,623	,131
Pair 8	M2_Elegant	2,99	153	1,566	,127
	QF2_Elegant	2,77	153	1,528	,124
Pair 9	M2_Moderne	3,38	153	1,564	,126
	QF2_Moderne	3,44	153	1,564	,126
Pair 10	M2_Palidelig	3,94	153	1,505	,122
	QF2_Palidelig	3,58	153	1,641	,133
Pair 11	M2_Temperamentsfuld	3,30	153	1,577	,128
	QF2_Temperamentsfuld	3,17	153	1,525	,123
Pair 12	M2_Venlig	4,73	153	1,548	,125
	QF2_Venlig	3,90	153	1,468	,119
Pair 13	M3_Fredfuld	3,41	153	1,660	,134
	QF3_Fredfuld	3,02	153	1,571	,127
Pair 14	M3_Glamouros	2,78	153	1,603	,130
	QF3_Glamouros	2,54	153	1,491	,121
Pair 15	M3_Nem	4,54	153	1,509	,122
	QF3_Nem	4,12	153	1,522	,123
Pair 16	M3_Sikker	4,08	153	1,528	,124
	QF3_Sikker	3,52	153	1,615	,131
Pair 17	M3_Spaendende	3,72	153	1,616	,131
	QF3_Spaendende	3,55	153	1,678	,136
Pair 18	M3_Teknisk	3,10	153	1,527	,123
	QF3_Teknisk	3,42	153	1,580	,128

OD Audio / means comparison

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper			
Pair 1	M1_aerlig - QF1_aerlig	,418	1,692	,137	,148	,689	3,058	152	,003
Pair 2	M1_Fantasifuld - QF1_Fantasifuld	,647	1,648	,133	,384	,910	4,856	152	,000
Pair 3	M1_Nedepajorden - QF1_Nede-pa-jorden	,444	1,788	,145	,159	,730	3,075	152	,002
Pair 4	M1_Passioneret - QF1_Passioneret	,484	1,598	,129	,228	,739	3,743	152	,000
Pair 5	M1_Unik - QF1_Unik	,660	1,561	,126	,411	,909	5,231	152	,000
Pair 6	M1_Vovet - QF1_Vovet	,144	1,628	,132	-,116	,404	1,093	152	,276
Pair 7	M2_Blid - QF2_Blid	,346	1,578	,128	,094	,599	2,715	152	,007
Pair 8	M2_Elegant - QF2_Elegant	,222	1,221	,099	,027	,417	2,252	152	,026
Pair 9	M2_Moderne - QF2_Moderne	-,065	1,341	,108	-,280	,149	-,603	152	,547
Pair 10	M2_Palidelig - QF2_Palidelig	,366	1,716	,139	,092	,640	2,639	152	,009
Pair 11	M2_Temperamentsfuld - QF2_Temperamentsfuld	,131	1,306	,106	-,078	,339	1,238	152	,218
Pair 12	M2_Venlig - QF2_Venlig	,824	1,565	,127	,574	1,073	6,509	152	,000
Pair 13	M3_Fredfuld - QF3_Fredfuld	,392	1,501	,121	,152	,632	3,232	152	,002
Pair 14	M3_Glamouros - QF3_Glamouros	,235	1,151	,093	,051	,419	2,528	152	,013
Pair 15	M3_Nem - QF3_Nem	,418	1,633	,132	,158	,679	3,169	152	,002
Pair 16	M3_Sikker - QF3_Sikker	,562	1,543	,125	,316	,808	4,507	152	,000
Pair 17	M3_Spaendende - QF3_Spaendende	,170	1,657	,134	-,095	,435	1,268	152	,207
Pair 18	M3_Teknisk - QF3_Teknisk	-,314	1,398	,113	-,537	-,090	-2,776	152	,006

OD Audio Visual

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	M1_aerlig & QF1_aerlig	167	,757	,000
Pair 2	M1_Fantasifuld & QF1_Fantasifuld	167	,702	,000
Pair 3	M1_Nedepajorden & QF1_Nede-pa-jorden	167	,585	,000
Pair 4	M1_Passioneret & QF1_Passioneret	167	,672	,000
Pair 5	M1_Unik & QF1_Unik	167	,719	,000
Pair 6	M1_Vovet & QF1_Vovet	167	,644	,000
Pair 7	M2_Blid & QF2_Blid	167	,766	,000
Pair 8	M2_Elegant & QF2_Elegant	167	,673	,000
Pair 9	M2_Moderne & QF2_Moderne	167	,795	,000
Pair 10	M2_Palidelig & QF2_Palidelig	167	,762	,000
Pair 11	M2_Temperamentsfuld & QF2_Temperamentsfuld	167	,792	,000
Pair 12	M2_Venlig & QF2_Venlig	167	,771	,000
Pair 13	M3_Fredfuld & QF3_Fredfuld	167	,762	,000
Pair 14	M3_Glamouros & QF3_Glamouros	167	,766	,000
Pair 15	M3_Nem & QF3_Nem	167	,665	,000
Pair 16	M3_Sikker & QF3_Sikker	167	,702	,000
Pair 17	M3_Spaendende & QF3_Spaendende	167	,762	,000
Pair 18	M3_Teknisk & QF3_Teknisk	167	,680	,000

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	M1_aerlig	3,83	167	1,396	,108
	QF1_aerlig	3,63	167	1,498	,116
Pair 2	M1_Fantasifuld	3,80	167	1,479	,114
	QF1_Fantasifuld	3,41	167	1,584	,123
Pair 3	M1_Nedepajorden	4,07	167	1,448	,112
	QF1_Nede-pa-jorden	3,91	167	1,544	,119
Pair 4	M1_Passioneret	3,58	167	1,478	,114
	QF1_Passioneret	3,28	167	1,532	,119
Pair 5	M1_Unik	3,68	167	1,568	,121
	QF1_Unik	3,25	167	1,616	,125
Pair 6	M1_Vovet	3,40	167	1,501	,116
	QF1_Vovet	3,08	167	1,477	,114
Pair 7	M2_Blid	3,51	167	1,480	,115
	QF2_Blid	3,44	167	1,551	,120
Pair 8	M2_Elegant	2,96	167	1,388	,107
	QF2_Elegant	2,97	167	1,495	,116
Pair 9	M2_Moderne	3,65	167	1,583	,122
	QF2_Moderne	3,47	167	1,653	,128
Pair 10	M2_Palidelig	3,66	167	1,434	,111
	QF2_Palidelig	3,60	167	1,452	,112
Pair 11	M2_Temperamentsfuld	3,24	167	1,510	,117
	QF2_Temperamentsfuld	3,05	167	1,472	,114
Pair 12	M2_Venlig	4,25	167	1,570	,121
	QF2_Venlig	4,02	167	1,619	,125
Pair 13	M3_Fredfuld	3,26	167	1,485	,115
	QF3_Fredfuld	3,25	167	1,455	,113
Pair 14	M3_Glamouros	2,67	167	1,351	,105
	QF3_Glamouros	2,75	167	1,543	,119
Pair 15	M3_Nem	4,28	167	1,484	,115
	QF3_Nem	4,07	167	1,557	,120
Pair 16	M3_Sikker	3,75	167	1,463	,113
	QF3_Sikker	3,77	167	1,492	,115
Pair 17	M3_Spaendende	3,41	167	1,549	,120
	QF3_Spaendende	3,44	167	1,585	,123
Pair 18	M3_Teknisk	3,16	167	1,388	,107
	QF3_Teknisk	3,19	167	1,410	,109

OD Audio Visual / means comparison

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper			
Pair 1	M1_aerlig - QF1_aerlig	,198	1,013	,078	,043	,352	2,520	166	,013
Pair 2	M1_Fantasifuld - QF1_Fantasifuld	,383	1,186	,092	,202	,564	4,176	166	,000
Pair 3	M1_Nedepajorden - QF1_Nede-pa-jorden	,156	1,366	,106	-,053	,364	1,472	166	,143
Pair 4	M1_Passioneret - QF1_Passioneret	,299	1,220	,094	,113	,486	3,172	166	,002
Pair 5	M1_Unik - QF1_Unik	,431	1,195	,092	,249	,614	4,663	166	,000
Pair 6	M1_Vovet - QF1_Vovet	,317	1,257	,097	,125	,509	3,263	166	,001
Pair 7	M2_Blid - QF2_Blid	,072	1,039	,080	-,087	,231	,894	166	,373
Pair 8	M2_Elegant - QF2_Elegant	-,006	1,169	,090	-,185	,173	-,066	166	,947
Pair 9	M2_Moderne - QF2_Moderne	,180	1,037	,080	,021	,338	2,238	166	,027
Pair 10	M2_Palidelig - QF2_Palidelig	,054	,996	,077	-,098	,206	,700	166	,485
Pair 11	M2_Temperamentsfuld - QF2_Temperamentsfuld	,192	,963	,075	,045	,339	2,572	166	,011
Pair 12	M2_Venlig - QF2_Venlig	,228	1,079	,084	,063	,392	2,725	166	,007
Pair 13	M3_Fredfuld - QF3_Fredfuld	,006	1,015	,079	-,149	,161	,076	166	,939
Pair 14	M3_Glamouros - QF3_Glamouros	-,078	1,006	,078	-,232	,076	-1,000	166	,319
Pair 15	M3_Nem - QF3_Nem	,210	1,246	,096	,019	,400	2,174	166	,031
Pair 16	M3_Sikker - QF3_Sikker	-,024	1,140	,088	-,198	,150	-,271	166	,786
Pair 17	M3_Spaendende - QF3_Spaendende	-,024	1,081	,084	-,189	,141	-,286	166	,775
Pair 18	M3_Teknisk - QF3_Teknisk	-,036	1,119	,087	-,207	,135	-,415	166	,679

OD Visual

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	M1_aerlig & QF1_aerlig	146	,548	,000
Pair 2	M1_Fantasifuld & QF1_Fantasifuld	146	,494	,000
Pair 3	M1_Nedepajorden & QF1_Nede-pa-jorden	146	,439	,000
Pair 4	M1_Passioneret & QF1_Passioneret	146	,635	,000
Pair 5	M1_Unik & QF1_Unik	146	,594	,000
Pair 6	M1_Vovet & QF1_Vovet	146	,605	,000
Pair 7	M2_Blid & QF2_Blid	146	,563	,000
Pair 8	M2_Elegant & QF2_Elegant	146	,683	,000
Pair 9	M2_Moderne & QF2_Moderne	146	,636	,000
Pair 10	M2_Palidelig & QF2_Palidelig	146	,686	,000
Pair 11	M2_Temperamentsfuld & QF2_Temperamentsfuld	146	,635	,000
Pair 12	M2_Venlig & QF2_Venlig	146	,558	,000
Pair 13	M3_Fredfuld & QF3_Fredfuld	146	,678	,000
Pair 14	M3_Glamouros & QF3_Glamouros	146	,640	,000
Pair 15	M3_Nem & QF3_Nem	146	,602	,000
Pair 16	M3_Sikker & QF3_Sikker	146	,747	,000
Pair 17	M3_Spaendende & QF3_Spaendende	146	,550	,000
Pair 18	M3_Teknisk & QF3_Teknisk	146	,541	,000

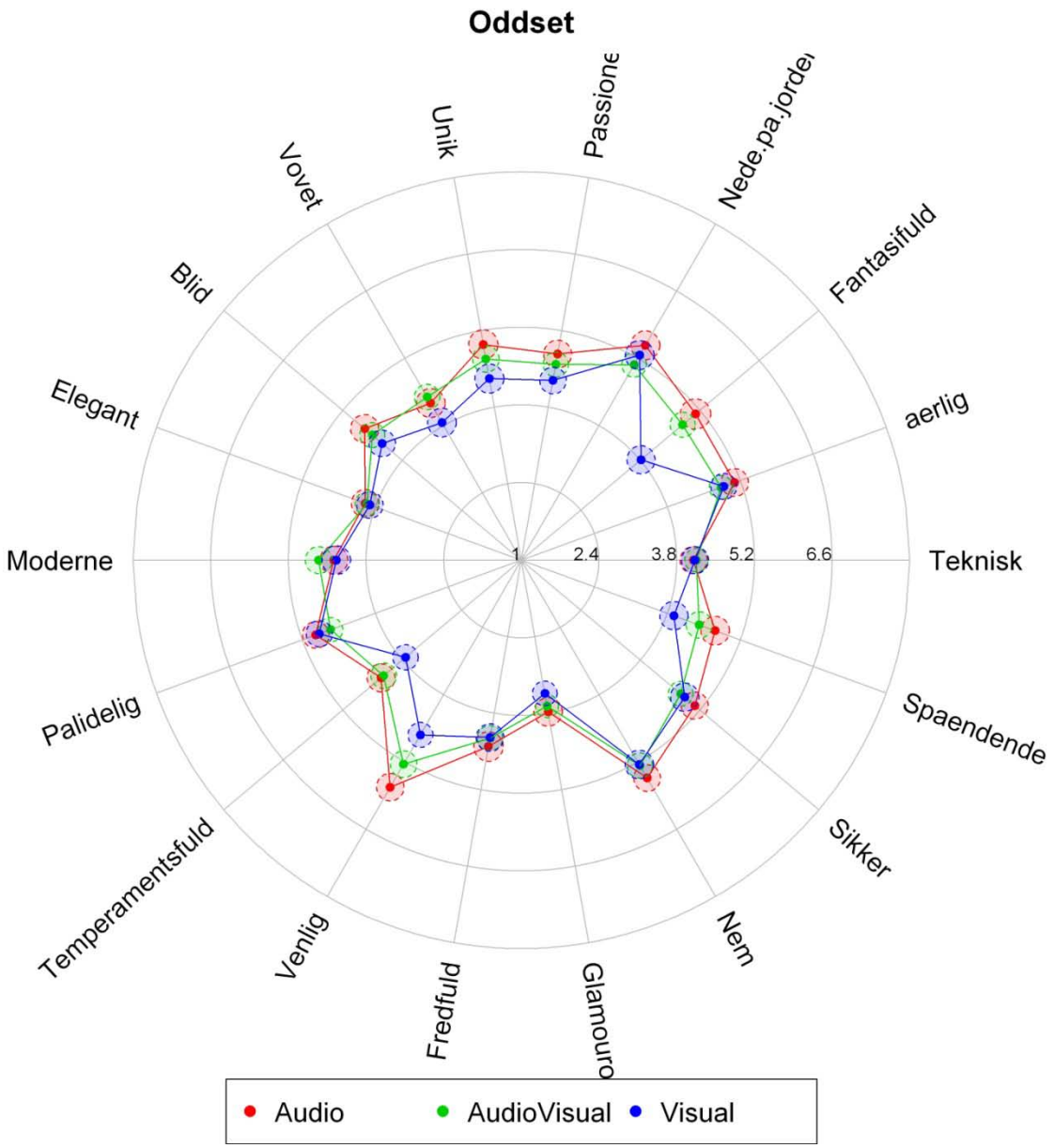
Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	M1_aerlig	3,88	146	1,426	,118
	QF1_aerlig	3,64	146	1,552	,128
Pair 2	M1_Fantasifuld	2,82	146	1,545	,128
	QF1_Fantasifuld	3,51	146	1,778	,147
Pair 3	M1_Nedepajorden	4,27	146	1,586	,131
	QF1_Nede-pa-jorden	3,86	146	1,676	,139
Pair 4	M1_Passioneret	3,29	146	1,462	,121
	QF1_Passioneret	3,21	146	1,628	,135
Pair 5	M1_Unik	3,32	146	1,597	,132
	QF1_Unik	3,40	146	1,787	,148
Pair 6	M1_Vovet	2,86	146	1,578	,131
	QF1_Vovet	3,05	146	1,517	,126
Pair 7	M2_Blid	3,27	146	1,460	,121
	QF2_Blid	3,31	146	1,583	,131
Pair 8	M2_Elegant	2,90	146	1,454	,120
	QF2_Elegant	2,74	146	1,405	,116
Pair 9	M2_Moderne	3,34	146	1,577	,131
	QF2_Moderne	3,27	146	1,546	,128
Pair 10	M2_Palidelig	3,88	146	1,443	,119
	QF2_Palidelig	3,76	146	1,524	,126
Pair 11	M2_Temperamentsfuld	2,73	146	1,392	,115
	QF2_Temperamentsfuld	3,07	146	1,502	,124
Pair 12	M2_Venlig	3,64	146	1,379	,114
	QF2_Venlig	3,98	146	1,595	,132
Pair 13	M3_Fredfuld	3,25	146	1,516	,125
	QF3_Fredfuld	2,97	146	1,524	,126
Pair 14	M3_Glamouros	2,44	146	1,359	,113
	QF3_Glamouros	2,38	146	1,351	,112
Pair 15	M3_Nem	4,25	146	1,570	,130
	QF3_Nem	3,90	146	1,530	,127
Pair 16	M3_Sikker	3,84	146	1,561	,129
	QF3_Sikker	3,56	146	1,531	,127
Pair 17	M3_Spaendende	2,92	146	1,554	,129
	QF3_Spaendende	3,36	146	1,613	,134
Pair 18	M3_Teknisk	3,13	146	1,491	,123
	QF3_Teknisk	3,11	146	1,486	,123

OD Visual / means comparison

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper			
Pair 1	M1_aerlig - QF1_aerlig	,240	1,421	,118	,007	,472	2,039	145	,043
Pair 2	M1_Fantasifuld - QF1_Fantasifuld	-,699	1,683	,139	-,974	-,423	-5,016	145	,000
Pair 3	M1_Nedepajorden - QF1_Nede-pa-jorden	,404	1,728	,143	,121	,687	2,825	145	,005
Pair 4	M1_Passioneret - QF1_Passioneret	,075	1,329	,110	-,142	,293	,685	145	,494
Pair 5	M1_Unik - QF1_Unik	-,082	1,534	,127	-,333	,169	-,648	145	,518
Pair 6	M1_Vovet - QF1_Vovet	-,192	1,376	,114	-,417	,033	-1,684	145	,094
Pair 7	M2_Blid - QF2_Blid	-,034	1,426	,118	-,267	,199	-,290	145	,772
Pair 8	M2_Elegant - QF2_Elegant	,164	1,139	,094	-,022	,351	1,744	145	,083
Pair 9	M2_Moderne - QF2_Moderne	,068	1,332	,110	-,149	,286	,621	145	,535
Pair 10	M2_Palidelig - QF2_Palidelig	,116	1,177	,097	-,076	,309	1,195	145	,234
Pair 11	M2_Temperamentsfuld - QF2_Temperamentsfuld	-,342	1,240	,103	-,545	-,140	-3,338	145	,001
Pair 12	M2_Venlig - QF2_Venlig	-,342	1,411	,117	-,573	-,112	-2,932	145	,004
Pair 13	M3_Fredfuld - QF3_Fredfuld	,281	1,219	,101	,081	,480	2,783	145	,006
Pair 14	M3_Glamouros - QF3_Glamouros	,055	1,149	,095	-,133	,243	,576	145	,565
Pair 15	M3_Nem - QF3_Nem	,356	1,383	,114	,130	,582	3,111	145	,002
Pair 16	M3_Sikker - QF3_Sikker	,281	1,100	,091	,101	,461	3,084	145	,002
Pair 17	M3_Spaendende - QF3_Spaendende	-,432	1,504	,124	-,677	-,186	-3,468	145	,001
Pair 18	M3_Teknisk - QF3_Teknisk	,021	1,426	,118	-,213	,254	,174	145	,862


Oddset
Passione
Nede.pa.jorde
Fantasifuld
aerlig
Teknisk
Spaendende
Sikker
Nem
Glamouro
Fredfuld
Venlig
Temperamentsfuld
Palidelig
Moderne
Elegant
Blid
Vovet
Unik
1
2.4
3.8
5.2
6.6
Audio
AudioVisual
Visual

Q8 Audio

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	M1_aerlig & QF1_aerlig	181	,678	,000
Pair 2	M1_Fantasifuld & QF1_Fantasifuld	181	,433	,000
Pair 3	M1_Nedepajorden & QF1_Nede-pa-jorden	181	,666	,000
Pair 4	M1_Passioneret & QF1_Passioneret	181	,588	,000
Pair 5	M1_Unik & QF1_Unik	181	,537	,000
Pair 6	M1_Vovet & QF1_Vovet	181	,581	,000
Pair 7	M2_Blid & QF2_Blid	181	,674	,000
Pair 8	M2_Elegant & QF2_Elegant	181	,618	,000
Pair 9	M2_Moderne & QF2_Moderne	181	,569	,000
Pair 10	M2_Palidelig & QF2_Palidelig	181	,708	,000
Pair 11	M2_Temperamentsfuld & QF2_Temperamentsfuld	181	,576	,000
Pair 12	M2_Venlig & QF2_Venlig	181	,619	,000
Pair 13	M3_Fredfuld & QF3_Fredfuld	181	,645	,000
Pair 14	M3_Glamouros & QF3_Glamouros	181	,703	,000
Pair 15	M3_Nem & QF3_Nem	181	,621	,000
Pair 16	M3_Sikker & QF3_Sikker	181	,649	,000
Pair 17	M3_Spaendende & QF3_Spaendende	181	,597	,000
Pair 18	M3_Teknisk & QF3_Teknisk	181	,714	,000

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	M1_aerlig	3,43	181	1,363	,101
	QF1_aerlig	3,41	181	1,479	,110
Pair 2	M1_Fantasifuld	3,84	181	1,657	,123
	QF1_Fantasifuld	3,20	181	1,493	,111
Pair 3	M1_Nedepajorden	3,60	181	1,459	,108
	QF1_Nede-pa-jorden	3,65	181	1,572	,117
Pair 4	M1_Passioneret	3,36	181	1,479	,110
	QF1_Passioneret	3,02	181	1,462	,109
Pair 5	M1_Unik	3,80	181	1,648	,122
	QF1_Unik	3,22	181	1,492	,111
Pair 6	M1_Vovet	3,46	181	1,551	,115
	QF1_Vovet	3,04	181	1,464	,109
Pair 7	M2_Blid	3,29	181	1,512	,112
	QF2_Blid	3,09	181	1,548	,115
Pair 8	M2_Elegant	3,13	181	1,481	,110
	QF2_Elegant	2,87	181	1,489	,111
Pair 9	M2_Moderne	3,91	181	1,518	,113
	QF2_Moderne	3,48	181	1,562	,116
Pair 10	M2_Palidelig	3,48	181	1,424	,106
	QF2_Palidelig	3,56	181	1,495	,111
Pair 11	M2_Temperamentsfuld	3,45	181	1,621	,120
	QF2_Temperamentsfuld	3,08	181	1,483	,110
Pair 12	M2_Venlig	3,73	181	1,497	,111
	QF2_Venlig	3,59	181	1,513	,112
Pair 13	M3_Fredfuld	3,07	181	1,519	,113
	QF3_Fredfuld	2,98	181	1,515	,113
Pair 14	M3_Glamouros	2,76	181	1,439	,107
	QF3_Glamouros	2,43	181	1,403	,104
Pair 15	M3_Nem	3,71	181	1,496	,111
	QF3_Nem	3,66	181	1,621	,120
Pair 16	M3_Sikker	3,60	181	1,405	,104
	QF3_Sikker	3,67	181	1,512	,112
Pair 17	M3_Spaendende	3,69	181	1,707	,127
	QF3_Spaendende	3,06	181	1,357	,101
Pair 18	M3_Teknisk	3,47	181	1,533	,114
	QF3_Teknisk	3,39	181	1,515	,113

Q8 Audio / Means comparison

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper			
Pair 1	M1_aerlig - QF1_aerlig	,011	1,145	,085	-,157	,179	,130	180	,897
Pair 2	M1_Fantasifuld - QF1_Fantasifuld	,635	1,683	,125	,388	,882	5,079	180	,000
Pair 3	M1_Nedepajorden - QF1_Nede-pa-jorden	-,050	1,244	,092	-,232	,133	-,538	180	,591
Pair 4	M1_Passioneret - QF1_Passioneret	,348	1,336	,099	,152	,544	3,506	180	,001
Pair 5	M1_Unik - QF1_Unik	,586	1,516	,113	,363	,808	5,196	180	,000
Pair 6	M1_Vovet - QF1_Vovet	,414	1,382	,103	,212	,617	4,033	180	,000
Pair 7	M2_Blid - QF2_Blid	,199	1,236	,092	,018	,380	2,166	180	,032
Pair 8	M2_Elegant - QF2_Elegant	,265	1,298	,096	,075	,456	2,749	180	,007
Pair 9	M2_Moderne - QF2_Moderne	,431	1,431	,106	,221	,641	4,053	180	,000
Pair 10	M2_Palidelig - QF2_Palidelig	-,088	1,117	,083	-,252	,075	-1,065	180	,288
Pair 11	M2_Temperamentsfuld - QF2_Temperamentsfuld	,365	1,434	,107	,154	,575	3,422	180	,001
Pair 12	M2_Venlig - QF2_Venlig	,149	1,314	,098	-,044	,342	1,527	180	,129
Pair 13	M3_Fredfuld - QF3_Fredfuld	,083	1,277	,095	-,104	,270	,873	180	,384
Pair 14	M3_Glamouros - QF3_Glamouros	,337	1,097	,082	,176	,498	4,135	180	,000
Pair 15	M3_Nem - QF3_Nem	,055	1,361	,101	-,144	,255	,546	180	,586
Pair 16	M3_Sikker - QF3_Sikker	-,077	1,227	,091	-,257	,103	-,848	180	,397
Pair 17	M3_Spaendende - QF3_Spaendende	,635	1,410	,105	,429	,842	6,062	180	,000
Pair 18	M3_Teknisk - QF3_Teknisk	,077	1,152	,086	-,092	,246	,903	180	,368

Q8 Audio Visual

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	M1_aerlig & QF1_aerlig	162	,607	,000
Pair 2	M1_Fantasifuld & QF1_Fantasifuld	162	,639	,000
Pair 3	M1_Nedepajorden & QF1_Nede-pa-jorden	162	,664	,000
Pair 4	M1_Passioneret & QF1_Passioneret	162	,679	,000
Pair 5	M1_Unik & QF1_Unik	162	,543	,000
Pair 6	M1_Vovet & QF1_Vovet	162	,613	,000
Pair 7	M2_Blid & QF2_Blid	162	,724	,000
Pair 8	M2_Elegant & QF2_Elegant	162	,654	,000
Pair 9	M2_Moderne & QF2_Moderne	162	,760	,000
Pair 10	M2_Palidelig & QF2_Palidelig	162	,623	,000
Pair 11	M2_Temperamentsfuld & QF2_Temperamentsfuld	162	,759	,000
Pair 12	M2_Venlig & QF2_Venlig	162	,673	,000
Pair 13	M3_Fredfuld & QF3_Fredfuld	162	,682	,000
Pair 14	M3_Glamouros & QF3_Glamouros	162	,753	,000
Pair 15	M3_Nem & QF3_Nem	162	,655	,000
Pair 16	M3_Sikker & QF3_Sikker	162	,603	,000
Pair 17	M3_Spaendende & QF3_Spaendende	162	,714	,000
Pair 18	M3_Teknisk & QF3_Teknisk	162	,775	,000

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	M1_aerlig	3,22	162	1,397	,110
	QF1_aerlig	3,53	162	1,508	,119
Pair 2	M1_Fantasifuld	3,53	162	1,642	,129
	QF1_Fantasifuld	3,34	162	1,521	,119
Pair 3	M1_Nedepajorden	3,57	162	1,515	,119
	QF1_Nede-pa-jorden	3,75	162	1,538	,121
Pair 4	M1_Passioneret	2,99	162	1,381	,108
	QF1_Passioneret	3,17	162	1,485	,117
Pair 5	M1_Unik	3,48	162	1,654	,130
	QF1_Unik	3,23	162	1,574	,124
Pair 6	M1_Vovet	3,23	162	1,529	,120
	QF1_Vovet	3,16	162	1,532	,120
Pair 7	M2_Blid	3,01	162	1,462	,115
	QF2_Blid	3,10	162	1,467	,115
Pair 8	M2_Elegant	2,95	162	1,552	,122
	QF2_Elegant	2,99	162	1,438	,113
Pair 9	M2_Moderne	3,33	162	1,508	,118
	QF2_Moderne	3,41	162	1,527	,120
Pair 10	M2_Palidelig	3,29	162	1,413	,111
	QF2_Palidelig	3,62	162	1,496	,118
Pair 11	M2_Temperamentsfuld	3,14	162	1,506	,118
	QF2_Temperamentsfuld	2,96	162	1,418	,111
Pair 12	M2_Venlig	3,45	162	1,545	,121
	QF2_Venlig	3,64	162	1,602	,126
Pair 13	M3_Fredfuld	2,89	162	1,556	,122
	QF3_Fredfuld	2,96	162	1,442	,113
Pair 14	M3_Glamouros	2,48	162	1,357	,107
	QF3_Glamouros	2,44	162	1,360	,107
Pair 15	M3_Nem	3,29	162	1,506	,118
	QF3_Nem	3,64	162	1,510	,119
Pair 16	M3_Sikker	3,34	162	1,411	,111
	QF3_Sikker	3,62	162	1,504	,118
Pair 17	M3_Spaendende	3,33	162	1,490	,117
	QF3_Spaendende	3,12	162	1,439	,113
Pair 18	M3_Teknisk	3,67	162	1,634	,128
	QF3_Teknisk	3,52	162	1,500	,118

Q8 Audio Visual / Means comparison

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper			
Pair 1	M1_aerlig - QF1_aerlig	-,309	1,292	,101	-,509	-,108	-3,042	161	,003
Pair 2	M1_Fantasifuld - QF1_Fantasifuld	,191	1,349	,106	-,018	,401	1,805	161	,073
Pair 3	M1_Nedepajorden - QF1_Nede-pa-jorden	-,179	1,251	,098	-,373	,015	-1,822	161	,070
Pair 4	M1_Passioneret - QF1_Passioneret	-,179	1,152	,091	-,358	,000	-1,977	161	,050
Pair 5	M1_Unik - QF1_Unik	,247	1,545	,121	,007	,487	2,035	161	,044
Pair 6	M1_Vovet - QF1_Vovet	,068	1,347	,106	-,141	,277	,641	161	,522
Pair 7	M2_Blid - QF2_Blid	-,086	1,089	,086	-,255	,082	-1,010	161	,314
Pair 8	M2_Elegant - QF2_Elegant	-,043	1,248	,098	-,237	,150	-,441	161	,660
Pair 9	M2_Moderne - QF2_Moderne	-,080	1,051	,083	-,243	,083	-,971	161	,333
Pair 10	M2_Palidelig - QF2_Palidelig	-,327	1,265	,099	-,523	-,131	-3,292	161	,001
Pair 11	M2_Temperamentsfuld - QF2_Temperamentsfuld	,173	1,019	,080	,015	,331	2,159	161	,032
Pair 12	M2_Venlig - QF2_Venlig	-,191	1,273	,100	-,389	,006	-1,913	161	,058
Pair 13	M3_Fredfuld - QF3_Fredfuld	-,068	1,201	,094	-,254	,118	-,720	161	,473
Pair 14	M3_Glamouros - QF3_Glamouros	,031	,955	,075	-,117	,179	,411	161	,681
Pair 15	M3_Nem - QF3_Nem	-,352	1,253	,098	-,546	-,157	-3,573	161	,000
Pair 16	M3_Sikker - QF3_Sikker	-,278	1,301	,102	-,480	-,076	-2,718	161	,007
Pair 17	M3_Spaendende - QF3_Spaendende	,204	1,110	,087	,032	,376	2,336	161	,021
Pair 18	M3_Teknisk - QF3_Teknisk	,148	1,059	,083	-,016	,312	1,781	161	,077

Q8 Visual

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	M1_aerlig & QF1_aerlig	173	,534	,000
Pair 2	M1_Fantasifuld & QF1_Fantasifuld	173	,489	,000
Pair 3	M1_Nedepajorden & QF1_Nede-pa-jorden	173	,436	,000
Pair 4	M1_Passioneret & QF1_Passioneret	173	,578	,000
Pair 5	M1_Unik & QF1_Unik	173	,346	,000
Pair 6	M1_Vovet & QF1_Vovet	173	,545	,000
Pair 7	M2_Blid & QF2_Blid	173	,438	,000
Pair 8	M2_Elegant & QF2_Elegant	173	,443	,000
Pair 9	M2_Moderne & QF2_Moderne	173	,514	,000
Pair 10	M2_Palidelig & QF2_Palidelig	173	,487	,000
Pair 11	M2_Temperamentsfuld & QF2_Temperamentsfuld	173	,400	,000
Pair 12	M2_Venlig & QF2_Venlig	173	,342	,000
Pair 13	M3_Fredfuld & QF3_Fredfuld	173	,549	,000
Pair 14	M3_Glamouros & QF3_Glamouros	173	,662	,000
Pair 15	M3_Nem & QF3_Nem	173	,370	,000
Pair 16	M3_Sikker & QF3_Sikker	173	,479	,000
Pair 17	M3_Spaendende & QF3_Spaendende	173	,571	,000
Pair 18	M3_Teknisk & QF3_Teknisk	173	,607	,000

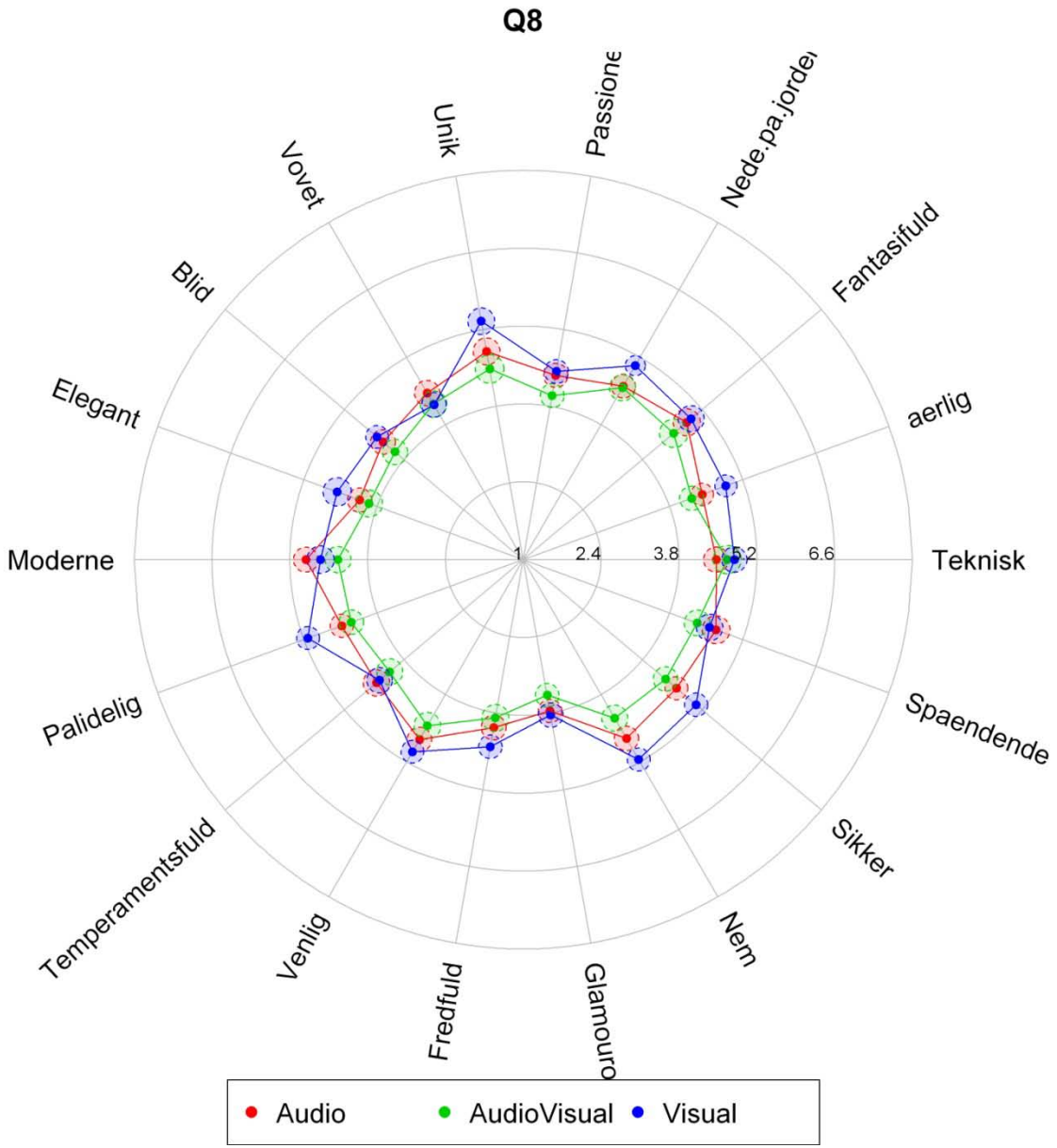
Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	M1_aerlig	3,88	173	1,313	,100
	QF1_aerlig	3,61	173	1,409	,107
Pair 2	M1_Fantasifuld	3,94	173	1,562	,119
	QF1_Fantasifuld	3,40	173	1,613	,123
Pair 3	M1_Nedepajorden	4,03	173	1,198	,091
	QF1_Nede-pa-jorden	3,73	173	1,506	,115
Pair 4	M1_Passioneret	3,43	173	1,432	,109
	QF1_Passioneret	3,20	173	1,467	,111
Pair 5	M1_Unik	4,35	173	1,606	,122
	QF1_Unik	3,52	173	1,605	,122
Pair 6	M1_Vovet	3,21	173	1,473	,112
	QF1_Vovet	3,28	173	1,546	,118
Pair 7	M2_Blid	3,43	173	1,361	,103
	QF2_Blid	3,32	173	1,532	,116
Pair 8	M2_Elegant	3,56	173	1,696	,129
	QF2_Elegant	3,01	173	1,568	,119
Pair 9	M2_Moderne	3,65	173	1,638	,125
	QF2_Moderne	3,43	173	1,678	,128
Pair 10	M2_Palidelig	4,12	173	1,382	,105
	QF2_Palidelig	3,75	173	1,412	,107
Pair 11	M2_Temperamentsfuld	3,38	173	1,522	,116
	QF2_Temperamentsfuld	3,10	173	1,602	,122
Pair 12	M2_Venlig	3,99	173	1,360	,103
	QF2_Venlig	3,71	173	1,505	,114
Pair 13	M3_Fredfuld	3,42	173	1,406	,107
	QF3_Fredfuld	3,13	173	1,497	,114
Pair 14	M3_Glamouros	2,84	173	1,470	,112
	QF3_Glamouros	2,68	173	1,434	,109
Pair 15	M3_Nem	4,15	173	1,377	,105
	QF3_Nem	3,73	173	1,529	,116
Pair 16	M3_Sikker	4,06	173	1,401	,106
	QF3_Sikker	3,76	173	1,478	,112
Pair 17	M3_Spaendende	3,57	173	1,586	,121
	QF3_Spaendende	3,20	173	1,558	,118
Pair 18	M3_Teknisk	3,80	173	1,513	,115
	QF3_Teknisk	3,53	173	1,568	,119

Q8 Audio Visual / Means comparison

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper			
Pair 1	M1_aerlig - QF1_aerlig	,272	1,317	,100	,074	,469	2,714	172	,007
Pair 2	M1_Fantasifuld - QF1_Fantasifuld	,538	1,605	,122	,297	,778	4,406	172	,000
Pair 3	M1_Nedepajorden - QF1_Nede-pa-jorden	,301	1,459	,111	,082	,520	2,709	172	,007
Pair 4	M1_Passioneret - QF1_Passioneret	,231	1,331	,101	,031	,431	2,285	172	,024
Pair 5	M1_Unik - QF1_Unik	,832	1,837	,140	,557	1,108	5,961	172	,000
Pair 6	M1_Vovet - QF1_Vovet	-,069	1,441	,110	-,286	,147	-,633	172	,527
Pair 7	M2_Blid - QF2_Blid	,116	1,540	,117	-,115	,347	,988	172	,325
Pair 8	M2_Elegant - QF2_Elegant	,555	1,727	,131	,296	,814	4,227	172	,000
Pair 9	M2_Moderne - QF2_Moderne	,220	1,635	,124	-,026	,465	1,767	172	,079
Pair 10	M2_Palidelig - QF2_Palidelig	,376	1,415	,108	,163	,588	3,491	172	,001
Pair 11	M2_Temperamentsfuld - QF2_Temperamentsfuld	,277	1,713	,130	,020	,535	2,130	172	,035
Pair 12	M2_Venlig - QF2_Venlig	,277	1,647	,125	,030	,525	2,216	172	,028
Pair 13	M3_Fredfuld - QF3_Fredfuld	,289	1,380	,105	,082	,496	2,755	172	,007
Pair 14	M3_Glamouros - QF3_Glamouros	,162	1,195	,091	-,017	,341	1,782	172	,077
Pair 15	M3_Nem - QF3_Nem	,422	1,636	,124	,176	,667	3,393	172	,001
Pair 16	M3_Sikker - QF3_Sikker	,301	1,471	,112	,080	,521	2,687	172	,008
Pair 17	M3_Spaendende - QF3_Spaendende	,370	1,455	,111	,152	,588	3,343	172	,001
Pair 18	M3_Teknisk - QF3_Teknisk	,266	1,368	,104	,061	,471	2,557	172	,011


Q8
Unik
Passione
Nede.pa.jorde
Fantasifuld
aerlig
Teknisk
Spaendende
Sikker
Nem
Glamouro
Fredfuld
Venlig
Temperamentsfuld
Palidelig
Moderne
Elegant
Blid
Vovet
1
2.4
3.8
5.2
6.6
Audio
AudioVisual
Visual

Julie Winther | February 2012
MSc. Marketing Communication Management
Thesis advisor: Suzanne C. Beckmann | Department of Marketing | Copenhagen Business School