



LUT School of Business and Management

Bachelor's thesis, Business Administration

International Marketing

**The effect of website design elements on a healthcare company's website's
credibility: Case Suomen Terveysmaailma Oy**

**Verkkosivujen ominaisuuksien vaikutus terveysalan yrityksen verkkosivujen
uskottavuuteen: Case Suomen Terveysmaailma Oy**

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ABSTRACT

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The aim of this bachelor's thesis is to examine how website design elements affect the perceived credibility of a healthcare company's website. Out of various web design elements, this thesis focuses on aesthetical elements, and responsive web design. This thesis is a qualitative case study for a Finnish healthcare company Suomen Terveysmaailma Oy. The research questions are answered using information from two different sources: a qualitative survey, and the writer's observations.

According to the participants answers, appealing aesthetical appearance and responsive and functionable website increases the credibility. All the participants commented that credibility has a great effect on their purchasing decision; the more credible a website is perceived as, the more likely they will finish the purchasing process. Most participants chose the case company's new website as the more aesthetically pleasing and more credible website. They described the new website as more modern, more appropriate, and more trustworthy than the case company's old website before rebranding.

It can be concluded that obtaining a high level of credibility is vitally important for present-day e-commerce companies, and especially for companies operating in the healthcare market. The best aesthetical elements for heightened credibility are simplicity, balance, simplistic images, as well as calm colors. However, it can be concluded that a responsive web design is even more important for the case company than aesthetical appearance as it has a great effect on the perceived credibility and the purchase intention.

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Tämän kandidaatintutkielman tavoitteena on tarkastella, miten verkkosivujen ominaisuudet vaikuttavat terveystalan yrityksen verkkosivujen uskottavuuteen. Lukuisista eri verkkosivujen ominaisuuksista tämä tutkielma keskittyy esteettisiin ominaisuuksiin ja responsiiviseen designiin. Tämä tutkielma on case-tutkimus suomalaiselle terveystalan yritykselle Suomen Terveystmaailma Oy:lle. Tutkimuskysymyksiin on vastattu käyttäen dataa kahdesta eri lähteestä: laadullisesta kyselystä sekä kirjoittajan omista havainnoinneista.

Kyselyyn osallistuneiden vastaajien mukaan vetoava esteettinen ulkonäkö, sekä responsiivinen ja toimiva verkkosivusto lisäävät uskottavuutta. Kaikki osallistujat kommentoivat uskottavuuden vaikuttavan heidän ostopäätökseensä merkittävästi; mitä uskottavammalta sivusto vaikuttaa, sitä todennäköisemmin ostoprosessi viedään loppuun asti. Suurin osa osallistujista valitsi case-yrityksen uudet verkkosivut esteettisesti mieluisimmiksi sekä uskottavimmiksi kuin case yrityksen vanhat verkkosivut ennen uudelleenbrändäystä. He kuvailivat uusia verkkosivuja modernimmiksi, asiallisemmiksi sekä uskottavammiksi.

Johtopäätöksenä voidaan todeta, että korkean uskottavuuden saavuttaminen on erittäin tärkeää nykypäivän verkkokaupparyrityksille. Parhaat esteettiset elementit uskottavuuden kasvattamiseen ovat yksinkertaisuus, tasapaino, yksinkertaiset kuvat sekä rauhalliset värit. Voidaan kuitenkin todeta, että responsiivinen design on vielä tärkeämpää case-yritykselle kuin esteettinen ilme, koska sillä on merkittävä vaikutus uskottavuuteen sekä ostopäätökseen.

CONTENTS

1. INTRODUCTION	1
1.1. Previous research	2
1.2. Research objectives and questions	3
1.3. Theoretical framework and key concepts	3
1.4. Research methodology	5
1.5. Structure of the thesis	6
2. THE EFFECT OF WEB DESIGN ELEMENTS ON THE PERCEIVED CREDIBILITY	6
2.1. Source Credibility Theory adapted into web-based communication	6
2.2. Aesthetics in website design and the effect on credibility	8
2.2.1. Visual complexity	8
2.2.2. Color	9
2.2.3. Balance and symmetry	10
2.2.4. Graphics	11
2.3. The effect of responsive web design on credibility	12
3. METHODS AND MATERIAL	15
3.1. Participants	15
3.2. The survey form	16
3.3. Qualitative research and case study	16
4. EMPIRICAL OBSERVATIONS OF THE CASE COMPANY	20
4.1. Visual complexity of the case company's website	20
4.2. Color of the case company's website	21
4.3. Balance and symmetry of the case company's website	23
4.4. Graphics of the case company's website	24
4.5. Case company's responsive web design	27
5. RESULTS OF THE EMPIRICAL STUDY	28
5.1. Category 1- web design elements	28
5.2. Category 2 – Aesthetical elements' effect on credibility	28
5.3. Category 3 – The effect of credibility on the purchase decision	31
5.4. Category 4 – Comparing two example websites	32
5.5. Category 5 – Credibility and aesthetics of the case company	33
5.6. Category 6 – Responsive Web Design	34

5.7. Category 7 – Credibility and Responsive Web Design of the Case Company.....	35
6. DISCUSSION.....	38
6.1. Implications for the case company.....	40
6.2. Reliability of the research.....	42
7. CONCLUSIONS	44
8. FUTURE RESEARCH.....	45
REFERENCES	46

APPENDICES

Appendix 1. The translated survey form.

1. INTRODUCTION

In the last decade business activities have progressively moved towards online platforms and e-commerce, which is why a well-designed e-commerce system has become one of the most vital factors for a company's success (Abdul Hamid, Cheun, Abdullah, Ahmad & Ngadiman, 2019, 264). The Covid-19 pandemic, which defined years 2020 and 2021, has transformed the business landscape rapidly, and now consumers are increasingly shifting towards e-commerce and online purchasing (Tran, 2021, 1). According to Statista's forecast (Statista, 2020), e-commerce market in Europe is continuing to grow rapidly over the next few years, with projected revenue of 510.5 billion US dollars in 2024. However, companies are struggling with low e-commerce conversion rates on both smartphone and desktop, with Nordic countries having a conversion rate of 3,8% on desktop, and only 1,19% on smartphones in 2015 (Statista, 2015). Credibility and trust can increase consumers' purchase intentions online (Farivar, Turel & Yuan, 2017, 597), which is why it is important to enhance company's website credibility. Consumer's first impression of a website happens in a matter of few seconds, and since websites are visual mediums, the consumer makes preconscious judgements of the website's credibility based on visual website design elements. If the website is not perceived credible enough, it is likely that the consumer leaves the site and thus the transaction will not be completed. (Robins & Holmes, 2008, 386-387)

This thesis focuses on credibility and how it is affected by different website design elements, which in this research are divided into aesthetics, and responsive web design. The theoretical framework as well as the results of an empirical study will be examined and discussed from the perspective of a healthcare company. The thesis includes a case research on a Finnish healthcare company Suomen Terveysmaailma Oy. The case study focuses on the online store (terveystyyny.fi) of their product *Duqem-health pillow*. A new visual website design and issues with credibility are critical topics for the case company at the moment. The case company is implementing changes with their branding and website design of their online store. With the help of the theoretical background of this thesis the goal is to examine the differences between the old and the new brand design and give assessments of the rebranding. The goal of the empirical research of this thesis is to get more insights directly from potential customer segment on how they perceive the rebranding in terms of aesthetics and credibility,

as well as to give recommendations for the case company based on the empirical study. This introduces tools to further develop their website's design to achieve more credibility and trust among consumers.

1.1. Previous research

There have been many studies done on visual design of traditional web pages, especially research on website's aesthetics (Robins & Holmes, 2008; Lin, Yeh & Wei, 2013; Hartono & Holsapple, 2019; Zhang, Lan, Wang, Gao & Liu, 2020; Longstreet, Valacich & Wells, 2021; Liu & Jiang, 2021). Marcotte (2010) first introduced the concept of Responsive Web Design (RWD) and for example Hung and Wang (2020) have proposed an RWD technique for developing websites as well as researched consumers' visual attention on websites with eye tracking. There has also been a lot of research done on the impact of these elements on the perceived credibility and trust (Robins & Holmes, 2008; Lowry, Wilson & Haig, 2014; Shah, Ravana, Hamid & Ismail, 2015).

The literature related to credibility of online consumer health information has increased (Robins, Holmes & Stansbury, 2010). Hong (2006) has researched the impact of website's structural and message features on the perceived credibility of health-related websites. Robins et al. (2010) have researched the impact of visual design features on the perceived credibility of health information websites. However, there has been no research done on the relationship of website design and credibility of e-commerce companies that specifically operate on health care market. As the internet, its platforms, and its content is becoming more and more global, the trends and consumers' online behaviour is constantly changing and evolving. Therefore new, and further research is needed to help businesses to keep up with the evolving online environment.

1.2. Research objectives and questions

The aim of this bachelor's thesis is to examine how visual website design affects the perceived credibility of a healthcare company's website. The research is based on one main research question and two sub-research questions. The main research question of the study is the following:

How do website design elements affect healthcare company's credibility?

The sub-research questions will provide support to the main research question and help examine the effects of different website design elements on credibility. The main concept of website design has been divided into two sub-categories: aesthetics and responsive web design. The two sub-research questions, which are formulated based on this division, are the following:

How do website's aesthetical elements affect company's credibility?

How does responsive web design affect company's credibility?

1.3. Theoretical framework and key concepts

In this chapter, the theoretical framework will be introduced, and the key concepts of this thesis will be defined. The theoretical framework of this thesis is presented in figure 1. Identifying key concepts is important as it creates a base for the research and helps in the search process for the theoretical framework. The main concepts in the thesis are credibility as well as website design, which has been further divided into two elements: aesthetics, and responsive web design.

Credibility is defined by Go, You, Jung, and Shim (2016, 234) as an instant perception of information's reliability and relevance but can also be considered as an essential factor for building trust. In this thesis credibility is limited to trustworthiness of the perceived visual information and therefore, analysis of the credibility of website's content is not included in this thesis. The theoretical framework for the

credibility analysis in this thesis will be based on source credibility theory (SCT). SCT composes of three primary factors that people base their credibility judgements on: dynamism, trustworthiness, and competence (Robins & Holmes, 2008, 388). This thesis will be mainly focusing on dynamism since it represents the visual aspects of a website, such as aesthetics and design, but trustworthiness and competence are also used in the analysis to get more holistic view of credibility judgements.

Website design includes many various design elements that must be considered simultaneously when designing an effective website (Cebi, 2013, 1030). In his study Cebi (2013, 1033) has listed different website design elements such as usability, visual aspects, content, security, communication, etc. as well as sub-design parameters such as accessibility, navigation, reliability, privacy, etc. As mentioned earlier, the theoretical framework of this thesis will focus on two specific website design elements which are aesthetics and responsive web design.

The term “**aesthetics**” is usually used in relation with philosophy of sensation and perception as it derives from the Greek verb *aesthanesthai* (to perceive) and *aisthētikos* (of perception of the senses). Although aesthetics has countless various definitions, most of them refer to beauty and an appreciation for beauty. In the field of consumer psychology, the most widely used definitions for aesthetics include the beauty and the form of people, objects, and consumption environments. (Patrick & Peracchio, 2010, 393) In the case of website design, aesthetics refers to the impression of the website’s attractiveness created by different visual design elements and other characteristics (Zhang et al., 2020, 1076). As can be seen in figure 1, out of various website’s aesthetical elements, this thesis will focus on visual complexity, color, balance and symmetry as well as graphics, since these are the most apparent form of website’s visual presentation and thus closely related to the credibility trait dynamism.

Responsive web design allows the web page to adapt to different devices and browsers by allowing various website features to move around and change size and appearance in a way that best suits each device (De León, 2016, 24). Responsive web design relates to many different web design elements, including aesthetical elements and usability elements for example. Therefore, when analysing the effects of responsive web design on the credibility of a website, it is important to take account all three factors of credibility: dynamism, trustworthiness, and competence. (Figure 1.) As the mobile internet

usage continues to increase yearly (Clement, 2020), responsive web design has become a vital web design element for companies worldwide.

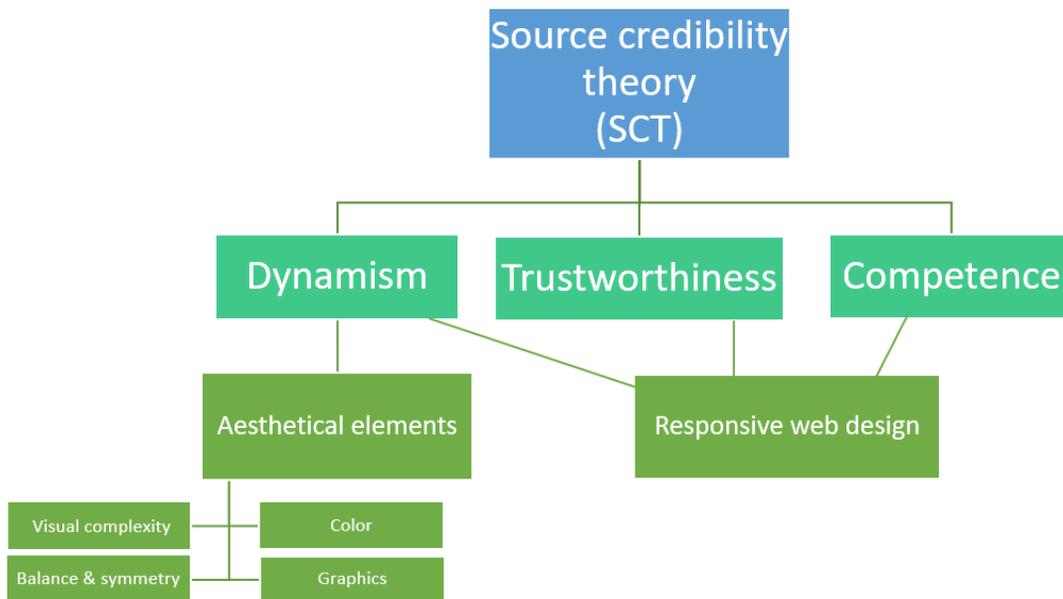


Figure 1. The Theoretical framework of this thesis.

1.4. Research methodology

In addition to the theoretical framework, which has been written based on previous research and literature, this thesis includes a qualitative case study for a Finnish healthcare company Suomen Terveystieteiden Oy. In a case study it is typical to use triangulation as a research strategy, which refers to gathering data and information from different sources in order to get a holistic view of the subject (Kananen, 2013, 77). In this thesis the research questions are answered using information from two different sources: a qualitative survey and the writer's observations. The empirical study includes data from the qualitative survey which includes Likert-scale, multiple choice, and open-ended questions. The written survey was conducted in order to gather valuable information directly from customers perspective to get more insights of the customers perceptions.

The target population of the survey was chosen to be young Finnish adults, ages between 20-30. There were no limitations relating to the gender or the level of education of the participants. This target

population was chosen as the case company would like to explore this age group as a possible target customer segment.

1.5. Structure of the thesis

This thesis is structured as follows. The first chapter introduces the previous research, the aim and limitations of this thesis, the research problems, the theoretical framework and the key concepts, research methodology, and the structure of this thesis. The second chapter explores the previous literature and established theories more thoroughly. After the theoretical framework, the third chapter establishes the methodologies and material of the empirical study of this thesis. In the fourth chapter, the theoretical framework and empirical data from the writer's observations are compared and then applied to the case company. Next, the results of the qualitative survey are presented in the chapter five and then compared with the theoretical framework and previous literature in chapter six and deliberated to form conclusions in order to get answers to the research questions. The sixth chapter also includes implications for the case company and reflecting of the reliability of this research. The seventh chapter concludes the main points of the theoretical framework and the results. Finally, the eighth chapter presents suggestions for future research.

2. THE EFFECT OF WEB DESIGN ELEMENTS ON THE PERCEIVED CREDIBILITY

The theoretical framework of this research is based on a literature review and earlier research on website design and credibility. The theoretical part of the thesis consists of examining website design by dividing it into two more specific elements, which are website's aesthetics and responsive web design, and how each of them impact the perceived credibility of a company.

2.1. Source Credibility Theory adapted into web-based communication.

The credibility analysis in this thesis will be based on source credibility theory (SCT). Source credibility theory describes various factors that people base their credibility judgement on, and as can be seen from the figure 2 below, the three primary factors are dynamism, trustworthiness, and competence (Robins & Holmes, 2008, 388).

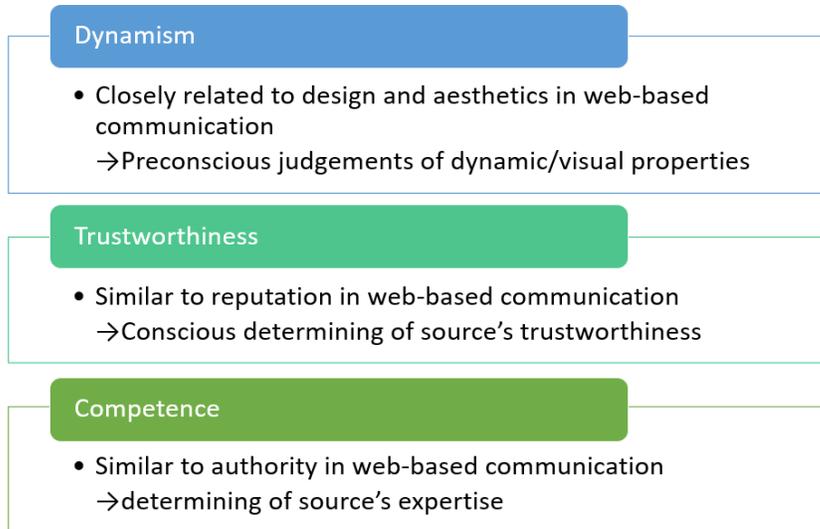


Figure 2. The three factors of SCT that people base their credibility judgements on most.

Dynamism is defined by Eisend (2005, 3) as “the appearance of the source” or “characteristics of presentation style”. Robins and Holmes (2008, 388) argue that in web-based communication unwritten elements such as design and aesthetics would be most closely related to dynamism. According to Robins and Holmes (2008, 388-389), credibility judgements can result from various processes such as conscious determining of a source’s trustworthiness and expertise, or preconscious judgements of a source’s dynamic or visual properties. Since websites are visual mediums, consumer makes preconscious judgements of the website’s credibility based on visual website design elements (Robins & Holmes, 2008, 386-387), such as the earlier mentioned two elements this thesis focuses on. Accomplishing credibility is vital for companies operating in a healthcare industry (Robins et al. 2010, 25-26). Robins et al. (2010, 21) have shown that health information websites that have better visual design are also usually perceived more credible.

Going back to the other two elements of the source credibility theory, in web-based communication trustworthiness could be compared to reputation and competence to authority (Robins & Holmes, 2008, 388). Fogg et al. (2001) define web credibility to consist of the perceived trustworthiness of the website and perceived expertise of the website. According to Lowry et. al (2014, 84) all the three traits of credibility - trustworthiness, expertise, and dynamism- are vital predictors of trust on the web. Authority and reputation also play a vital role for the credibility of companies in the health care industry (Robins et al. 2010, 25-26).

2.2. Aesthetics in website design and the effect on credibility

Different design elements and other website's characteristics create an impression for the consumer of the website's beauty (Zhang et al., 2020, 1076). Robin and Holmes (2008, 387) describe aesthetical web design as achieving a website with professional look and a feel relevant to the company by using colours and graphics strategically.

Aesthetics and the objective elements of beauty are widely researched subjects. These objective elements include for instance balance and proportion, contrast and clarity, and symmetry. (Tuch, Bargas-Avila & Opwis, 2010, 1832) In the field of human computer interaction (HCI) aesthetical design and specific objective design features have also been researched in various studies. These objective design features specifically for website design include for example visual complexity (Michailidou, Harper and Bechhofer 2008; Tuch, Bargas-Avila, Opwis & Wilhelm, 2009), color (Wu, Cheng & Yen, 2008; Hynes, 2009; Cyr, Head & Larios, 2010, Longstreet, Valacich & Wells, 2021), balance and symmetry (Wilson and Chatterjee, 2005; Bauerly & Liu, 2006; Tuch, Bargas-Avila & Opwis, 2010), and graphics (Cyr, Head, Larios & Pan, 2009; Lowry et al. 2014). Website design also includes other aesthetic components such as graphic quality, layout, text, and font, as well as sequence, orderliness, cohesion, unity, proportionality, density etc. (Ramezani Nia & Shokouhyar, 2020, 360). However, in this thesis, the analysis will be focused on the first four mentioned: visual complexity, color, balance and symmetry as well as graphics.

2.2.1. Visual complexity

According to Tuch, Bargas-Avila, Opwis and Wilhelm (2009, 712) visual complexity of the webpage influences the perceived pleasure, arousal, physiological response, and recognition performance of the user, and thus visual complexity should be viewed as crucial element in website design. Arousal is defined as the level of excitement, stimulation, alertness, or activeness of a person (Wu, Cheng & Yen, 2008, 494). The study of Tuch et al. (2009, 712) showed that websites' start pages that had lower visual complexity were perceived more pleasurable but on the other hand less arousing. Therefore, it is important to find the right balance between simplicity and complexity. If the website is visually too complex with complicated structures for instance, users can start to hesitate which then leads to insecurity. On the other hand, if the website design is too simple with a low visual complexity, it might

decrease the level of experienced arousal, and users may get bored and lose their interest. (Ramezani Nia & Shokouhyar, 2020, 360) The research of Tuch et al. (2009, 712) also showed that websites' start pages that had lower visual complexity had better results on search and recognition tasks, which implies that users remember better and favour webpages with relatively low visual complexity. Another research on visual complexity by Michailidou, Harper and Bechhofer (2008, 220) similarly suggests that the less visually complex a web page is, the more beautiful, clear, clean, and organized it was perceived as. Furthermore, Robins and Holmes (2008, 397) discovered in their research that a website with a "high aesthetical treatment" (HAT) was perceived less credible than the same website with a "low aesthetical treatment" (LAT). They suggested that the credibility was increased by designing the website to be simpler and clearer (Robins & Holmes, 2008, 397).

2.2.2. Color

In the Munsell System, which is essentially the first atlas of color and still impacts the modern measurements of colors (Landa & Fairchild, 2005, 436), the colors are divided into three dimensions which are *hue*, *value*, and *chroma*. *Hue* refers to the color's pigment, *value* defines how dark, or light is the color, and *chroma* implies to the saturation of the color. *Hues* are categorized into *warm* colors, such as red, orange, and yellow, which have a high wavelength, and *cool* colors, such as green or blue, which have a low wavelength. (Munsell, 1905, 19 & 48) Wu, Cheng & Yen (2008, 497) discovered in their study that participants' emotions were substantially affected by the website's color theme. Emotional elements are found to be very important in website design for user loyalty and trust (Cyr, Head & Larios, 2010, 2). According to Baxter, Ilicic & Kulczynski (2018, 390) colors can create associations to personality traits and further establish a perception of the brand's personality based on the color theme. Therefore, color should be viewed as an effective tool for creating a desired brand identity. (Baxter et al. 2018, 390)

According to Wu et al. (2008, 494) earlier research has found that cool colors reduce arousal and increase emotions like *peacefulness*, *calmness*, and *love*, whereas warm colors increase *arousal* and *anxiety*. However, in their own study Wu et al. (2008, 497) discovered that being exposed to warm colors resulted in significantly higher levels of arousal and pleasure, and furthermore resulted in increased purchase intentions. On the other hand, culture plays a notable part in color preferences

(Oyibo, Ali & Vassileva, 2016, 46); the Chinese consider red as a positive color, but it might be associated with danger in the United States (Cyr & Trevor-Smith, 2004, 1202). Simon (2001, 31) discovered that Asians (72 %) preferred colors that are less bright such as green, but Europeans (65 %) and North Americans (87 %) preferred brighter and lighter colors combined with images to get more modern feel of the website. Thus, it is very important to take account the local color preferences when designing a website for a local market. There have been no prior studies on Finnish color preferences in website design. Alongside with cultural preferences, individuals' perceptions of the web page's color profile can significantly affect the perceived credibility of the website (Cyr et al. 2010, 15). In their study yellow websites were disliked regardless of culture, whereas blue scheme on the website increased the website's credibility.

2.2.3. Balance and symmetry

Fundamentally, balance is defined by how the optical weight, in other words the weight of visual elements, is distributed across the website. It is affected by the sizes, colors, and locations of elements on the web page. (Ngo & Byrne, 2001, 151) Balance is also defined by how the various web design elements on the website interact with each other, and how does the user then perceive the overall aesthetical experience (Longstreet et al. 2021, 5). In other words, the overall balance of the web page consists of these various design elements working together in harmony, all having an influence on one another. Balance can be easily disrupted if even one element is unfitting or faulty. Thus, balance is very much affecting the perceived aesthetical experience of the user. (Longstreet et al. 2021, 5) Lindgaard, Dudek, Sen, Sumegi and Noonan (2011, 18) discovered in their study that websites with a good balance, alongside with generous graphics, and a moderate level of text and contrast, were perceived the most trustworthy. The websites with the best credibility-rating were also among the most visually appealing websites (Lindgaard et al. 2011, 18).

Symmetry is defined by Ngo and Byrne (2001, 153) as the mirroring of one side of the web page across the center line to the other side of the web page. In a study by Jacobsen, Schubotz, Höfel, and Cramon (2006, 284), it was discovered that the brain activity of aesthetic judgements of beauty correlates with the brain activity during judgement of symmetry. Tuch et al. (2010, 1835) studied the effects of vertical symmetry to the aesthetical judgements and discovered that symmetrical web pages were favoured

compared to asymmetrical pages, which were considered less beautiful. However, this was only the case for male participants in the study (Tuch et al. 2010, 1835), which suggest that there are notable differences between the genders on the aesthetical perception of websites. There was also difference in the results for classical and expressive aesthetics. Classical aesthetics represents the traditional elements of aesthetics such as clear, organized, and clean, whereas expressive aesthetics refers to more unique representation of the design, with qualities such as creativity, originality, and captivating design. (Tuch et al. 2010, 1832) Tuch et al. (2010, 1835) suggested that symmetry influenced the aesthetical judgements more on websites with classical aesthetics than on websites with expressive aesthetics. However, more recent study of Lindgaard et al. (2011, 18) suggests that website's symmetry does not have an effect on how visually appealing or trustworthy the website is perceived as.

There has not been much research focusing on the direct effect of balance and symmetry on the perceived credibility of the website, but according to Sonderegger, Sauer & Eichenberger (2014, 1181) it has been shown that website's aesthetical presentation does affect credibility, and users tend to trust websites more if the websites are visually appealing to them. This seems to suggest that balance and symmetry does positively influence the perceived credibility through aesthetical appeal.

2.2.4. Graphics

The term graphics is used to describe images and other artwork on the website, and they are generally used to clarify or enhance the message of the text content on the website. Graphics also provide structure to the web page or can be used as an emotional factor such as to shock or arouse the user. (Longstreet et al. 2021, 5)

Cyr et al. (2009) have studied the effects of human images on website to the perceptions of the users. They discovered that most participants (from Germany, Canada, and Japan) viewed human images on websites as positive, increasing emotions and creating perceptions such as appealing, warmth, and social presence. Images with human facial features were perceived as the most trustworthy. On the contrary, images with no humans received mostly negative feedback and comments across all three countries. These images were associated with unfriendliness and blunt. (Cyr et al. 2009, 554)

Lowry et al. (2014, 63) suggest that companies' logos can increase the perceived credibility of the company if they are designed considering the credibility elements, and thus can be considered an

important web design element to capture customers' attention and trust. According to Haig (2008) consumers tend to stay longer and interact more with web pages of companies which logos followed the credibility traits competence and trustworthiness (Lowry et al. 2014, 63). For example, Hagtvedt (2011, 89) discovered that if a logo has some characters intentionally blanked out, it decreases its credibility and in turn increases the perceived innovativeness. Logos should generally be designed as fairly simple and natural to increase reassurance (Henderson, Giese & Cote, 2004, 70). The color scheme of logos should be chosen based on emotions the company wishes to be conveyed such as reliability and security (Hynes, 2009). According to the rules of dynamism, logos should be clear and understandable, not too detailed, and have enough contrast to the background. The design of the website should also be consistent with the design of the logo as it conveys credibility. (Lowry et al. 2014, 89)

2.3. The effect of responsive web design on credibility

In January 2021, internet traffic from mobile devices accounted for 55,64 % of total web traffic globally (StatCounter, 2021), and mobile data traffic is projected to increase with an annual growth rate of 46 % (Clement, 2020). As mobile internet usage continues to increase yearly, responsive web design has become a vital web design element for companies worldwide. Responsive web design (RWD) allows the web page to adapt to different devices and browsers by allowing various website features to move around and change size and appearance in a way that best suits each device (De León, 2016, 24). In addition to smartphones, there are many other various smart devices that have access to internet, such as tablets, smart TVs, smart watches, smart speakers and so on. Therefore, it is important for the designer to test the responsive website on many devices, because if a responsive website performs well on desktop and mobile device, it does not mean that it fits other smart devices available (Perakakis & Ghinea, 2017, 861).

As the user browses a responsive website, the RWD model used, and the arrangement of various objects affect the users' visual attention, and therefore their experience and behaviour, such as purchasing intention (Hung & Wang, 2020, 344). If the objects on the page are designed and located according to users' expectations, the searching time for the target objects reduces, optimizing the user experience (Roth, Tuch, Mekler, Bargas-Avila & Opwis, 2013, 228). Because of the limited space on the

website on mobile devices the site's full navigation menu needs to be reduced to a single menu icon (usually presented with three horizontal lines i.e., the hamburger icon), which then expands to the full navigation menu when clicked. According to Hung and Wang's (2020, 354) study, the location of the menu icon did not have much effect on the searching time of the menu icon, and it was always the last area viewed by the participants. When the navigation menu was opened, the study's participants had to spend more time reading it when the menu items were placed vertically than when they were placed horizontally (Hung & Wang, 2020, 363). This suggests that it would be better to have the navigation menu to be horizontal, if it is desired that the user finds the information that they are looking quicker. However, Leuthold, Schmutz, Bargas-Avila, Tuch & Opwis (2011, 496) discovered in their study that vertical navigation bars performed better, and the users preferred them more than horizontal navigation menus. The participants of their study concluded that vertical menus were easier to use and turned out to be more helpful (Leuthold et al., 2011, 496).

According to Hung and Wang (2020, 364), users tend to gaze the text content before the image to get graphic understanding regardless of the arrangement of pictures and text. Based on their study, they concluded that on mobile websites it is better to have the picture completely above the text description rather than to have the picture on the left side and text description on right side of the screen, since the first arrangement saved more time when participants were searching for information (Hung & Wang, 2020, 364).

The most common errors that might happen if a website is not responsive or adapted are *out of the viewport*, *unreadable font size*, *cluttered text*, *distorted layout*, and *unwanted white area* (Wu, Tong, Dwyer, Lee, Isenberg & Qu, 2021, 466). According to LePaige (2019) when *out of the viewpoint* occurs, user needs to scroll horizontally in order to see the hidden content, which makes the overall experience worse for the user (Wu et al., 2021, 466). If the designer focuses solely on fitting all visual content on the screen, the font size might become unreadable. *Cluttered text* refers to clutches where the text becomes cluttered or overlapping with other elements. *Distorted layout* means layout that becomes stretched that generally results from the difference of screen width on different devices. Sometimes there is *excess white space* on the screen when the design does not match the device's measurements. These are the five most common issues found on mobile websites and should be avoided to give better user experience. There are also other issues that might occur especially on smartphones; sometimes

touch elements are located too close to each other and it becomes hard for the user to touch them, or images might not scale properly to smaller devices. (Wu et al. 2021, 466)

By applying the credibility principles of aesthetics developed by Robins and Holmes (2008) into responsible web design, it can be concluded that issues with the adaptiveness of the website, layout and design objects to different smart devices can debilitate the experienced visual appeal and therefore decrease the perceived credibility.

3. METHODS AND MATERIAL

This thesis includes a qualitative case study for a Finnish healthcare company Suomen Terveystyö Oy. This study includes data from a qualitative survey with Likert-scale, multiple choice, and open-ended questions. The study was conducted in Finnish in the interest of the participants' understanding. The translated survey form is found in appendix 1.

3.1. Participants

The target population of the qualitative survey was chosen to be young Finnish adults, ages between 20-30. There were no limitations relating to the gender or the level of education of the participants. This target population was chosen as the case company would like to explore this age group as a possible target customer segment.

A snowball sampling technique was used to gather participants for this study. Specific acquaintances were chosen to fit the age bracket of this study and to get answers from as different educational backgrounds as possible. The first participants then shared the survey to their acquaintances. The survey was open for two weeks and the participants were asked to answer the survey in the given time. In the given time of two weeks, 13 answers were recorded. Three basic demographic questions were asked to get more valuable information of the participants demographics: gender, age and completed or current level of education. Nine of the participants were women and four were men. The age of the respondents was well distributed across the age bracket. The full age distribution can be seen in figure 3 below. The level of education was appropriately diverse as it benefits the case company more. The exact number of participants for each educational level can be seen in the table 1 below.

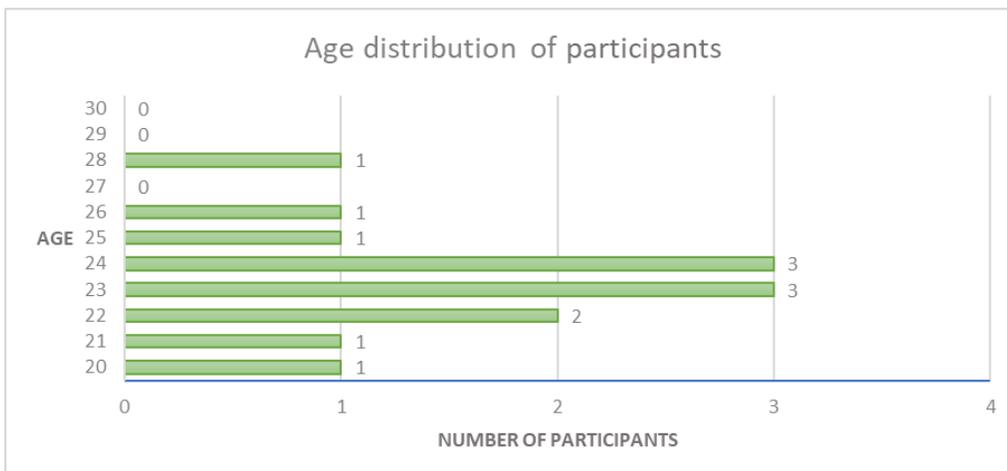


Figure 3. Age distribution of the participants.

Table 1. Level of education of the participants

The level of education	Number of participants
Primary school	0
Vocational school	3
High school	1
College	2
University	7

3.2. The survey form

In addition to the demographic questions, the survey consisted of 17 questions, from which two (2) were Likert-scale questions, two (2) were multiple answer questions, and 13 were open-ended questions. Since the data was analyzed using qualitative methods, the survey had to include higher number of open-ended questions, even though there was a risk that the participants would not bother to answer them well enough. However, most answers turned out to be rich and informative. As mentioned earlier, the full translated survey form can be found in the appendix 1.

3.3. Qualitative research and case study

The study was chosen to be analysed using qualitative methods since the research questions aim to find a holistic answer to the research problem. When the aim of the research calls for a holistic view of a specific phenomenon or subject, qualitative research, and its subcategory *case study*, are needed (Kananen, 2013, 66). In addition, the research questions are presented in a form of “*how*”, which is usually an indication for the need of a case study (Yin, 2003, 9). In a case study it is typical to gather data and information from different sources in order to get a holistic view of the subject (Kananen, 2013, 77). In this thesis the research questions are answered using information from two different sources: The qualitative survey and the writer’s observations.

Case research does not have its own analysing methods and it is mostly based on analysis methods used in qualitative research (Kananen, 2013, 103). A thematic qualitative analysis was used in this study as can be seen from figure 4. Thematic analysis is an effective method when the aim is to find subjective information from the data such as participants’ experiences, views, and opinions. It is often used when

analysing surveys and interviews since they usually include a lot of subjective information. Thematic analysis can be divided into various approaches, from which an inductive approach will be used in this thesis. In an inductive approach the themes will emerge from the data without any preconceptions affecting the analysis. (Crosley, 2021)

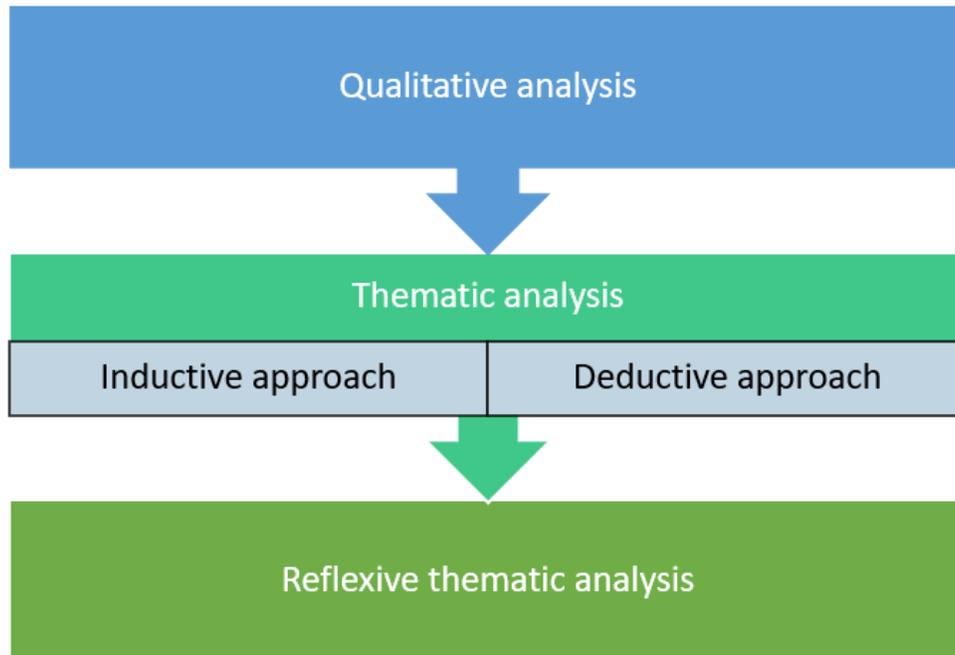


Figure 4. Analysis methods of this thesis

The qualitative analysis of data is divided into five phases, which are transcription, segmenting, categorizing, coding, and analysing (Kananen, 2013, 104). Since the data from the qualitative survey is already in written form, the analysis process in this thesis started from segmenting and categorizing. The survey questions were segmented into seven different categories which can be seen in the table 2 below.

Table 2. The segmenting of the data

Categories	Content
<p>Category 1 – Web Design Elements</p>	<ul style="list-style-type: none"> • First elements participants pay attention to
<p>Category 2 – Aesthetical elements' effect on credibility</p>	<ul style="list-style-type: none"> • Aesthetical elements' effect on credibility • Correlation of beauty/aesthetical appeal of a website and credibility • Category 2.1. colors <ul style="list-style-type: none"> • Color and emotion • Emotions effect on credibility • Category 2.2. graphics <ul style="list-style-type: none"> • Aesthetical appeal of images • Images effect on credibility • Human images
<p>Category 3 – The effect of credibility on the purchase decision</p>	<ul style="list-style-type: none"> • The effect of credibility on the purchase decision
<p>Category 4 – Comparing two example websites</p>	<ul style="list-style-type: none"> • Which of the websites seems more credible from the first sight?
<p>Category 5 – Credibility and aesthetics of the case company</p>	<ul style="list-style-type: none"> • Credibility of a company selling health products • Which case company's appearance is more appealing? • Which appearance seems more credible?
<p>Category 6 – Responsive Web Design</p>	<ul style="list-style-type: none"> • Purchasing on different devices
<p>Category 7 – Credibility and Responsive Web Design of the Case Company</p>	<ul style="list-style-type: none"> • Which visual appearance of the case company on a mobile browser is more aesthetically pleasing/beautiful? • Which appearance seems more credible?

Following the categorization, the data was coded using a reflexive thematic analysis (as seen in figure 4), which is the most flexible type of thematic analysis. When using the reflexive thematic analysis codes can be changed, removed, and added throughout the analysis process (Crosley, 2021). An example of the coding process can be seen in the table 3. The themes and codes found under each survey question were then holistically analysed and interpreted to get comprehensive answers to the research questions.

Table 3. Example of the coding process

Original (in Finnish)	translation & coding 1	coding 2	Final themes
Kuviin, yleisilmeeseen, värien harmoniaan. Siihen kuinka helposti etsimäni asiat löytyvät	Pictures, overall appearance, harmony of colors, how easy it is to find things I am looking for	Images Colors Overall presentation clarity aesthetical appeal layout font	usability
Ns. Yläbanneriin, josta käy selville yritys ja yrityksen brändi.	websites header that clarifies the company and its brand		
Selkeys, kuvat, värit	clearness, pictures, colors	easy navigation usability functionality quality	
Selkeys, helppokäyttöisyys	clearness ease of use		
Väreihin.	colors		
Selkeys ja että onko valikko helposti löydettävissä	clearness, is the menu easily found	credibility advertisements website's header	
Yleisilme ja toimivuus.	overall appearance, functionality		
Fontti, kuvat, mistä löydän menu-napin	font, pictures, where do I find the menu button		
Esteettisyyteen, asetteluun yms. jotka vaikuttavat mielikuvaan siitä onko sivusto oikea ja luotettava, vai feikki	aesthetics, layout, etc. that affects the perception of the website's realness and reliableness or fakeness		
Ulkonäköön sekä sivuston käytettävyyteen	appearance, usability		
Paljon mainoksia	lots of advertisements		Aesthetical elements
Kokonaisuuteen, väreihin, laatuun.	entity, colors, quality		

4. EMPIRICAL OBSERVATIONS OF THE CASE COMPANY

This chapter analyses the writer's empirical observations of the case company Suomen Terveysmaailma Oy's rebranding and explores the earlier established theory from the perspective of the case company. This thesis focuses on their product *Duqem-health pillow* and their online store *terveystyyny.fi*. The case company has implemented a rebranding for their Duqem-health pillow business and its online store, since the old branding was outdated and did not meet the appropriate image the case company desires for the product.

4.1. Visual complexity of the case company's website

The case company's new website is simple and easy to use. The navigation bar (picture 1) is located at the upper right corner of the webpage and is very easy to find and use. The navigation bar is not hidden behind a menu icon that opens the navigation bar when clicked, but instead could be seen instantly which enhances the usability. However, the navigation bar is missing a search function which would be a useful addition in terms of usability of the website. The navigation bar also includes the shopping cart.



Picture 1. The case company's website's navigation bar (Suomen Terveysmaailma Oy – terveystyyny.fi)

The fonts are simple and have enough contrast for an easy read. The new logo (picture 2) is much simpler than the old logo (picture 3) and fits the general feel of the website better. Some of the pictures, however, are too big even for a desktop browser, as they do not fit the screen whole, and the user must scroll down to see the rest of the photo. This increases the visual complexity of the website, and thus makes it less credible as stated earlier. The website footer (picture 4) is located at the bottom of the page, which includes the logo, contact information, FAQ-section (Frequently Asked Questions), terms and conditions, privacy policy as well as the social media links with icons.



Picture 2. The case company's new logo
(Suomen Terveysmaailma Oy – terveystyyny.fi)



Picture 3. The case company's old logo
(Suomen Terveysmaailma Oy)



Picture 4. The case company's new website's footer (Suomen Terveysmaailma Oy – terveystyyny.fi)

4.2. Color of the case company's website

The main color of the case company's old branding is a warm purple (Picture 5). In one of the most important psychological studies regarding color associations from 1954, purple was shown to evoke emotions such as *dignity* and *stateliness*. In the same study purple was also discovered to be *the least secure* and *the least comfortable* color. (Wexner, 1954, 434) The association with *luxury* is still valid in the modern day as Hynes' (2009, 549) study shows. Historically purple has a high association with royalty as it has been worn by royals in Elizabethan times and in the Roman empire, and thus the association of luxury came into existence. However, in more recent studies purple has been shown to be *dynamic*, *exciting*, and *playful*. (Hynes, 2009, 549) According to Hynes (2009, 549) this association has most likely developed from the brand Cadbury, which is known for their purple brand image (Picture 6). In the same study purple was also shown to correlate with associations such as *thoughtful*, *vision*, and *truth*. (Hynes, 2009, 551)

As can be seen from the picture 7, the case company's new color theme consists of three colors: Aegean blue, light beige, and pastel pink. The colors have a light value and are cool toned. According to study by Hynes (2009) blue was most view as *trustworthy*, *reliable*, *dependable*, *protective*, and *homely*. Since the case company wishes customers to have a perception of trust and credibility, the new blue is a

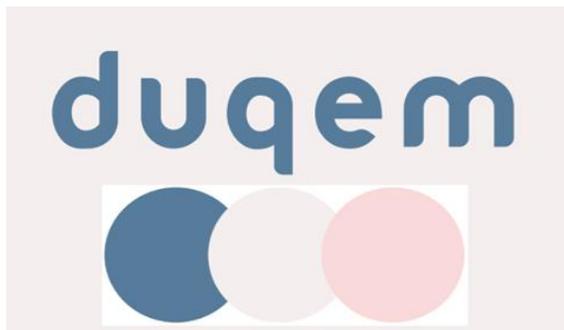
more fitting brand color than their old brand color purple. As mentioned earlier, colors with lighter values have been favoured by Europeans, and cool tones are generally viewed as *peaceful* and *calm*, which are also fitting to the case company's product's image and purpose. Most competitors of the case company in the Finnish health care market use different shades of blue, usually darker blue, in their branding (Picture 8), so the case company's new blue is a good choice to differentiate from its competitors, yet still conveying those associations important for the company, such as credible, peaceful and calm. There has been no research done on color perceptions on websites of companies operating in health care industry, so this thesis wishes to elaborate this subject more.



Picture 5. Case company's old color theme and the old logo. (Suomen Terveysmaailma Oy)



Picture 6. Cadbury's famous purple brand color. (Trademarks Patents Lawyers, 2017)



Picture 7. Case company's new color theme and the new logo. (Suomen terveysmaailma Oy)

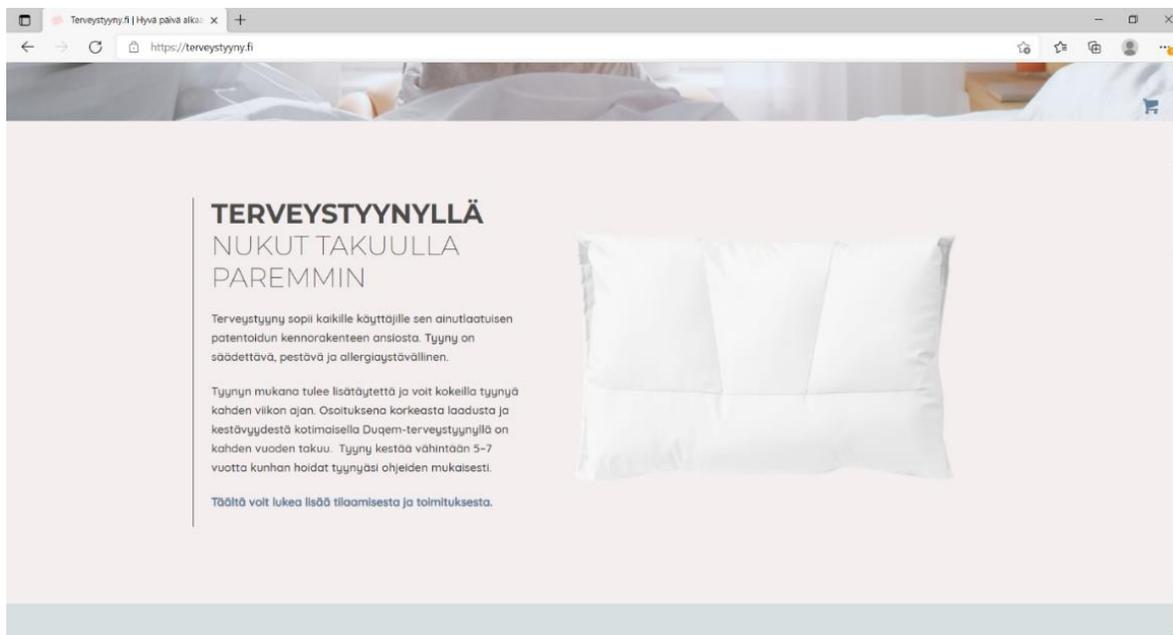


Picture 8. Case company's competitor's color theme

4.3. Balance and symmetry of the case company's website

The case company's new website is mostly well balanced, but there is space for improvements. Some of the graphics are too vast even for a desktop browser and should be adjusted for a better viewing experience. If the picture is too big for the screen, and the user needs to scroll down to reveal the whole picture, the desired balance is not achieved. Other than the size of some pictures, other elements are working great together, and the usability has been increased from the old website. The color theme of the new website, aegean blue, light beige, and pastel pink (picture 7), creates more aesthetical and balanced feel than the old color theme, white and purple (picture 5). As mentioned earlier, Lindgaard et al. (2011, 18) discovered that websites with a good balance, alongside with generous graphics, and a moderate level of text and contrast, are perceived the most trustworthy.

The case company's new website does not follow a symmetric pattern as the website has text on the left side and pictures on the right (Picture 9), with other text-picture layouts as well. However, as earlier studies have shown, website's symmetry does not increase the aesthetical perception nor increase the credibility.



Picture 9. The case company's new website's layout (Suomen Terveysmaailma Oy – terveystyyny.fi)

4.4. Graphics of the case company's website

On both their old and new website, the case company uses pictures of their product as well as pictures with humans (picture 10 below). On the new website however, most pictures have more professional look and they fit the website's color theme and aesthetical feel better (picture 11 below). The new website has many different pictures of the product in different setting and with humans as well. As stated previously, the earlier research claims that human imagery increases the trustworthiness and friendliness of the website and mostly evokes positive emotions. However, as mentioned earlier, some of the pictures with humans are too big even for a desktop browser. Below are two pictures comparing old and new images on the case company's website.

Hälsokudde.se Clear Cache App Josefina

Hälsokudde Tekniska uppgifter Användarerfarenheter 🛒 0



En bra natt – en bra dag

Duqemkudden är en finsk uppfinning som har varit finländarnas favorit i närmare 20 år. Skaffa en du med, så sover du bättre!

[Nu till priset 990 kr](#)

Clear Cache Terveystyyn Josefina

Nuku yösi paremmin – hanki Terveystyynny!



Ale!

Duqem-terveystyynny

★★★★★ (14 tuotearviota)

94,00 € **84,00 €** sis. alv

Anatomisesti oikein muotoiltu ja säädettävä Duqem- terveystyynny on yksilöllisesti muokattava tyyny, joka sopii kaikkiin nukkuma-asentoihin kaikenikäisille ja -kokoisille nukkujille. Terveystyynny mukana tulee yksi lisätäytepusi. Koko noin 50 cm x 37 cm x 15 cm (ilman lisätäytettä).

1 [Lisää ostoskoriin](#)



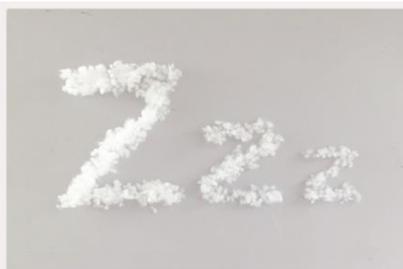
Duqem®

Duqem-terveystyynny
Anatomisesti oikein muotoiltu ja säädettävissä

health and quality



Picture 10. Images on the old website of the case company. (Suomen Terveysmaailma Oy)



Näin nukut riittävästi

Ajoissa sänkyyn Usein kuvittelemme saavamme tarpeeksi unta, mutta todellisuudessa yöt saattavat olla lyhyempiä. Emme ehkä laske mukaan nukahtamiseen käytettyä aikaa tai sitä ylimääräistä jaksoa suosikkisarjastamme, jota

[LUE LISÄÄ »](#)



Terveystyönnyn kesäkiertue - tervetuloa kokeilemaan Duqem-tyynyä ja patjoja

Olisiko aika uusia tyynyä ja petauspatjoja, mutta miten löydät sopivan? Duqem-tuotteita voi nyt kokeilla kesän markkinoilla ja messuilla. Katso lähin tapahtuma kiertuekalenteristamme! Myyjämme Paula kiertää tänä

[LUE LISÄÄ »](#)



Kuinka paljon pitäisi nukkua?

Nukumme yhä vähemmän ja se vaikuttaa olotilaan ja tehokkuuteen. Jos iltapäivällä väsyttää, nukahtaminen on nopeaa iltaisin tai on vaikea nousta aamuisin, on todennäköistä, ettei ole nukkunut

[LUE LISÄÄ »](#)

Picture 11. Images on the new website of the case company. (Suomen Terveysmaailma Oy – terveystyyny.fi)

The case company's old logo (in picture 3 earlier) was quite elaborate, and with the purple color, it conveyed associations like luxury. However, the case company wanted to change their branding to something more modern and more fitting to the product's purpose. The new logo (in picture 2 earlier) was chosen to have much more simplistic font and more neutral and light colors. This logo design should increase the perceived credibility of the case company.

4.5. Case company's responsive web design

The case company's new website works well on mobiles and tablets. On tablets however, the heading of the website becomes a little bit cluttered in a way that it overlaps with the "hero image" (i.e., large banner image on a website). All other graphics and pictures can be seen fully, and they work well with each device size. There are no unnecessary empty spaces, and the layout is great for each device. None of the most common errors mentioned earlier in chapter 2.3., other than the cluttered headline, cannot be found on the new website. The menu icon is located at the upper right corner in a form of the so-called *hamburger icon* which is a menu icon consisting of three horizontal lines. When clicked, a navigation bar opens vertically, which, as mentioned earlier, is considered easier to use and to be more helpful than horizontal navigation bar (Leuthold et al. 2011, 496).

5. RESULTS OF THE EMPIRICAL STUDY

In this chapter the results will be reported based on the segmenting and the coding process. As mentioned earlier, seven categories were discovered during segmenting, which will be used to arrange and organize the results. The categories and their content can be seen in the table 2 in the chapter 3.3.

5.1. Category 1- web design elements

The first category, Web Design Elements, composes solely of the first survey question: To which elements do you pay attention first when you open a website? This question received 12 answers out of 13, and the answers were clear and simple, and had a lot of convergent themes. The coding process of this category can be seen in the table 3 above. Two final themes were found which best describe the most answers of the participants: Aesthetical elements and usability. When breaking down the aesthetical elements theme, smaller themes found were the following: images, colors, overall presentation, clarity, aesthetical appeal, layout and font. Especially colors, overall presentation, and clarity were present in most answers. Another final theme, usability, can be separated into smaller themes of easy navigation, usability, functionality, and quality. Especially the ease of navigation was present in many answers. One example answer that well expresses the common themes of this category is *“Pictures, overall appearance, harmony of colors, and how easy it is to find things that I am looking for”*.

5.2. Category 2 – Aesthetical elements’ effect on credibility

The second category, aesthetical elements’ effect on credibility, is divided into three smaller categories. The first category covers aesthetical elements’ effect on credibility, and it includes the following two survey questions: *Do these visual website elements have effect on your perception of the credibility of a company?* and *does the beauty/aesthetical appeal of a website create a feeling of credibility in your opinion?* For the first question of this category the participants’ answers followed convergent themes. Altogether, 46.15 % of the participants regarded dark color theme to have somewhat negative effect on credibility of a company, and 30.77 % reported the dark color theme to have no effect on credibility. On the other hand, white color theme received mostly positive responses with 41,67 % on great positive effect and 33,33 % on somewhat positive effect. The answers to large quantity of colors were the most

unevenly distributed with 8 participants regarding it as having a negative effect on credibility whereas 5 participants regarded it as having no effect or a positive effect. With simplicity, the weight lies primarily on the positive side with 10 answers reporting it to have a positive effect and only 2 answers reporting it to have somewhat negative effect. On the contrary, visual complexity lies more on the negative side with 10 answers reporting it to have a negative effect on credibility, 2 answers on no effect, and only one answer on a somewhat positive effect. With balance most participants (53,85 %) reported it to have a great positive effect on credibility and 30,77 % reported it to have a somewhat positive effect on credibility. Similarly on symmetry, 53,86 % reported it to have a somewhat positive effect on credibility, but 23,08 % also regarded it to have no effect at all, and 23,07 % of participants regarded it to have a negative effect on credibility. Images were seen positive by all participants, with 69.23 % of answers on a great positive effect and 30.77 % of answers on somewhat positive effect. All these results can be seen in the table 4 below. The answer to the second question of this category was unanimous with all participants answering that a website's aesthetical appeal does create a feeling of credibility in their opinion.

Table 4. Results of the survey question "Do these visual website elements have effect on your perception of the credibility of a company?"

	Great negative effect		Somewhat negative effect		No effect		Somewhat positive effect		Great positive effect		I do not know		Total no. of answers
	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	
Dark color theme	0.00 %	0	46.15 %	6	30.77%	4	15.38%	2	0.00%	0	7.69%	1	13
White color theme	0.00 %	0	0.00%	0	25.00%	3	33.33%	4	41.67%	5	0.00%	0	12
Large quantity of colors	23.08%	3	38.46 %	5	7.69%	1	7.69%	1	23.08%	3	0.00%	0	13
Simplicity	0.00 %	0	16.67 %	2	0.00%	0	33.33%	4	50.00%	6	0.00%	0	12
Visual complexity	30.77%	4	46.15 %	6	15.38%	2	7.69%	1	0.00%	0	0.00%	0	13
Balance	0.00 %	0	7.69%	1	7.69%	1	30.77%	4	53.85%	7	0.00%	0	13
Symmetry	7.69 %	1	15.38 %	2	23.08%	3	53.85%	7	0.00%	0	0.00%	0	13
Image	0.00 %	0	0.00%	0	0.00%	0	30.77%	4	69.23%	9	0.00%	0	13

The next two questions address emotions woken by various color themes and their effect on the perception of credibility. Firstly, with red color theme, the most common themes found were strong, aggressive, restlessness, and interest. Some of the less common themes for the red color theme were cheapness, mistrust, elegance, and attentiveness. With dark blue color theme, the most common themes found from the answers were serenity, appropriateness, trust, gloominess, and luxury. With the light blue color theme, the answers correspond well with the theory found in existing literature and research with themes such as peaceful, clean, youthful, pleasant, and neutral. The most common emotions/associations for purple color were positive, mystic, uncertainty, and royal, which are also very similar to emotions found in earlier research. For white color, the most common themes were plain, neutral, clear, and credibility. For example, one participant commented white color as:

“Simple and doesn’t take attention away from the main point of the website.”

The answers for the question regarding the effects of emotions to credibility were quite vague and did not give many answers that relate specially to emotions. The answers that regarded emotions, suggested that positive emotions increase credibility. Some of the other most common themes found were that credibility is increased by compatibility of color and subject, appropriateness and clearness, pleasant colors and stylish feel, as well as composed and stylish use of color. The participants also described that cheap brand feel, unknown brand, and weird color combinations decrease credibility.

The following two question concerned the effect of graphical elements on the perception of aesthetical appeal and credibility, as well as the preference of human imagery on e-commerce websites. As established also in an earlier question, aesthetical appeal does generally seem to increase credibility. According to the participants either too many or too few images decrease appeal and credibility, but multiple images are needed. Some of the participants prefer simple images with tranquil colors and think that they increase credibility. Another very common theme among participants was that professional, well taken, and clear photos increase credibility and aesthetical appeal. Participants described that colorful pictures are generally not pleasant and that they decrease usability, but little accents of color are visually pleasing. According to some participants conspicuous pictures are fine if they fit the company’s image. Regarding the question about human imagery on e-commerce website, most of the participants preferred images featuring only the product or images that have the product

as the main part. However, in case of clothing, they prefer people, as it helps to demonstrate the size of the product. A few of the participants preferred human imagery over product images as it helps to see the product's real size. Here are some of the comments made by the participants:

“Strictly only the product except for clothes. When presenting clothes, well taken photos featuring models effect the purchasing decision. In case of images of items, furniture, etc. it is best to strip them of all stimuli, so that I can inspect the item by itself and imagine it in its own environment.”

“Personally, I like websites that also show photos taken by the real customers, because then you can see what the product really is like.”

“I like websites that include both kind of photos. Different kind of photos increase trust and help with the purchasing decision.”

“I prefer pictures featuring only the product since humans in images look unnatural and fake which makes them look as they do not even know what they are advertising”

5.3. Category 3 – The effect of credibility on the purchase decision

In this category the participants were unanimous. Every participant expressed that credibility has a great effect on their purchasing decision. According to the participants credibility is vital for online stores, since many people are much more observant with their money on the internet. If the website does not feel credible and is not well designed, they may not purchase anything. According to the answers, credibility is especially important when the website is visited for the first time. For example, this answer from one of the participants well describes the importance of credibility in modern e-commerce websites:

“Credibility is a must on present-day online stores. It can be achieved through various visual ways depending on the brand and the field, but a lack of credibility cannot be afforded. Every consumer possesses some level of media literacy that will detect if the websites are lacking.”

5.4. Category 4 – Comparing two example websites

The participants were asked to compare two screenshots of two different websites: one having a light blue color theme and the other one a red color theme. The screenshots can be seen in the survey form in appendix 1. The participants were asked which website seemed more credible from the first sight, and the answers were almost unanimous. 12 out of 13 participants thought that the website 1 looks more credible. One participant did not know which website seemed more credible. Website 1 with the light blue color theme was described as clean and simple, modern, more appropriate, professional, as well as clear and neat. The layout scales right and looks more official than the website 2. The blue color theme of the website 1 is linked to doctors and police which are associated with trust in the Finnish culture, thus associating blue with trustworthiness. The color theme of the website 1 was also described as harmonious and neutral. The font of the website 1 also received many appraisals, with its clear look and color. The website 2 on the other hand received a lot of negative comments of its visual presentation and was not seen as very credible. Many participants were commenting how outdated the website 2 looks, as it would be from the 90's or the beginning of the 2000's. In one participant's opinion the website 2 seems medieval and complicated. Many also commented that the website 2 looks like a blog or a homepage by an amateur. However, the red color theme does seem to divide people, as some participants thought the website's red color is not appropriate and decreases the credibility, but it also received a comment which described the red color as interesting and easily approachable. The font of the heading of the website 2, however, did not seem to appeal to the participants, as they found it hard to read. One of the participants thought that the choice of papyrus-font was not appropriate and can be seen as a joke.

“Website 1 seems more credible as its color theme is harmonious, and especially the font’s color is appropriate. Website 2 reminds of an amateur, that plays with colors in their blog. Additionally, the photo on website 1’s is more high quality than the photo on website 2.”

5.5. Category 5 – Credibility and aesthetics of the case company

The participants were asked how important the three individual elements of credibility (visual presentation, trustworthiness, and competence) are for a website of a company offering health products. Competence was rated as the most important with 11 out of 13 participants choosing “very important”. This was followed by trustworthiness with 9 out of 13 answers for “very important”. Visual presentation was perceived as the least important of these three, as most participants (69.23%) rated it as “important”, 23,08% rated it as “very important”, and one participant rated it as “somewhat important”.

Table 5. Results to the survey question “How important are the following aspects for you in a case of a website of a company offering health products?”

	Not important		Somewhat important		I do not know		Important		Very important		Total no. of answers
	%	No.	%	No.	%	No.	%	No.	%	No.	
Visual presentation	0.00%	0	7.69%	1	0.00%	0	69.23%	9	23.08%	3	13
Trustworthiness	0.00%	0	0.00%	0	0.00%	0	30.77%	4	69.23%	9	13
Competence	0.00%	0	0.00%	0	0.00%	0	15.38%	2	84.62%	11	13

Various screenshots of the case company’s old website and new website were presented to the participants, and they were asked to compare them and describe which one do they prefer and why, as well as which one of them do they consider more credible and why. The question only talked about a visual appearance 1 and visual appearance 2 so that the participants would not get any hints about which appearance is the “old” and which one is “new”, since it might affect their answers. 10 out of the 13 participants preferred the appearance 2, which is the new website, in terms of the visual appeal.

Most common comment on the visual appearance 2 was that it seems as it has more effort put into it. The participants commented that it presents as more holistic, more thoughtful, professional, and credible. Especially the professionalism was mentioned multiple times, and that in appearance 2, the company seems to bring out the expertise of their field better. The background and pastel colors received appraisals as being harmonious and not too extravagant. According to the participants the appearance 2 is more soft, interesting, and more easily approachable. Overall, most of the participants thought that the appearance 2 seems more credible since it presents as more modern than the visual appearance 1. Once again, the reasons for the heightened credibility were also present in the answers for aesthetic appeal. The most common themes found from the comments surrounding the appearance 1 are that it appears too boring with the white background, as well as too old-fashioned.

“The visual appearance 2 appears more trustworthy in my opinion. The layout, fonts and overall appearance seems more professional.”

“Visual appearance 1 reminds of a PowerPoint presentation by a student.”

Two of the participants preferred the visual appearance 1, which is the old website, over the appearance 2, and consider appearance 1 to be more credible. One of them expressed that appearance 1's colors seem better and softer, and that it looks like the company has put more effort into it by making the product look good. The other participant did not care for images, which is why appearance 1 appealed to them more. They commented that health products do not need to create a visual experience. One participant liked both appearances, so they could not decide on the credibility either.

5.6. Category 6 – Responsive Web Design

When the participants were asked what devices they would use to buy health products online, most participants seem to be willing to buy health products with either a computer or a mobile device. 12 out of 13 participants could use computer to buy health products, and 11 out of 13 participants could use a mobile device. Tablets seem to be most unpopular out of these three devices, with only 5 out of

13 participants willing to buy using a tablet. When asked if the participants experience more risk buying with other devices than computer, most participants commented that they do not experience more risks. However, according to the participants a vital factor that influences the experienced risk is the functionality of the mobile version of a website; they experience more risks if the website is not designed well for e.g., mobile devices. Three of the participants answered that they experience more risks on other devices and therefore prefer to use computers when buying online. They commented that the small screen of mobile devices and tablets make it harder to use and websites look better on a desktop browser.

The participants were asked what elements they would appreciate when buying health products online, and most of them answered that the responsiveness of the website, i.e., the website to be optimized for mobile devices, is the most important. Ease of use and general functionality, including ease of navigation and ease of reading, were also very common themes in the answers. Few of the participants also commented that they would appreciate appealing visual appearance and simplicity on mobile websites.

5.7. Category 7 – Credibility and Responsive Web Design of the Case Company

The participants were asked to compare the two visual appearances of the case company again but this time as mobile browser versions. Screenshots of the visual appearances can be seen in the survey form in appendix 1. The participants were asked which appearance is more visually appealing to them and which do they think looks more credible. 10 out of 12 participants thought that the appearance 2 is more appealing. According to the participants, the appearance 2 looks like it is designed on a mobile device better than the appearance 1, the pictures' sizes fit well, and the information is better presented. They commented that the overall aesthetical appearance is better on appearance 2 because the layout and the calming color palette. The font colors were also said to be more contrasted from the background in appearance 2, which makes it easier to read. In case of the appearance 1, the participants commented that it looks as it has not been designed for a mobile device and the picture does not fit the screen nicely, as well as that the text is not fully visible on the starting page in appearance 1. However, the two participants who liked the appearance 1 better commented that the appearance 1 is easier to read and that they prefer the whiteness and clearness of it.

In nine out of 11 answers the appearance 2 was chosen as the more credible appearance. Some of the most common reasons listed were that it looks like it is designed to be functional, it creates more appropriate image for the customer, and the colors and simplicity create more aesthetical feel. No participant chose the appearance 1 as more credible, but couple were not able to decide between the appearances. The appearance 1 was said to be outdated-looking, and that the pink logo creates an association to cheap retail goods, which decreases the credibility. Here are some of the comments made by the participants:

“On mobile devices the website’s visual appearance has to draw attention as there are usually a lot of other stimuli in mobile environment.”

“Appearance 2 seems more credible because there has been effort put into the aesthetics.”

“Visual appearance 2 is more credible. The plastic bag with the pillow filling on appearance 1 is not tempting at all and does not increase the credibility. In appearance 1 the logo of the company is pink which does not increase the credibility and seems more like cheap retail goods.”

“Appearance 1 does not seem to work on mobile device which makes it look outdated, which decreases the credibility. Especially in case of health products the website should be up to date.”

“Appearance 1 is more credible. I liked the whiteness and clearness.”

The most essential results of this qualitative survey are presented in the table 6 below.

Table 6. The most essential results of this empirical study

How do website design elements affect healthcare company's credibility?	
How do website's aesthetic elements affect company's credibility?	<p><u>First elements the participants pay attention to in a website:</u></p> <p>Aesthetical elements: Images, colors, overall presentation, clarity, aesthetical appeal, layout, font</p> <p>100 % of the participants answered that beauty/aesthetical appeal of a website creates a feeling of credibility.</p> <p>100 % answered that credibility has a great effect on their purchase decision.</p>
	<p><u>Effect of colors on credibility:</u></p> <p>Increases credibility: light color theme, compatibility of color and subject, appropriateness and clearness, pleasant colors and stylish feel, composed and stylish use of color</p> <p>Decreases credibility: dark color theme, weird color combinations, large quantity of different colors</p>
	<p><u>Effect of graphics on credibility:</u></p> <p>Increases credibility: Simple images with tranquil colors, Professional, well taken and clear photos</p> <p>Decreases credibility: Overly colorful pictures (Conspicuous pictures are ok if they fit the company's image)</p> <p>Most participants answered that they prefer pictures featuring only the product except for clothing.</p>
	<p><u>Case company:</u></p> <p>Most participants preferred the appearance of the new website (appearance 2) more in terms of the visual appeal.</p> <p>The participants commented that it presents as more holistic, more thoughtful, professional, and credible</p>
How does responsive web design affect company's credibility?	<p><u>First elements the participants pay attention to in a website:</u></p> <p>Usability: easy navigation, functionality, quality</p>
	<p><u>Responsive web design:</u></p> <p>A vital factor that influences the experienced risk on mobile devices is the functionality of the mobile version of a website</p> <p>Most important factors on mobile websites:</p> <p>Responsive web design, ease of use and general functionality, ease of navigation and ease of reading.</p>
	<p><u>Case Company:</u></p> <p>Most participants thought that the new mobile website (appearance 2) is more appealing. The new mobile website has better layout and more calming color palette.</p> <p>Most participants also chose the new mobile website (appearance 2) as the more credible. According to the participants, it was designed to be functional, it creates more appropriate image for the customer, and the colors and simplicity create more aesthetical feel.</p>

6. DISCUSSION

Since the subject of this thesis is related to aesthetics which in reality is guided by opinions, subjectivity and biases, it is not possible to conclude a one unambiguous theory or a clear set of suggestions. Since preferences are predominantly matters of opinion, the data of this study had a lot of variety in the answers. However, there can still be many similarities identified.

Based on the literature review and the empirical study of this thesis it can be concluded that website's aesthetics does affect the perceived credibility of the company. The higher the aesthetical appeal of a website is, the more likely it is perceived as credible by visitors. This thesis focused on four aesthetical elements: visual complexity, color, balance and symmetry, as well as graphics.

With visual complexity, based on the earlier research and the empirical study of this thesis it can be concluded that higher visual complexity decreases credibility. According to previous studies, the simpler the website is, the more credible it is seen as (Robins & Holmes, 2008, 397). The results of the empirical study of this thesis accurately reflects this as well, with 83,33 % of the participants reporting that simplicity affects positively to perceived credibility of a company, and 76,92 % of the participants reporting that visual complexity affects negatively to the perceived credibility of a company. This was also apparent in other survey questions as well. For example, the participants preferred simplicity when it comes to the graphical elements on websites as it increases the credibility in their opinion. Simplicity was also highly appreciated among the participants on mobile browser versions of websites, which is why it is also a vital element in responsive web design.

The results for the participants' perception and associations of colors were also very much similar with the already established theories (e.g., Wexner, 1954). In this empirical study, red color on website was seen as strong, aggressive, restless, interesting, and unreliable. Dark blue was associated with serenity, appropriateness, trust, gloominess, and luxury. With the light blue color, themes such as peaceful, clean, youthful, pleasant, and neutral were most common. For purple color the most regular associations were positive, mystic, uncertainty, and royal. White color was associated with plainness, neutrality, clearness, and credibility. These are all similar to the color theories established before, and especially the results for the purple color were very much alike the existing theories (e.g., Wexner,

1954; Hynes, 2009). It can be seen from the results that white, dark blue and light blue increase the credibility most, whereas red and purple might decrease the perceived credibility. These results verify the earlier established theories that cool colors increase credibility and warmer colors decrease credibility. Based on the participants answers it can be suggested that the main factor of the perception of credibility is not the color itself, but the context and the compatibility of the color and subject; strong visual choices can be justifiable if they fit well with the brand, but if the color combinations seem weird for the users, the credibility might decrease.

Similarly to earlier research, balance seems to be very important for heightened credibility. According to 84,62 % of the participants of this study, the balance of the website's elements affects positively to the perceived credibility. The answers also suggested that especially with images and other elements it is important that they are balanced as it makes the overall presentation more appealing and credible. Symmetry was reported to be affecting less to the credibility than the balance by the participants, with 53.85% choosing somewhat positive effect and 23.08% choosing no effect, which is similar to the results from previous studies, since there are some differences on the results of previous studies on symmetry and credibility. Whereas Tuch et al. (2010, 1835) suggest that symmetry influences the aesthetical judgements on websites with classical aesthetics, the study of Lindgaard et al. (2011, 18) suggests that website's symmetry does not affect how visually appealing or trustworthy the website is perceived as.

After coding and analyzing the results for survey questions regarding the preferences surrounding graphics, it can be concluded that images do increase the aesthetical appeal and credibility per se, but it is important to find the right balance, since too many photos was also reported negative by the participants. Simplicity, clearness, and professionalism were described by the participants to be the most important in terms of aesthetical appeal and credibility. The participants of this study were also asked about their preference on human imagery and the results were completely opposite of the results of a previous study of Cyr et al. (2009). According to their study, images with human and facial features on websites are preferred as they create associations such as appealing, warmth, and social presence. Images with human facial features were perceived as the most trustworthy in their research. On the contrary, images with no humans received mostly negative feedback and comments. These images were associated with unfriendliness and blunt. (Cyr et al. 2009, 554) The participants of the empirical study of this thesis, however, seems to have complete different opinions of human imagery, since most

of the participants preferred images featuring only the product or images that have the product as the main part. However, in case of clothing, they prefer people, as it helps to demonstrate the size of the product.

This difference of the results of this study and previous studies might be a result of cultural differences on the preferences. The study by Cyr et al. (2009) featured participants from Germany, Canada, and Japan, whereas the participants of this study are all from Finland. Finnish people are usually portrait blunter and straight forward than other European cultures for example, so this might be a reason why Finnish people would prefer pictures of products more than pictures featuring humans.

In the case of the survey's questions regarding responsive web design, it can be concluded that a responsive web design is in vital importance to e-commerce companies. Most participants of this study would use mobile devices to buy health products online and they do not experience more risk than on computer if the mobile version of the website is designed to be responsive and function well. A few participants' comments on the question regarding the mobile version of the case company's website suggest that if the website is designed to work well on mobile devices it increases the credibility. Other participants focused more on aesthetical appeal of the mobile version of the case company's website, but as earlier established, the more aesthetical appealing the website is, the more credible it is perceived as, which also applies to websites on mobile browsers.

6.1. Implications for the case company

In the basis of the literature review and the empirical study of this thesis it can be stated that obtaining a high level of credibility on their website is vitally important for the case company as it operates on an e-commerce market which constantly afflicts its users with new risks and uncertainty. The participants of this study were asked how credibility affects their purchasing decision online, and every participant expressed that credibility has a great effect on their purchasing decision. If the website does not feel credible and is not well designed, they may not purchase anything. Company's credibility can be obtained by various ways, from which web design is a very effective technique. One of the most visible web design elements is aesthetics. Website users make credibility judgements based on various processes such as conscious determining of a source's trustworthiness and expertise and preconscious judgements of a source's dynamic or visual properties, which happen in a matter of few seconds as

Robins and Holmes (2008, 386-387) have stated. Therefore, designing a website with an appealing aesthetical appearance is a very effective way to gain users interest and trust.

When the participants were asked to compare the old and the new website of the case company, 10 out of the 13 participants preferred the appearance of the new website more in terms of the visual appeal. Especially the new color theme received much appreciation and the associations the participants made for the new colors were similar with the previous theories; cool tones are generally viewed as *peaceful* and *calm*, which are also fitting to the case company's product's image and purpose. Most competitors of the case company in the Finnish health care market use different shades of blue, usually darker blue, in their branding so the case company's new blue is a good choice to differentiate from its competitors, yet still conveying those associations important for the company. Based on this and rest of the results in chapter 5.5., it can be stated that the rebranding of the case company was successful, as the overall image is now much more fit to the product Duqem-health pillow and the subject of sleep, calmness, health, and serenity. Most of the participants also thought that the appearance of the new website seems more credible since it presents as more modern and professional look.

As the mobile internet usage continues to increase yearly (Clement, 2020), responsive web design should continue to be a vital web design element for the case company. Most of the participants of this study thought that the case company's new website is more appealing and more credible on a mobile browser than the old website. They commented that the new website seems much simpler, more functionable, easier to use and navigate, as well as more visually appealing. There was only one improvement suggestion for the new website made by one of the participants, which is that the product properties which are told one below another do not seem like good quality so it would be better and more appealing to have the text in a narrative form in their opinion. The old website however did receive many negative comments about its visual appearance such as that it looks old-fashioned, colors are boring and the layout does not fit mobile devices well. Therefore, it can be stated that the new website is much more responsive than the old website and fits mobile browsers well. However, as also mentioned earlier in chapter 3.5., the heading of the new website becomes a little bit cluttered in a way that it overlaps with the hero image on tablets. The overlap is small, and does not prevent reading the headline, but it does weaken the aesthetical appearance, so it should be fixed as soon as possible.

6.2. Reliability of the research

In an academic research it is important to evaluate its reliability. (Kananen, 2008, 121-125) Reliability of the findings can be improved by triangulation, which implies to combining multiple research methods for one study to be able to study the subject from different perspectives. One form of triangulation is a methodological triangulation, which refers to using multiple methods in gathering data. (Kananen, 2008, 39) In this thesis the reliability of the findings has been tried to be improved by a methodological triangulation as two qualitative research methods have been used: the writer's own observations of the case company's rebranding and the qualitative survey. The writer's own observations can be seen in chapter 4, and the results from the qualitative survey can be seen in chapter 5. As a result from the triangulation, an incoherence of the results can occur, which can be a consequence of a false interpretation or a weakness of the instrument for instance (Kananen, 2008, 39). However, in this thesis, the theory, the writer's own observations, and the results from the survey were all similar and complementary except the results regarding the preferences of human imagery on websites. As mentioned earlier, this incoherence between the theory and findings may be due to cultural differences.

Academic research must be objective, which in qualitative research is challenging as the researcher's preconceptions, values, beliefs, and choices affect the objectivity. Therefore, the objectivity is created from the awareness of subjectivity. The possible mistakes and falsities have to be acknowledged and recognized at all points of the research process, which helps to reduce their impact to the quality of the results. In qualitative research, one of the greatest risks is that the researcher combines their own opinions and values to the research materials, for example formulates the interview questions in such way that it guides the examinee to specific answers. (Kananen, 2008, 121-122) In this thesis this was taken into account in every part of the thesis, especially in the process of formulating the survey questions as they were formulated in a way that the participants' answers would not be affected by the question itself. An example of this can be seen in chapter 5.5. Another risk in this thesis is that the participants may not fully understand all concepts used in the survey, which may affect their answers. Therefore, all the material was translated into Finnish in a way participants could easier understand them, and the harder concepts were explained to them at the beginning of the survey.

Since the participants for the survey were gathered using a snowball sampling technique, the number of final participants could not be controlled, and there was a risk of too few participants especially since the survey was only open for two weeks. However, the survey received 13 answers, which is a good amount of people considering that this is a qualitative research. With 13 answers there was saturation noticeable, which means that there is enough research material when the new results do not change the findings anymore (Kananen, 2008, 34). On the other hand, the quality of the data is more important than the amount of data (Kananen, 2008, 35). Since this qualitative study was conducted in the form of a survey, it was possible that the quality of the answers would be poor, as people often do not bother to answer many open-ended questions in surveys. However, most of the participants answers were good quality, and long enough to get reliable results.

7. CONCLUSIONS

The aim of this bachelor's thesis was to examine how visual website design affects the perceived credibility of a healthcare company's website. This thesis included a qualitative case study, and the research questions were answered using information from two different sources: the qualitative survey and the writer's observations. After reviewing earlier literature and research as well as analyzing the results from the empirical study, it can be concluded that obtaining a high level of credibility is vitally important for modern-day e-commerce companies, and especially for companies operating in the healthcare market. Website's credibility can be increased by proper web design that incorporates different website design elements in a way where they work together in a harmony, and do not override one another.

This thesis focused on aesthetic elements, specifically on visual complexity, colors, balance & symmetry, and graphics, as well as responsive web design. Based on the earlier established theory and the empirical study of this thesis, it can be determined that the best aesthetical elements for a website for heightened credibility are simplicity, balance, simplistic images, as well as calm colors which fit the purpose and image of the product/company. However, it has been proven that blue is generally viewed as the most credible color. The company's logo should also follow the aesthetical appearance of the website.

Currently and in the future, the e-commerce business is shifting increasingly towards mobile devices on all industries. From this and the empirical study it can be concluded that a responsive web design is even more important for companies operating on a healthcare industry than aesthetical elements. Most of the participants of this study could use mobile device to buy health products online. They commented that they would value if the mobile website was designed to work on mobile devices, and that it would be simple and functionable. This can be only achieved with responsive web design, where the designer carefully considers each web design element, and their balance on each device. According to the participants' answers, appealing aesthetical appearance and responsive and functionable website increases the credibility. All the participants commented that credibility has a great effect on their purchasing decision; the more credible a website is perceived as, the more likely they will finish the purchasing process.

The empirical study of this thesis was conducted in a form of a qualitative case study for a Finnish healthcare company Suomen Terveystyö Oy. The case study focuses on the online store (terveystyyny.fi) of their product *Duqem-health pillow*. The case company is implementing changes with their branding and website design of their online store. With the help of the theoretical background the goal was to examine the differences between the old and the new brand design and give assessments of the rebranding. The goal of the empirical research was to get more insights directly from potential customer segment on how they perceive the rebranding in terms of aesthetics and credibility, as well as to give recommendations for the case company based on the empirical study. This introduces tools to further develop their website's design to achieve more credibility and trust among consumers. Based on the theoretical background and the empirical study it can be concluded that the appearance of the case company's new website is better, more fitting to the company's and the product's image, as well as more credible. Especially the new color theme of the case company received many appraisals as it was calmer, more aesthetically pleasing and seemed more credible. Only a few suggestions for improvements could be given, as only a few elements needed to be improved, such as the sizes of some images and the cluttered text on tablet devices. Therefore, it can be established that the rebranding was successful, and in theory should increase the aesthetic appeal and the credibility of the website.

8. FUTURE RESEARCH

This thesis was restricted to only two web design elements: aesthetic elements and responsive web design. Since it is very important that the various web design elements work together in balance, it would be important for future research to study the balance and synergies of all web design elements. As this empirical study was conducted using qualitative methods, it would be beneficial to examine this subject using quantitative methods, for example a quantitative survey, and other numeral data, for example data from the case company's Google Analytics. Researching website credibility is vital in the future as well since the e-commerce industry is very dynamic and constantly changing, and therefore continuously afflicting internet users with new risks and uncertainty.

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Appendix 1. The translated survey form.



English - United Kingdom ▼

Dear participant,

With this survey, I am gathering data for my Bachelor's Thesis, where I study the effects of visual website design elements and responsive web design on the credibility of a company. Answering to this survey is voluntary, anonymous, and the participants' contact information, location information or IP-address will not be collected.

Answering to this survey will take approximately 20 minutes. If you have any questions regarding this survey or the thesis, please contact:

henna.laaksonen@student.lut.fi
0504124236

0% 100%

→

Survey Powered By [Qualtrics](#)



English - United Kingdom ▼

Definitions of the key concepts

Aesthetics:
In this instance aesthetics means the beauty created by different design elements on the website.

Credibility:
Credibility consists of competence, trustworthiness and dynamism. The Finnish term "*uskottavuus*" is generally used as a synonym for trustworthiness.

Gender

Female
 Male
 Other
 I do not want to say

Age

Completed or current level of education

Primary school
 Vocational school
 High school
 College
 University

0% 100%

← →

To which elements do you pay attention first when you open a website? (any website)

Do these visual website elements have effect on your perception of the credibility of a company?

	Great negative effect	Somewhat negative effect	No effect	Somewhat positive effect	Great positive effect	I do not know
Dark color theme	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Light color theme	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Large quantity of different colors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Simplicity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Visual complexity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Balance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Symmetry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Images	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Does the beauty/aesthetical appeal of a website create a feeling of credibility in your opinion?

- Yes
 No
 I do not pay attention to the aesthetics of websites

Imagine these color themes on a website. What emotions do these color themes reflect in you?

Red color theme	<input type="text"/>
Dark blue color theme	<input type="text"/>
Light blue color theme	<input type="text"/>
Purple color theme	<input type="text"/>
White color theme	<input type="text"/>

How do these emotions affect your perception of a website's credibility?

A. How does graphical elements, such as images, affect your opinion of a website's aesthetical appeal? E.g. Do you prefer many images, few images, simple images, colorful images etc.

B. Describe how these affect your perception of a website's credibility.

When using online stores (e-commerce websites), do you prefer images with humans or images that only show the product (or the product plays a major part)? Why?

How does credibility affect your purchasing decision online?



Compare the two (2) screenshots of two (2) different websites below. Which of them seems more credible from the first sight? Can you explain why? Try not to read the text and just focus on visually. After viewing the images, answer below this question.



Image 1. (Source: Institute for the Languages of Finland, <http://www.kielitoimistonohjepankki.fi>)

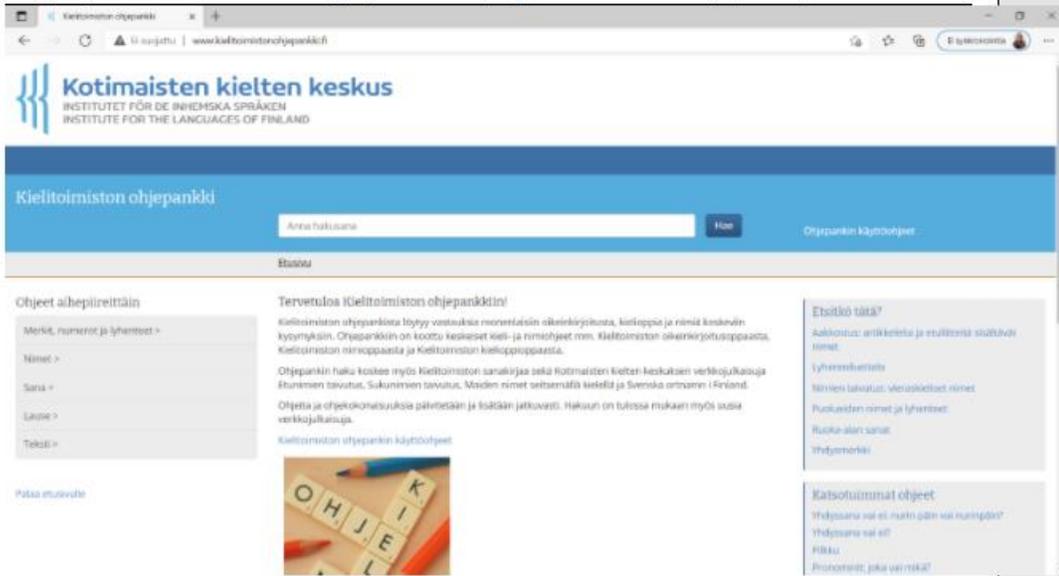


Image 2. (Source: Kirjoittajan ABC-kortti, <https://webcgi.oulu.fi/oykk/abc/>)



How important are the following aspects for you in a case of a website of a company offering health products?

	Not important	Somewhat important	I do not know	Important	Very important
Competence	<input type="radio"/>				
Trustworthiness	<input type="radio"/>				
Visual presentation	<input type="radio"/>				

Below there are screenshots of two (2) different visual appearances of a website of a company offering health products. (Four (4) images of both visual appearances) Compare the images and answer the questions after the images.

Visual appearance 1.



Visual appearance 1.



Visual appearance 1.

PESTÄVÄ JA SÄÄDETTÄVÄ

Terveystyynyn tärkeimmät ominaisuudet

- ✓ Sopii kaikille säädettävyytensä ansiosta
- ✓ Anatomisesti muotoiltu. Tukee päätä ja kaulanikaa oikealla tavalla
- ✓ Vähentää niska- ja hartakipuja
- ✓ Hygieniapäällinen pitää tyyntyn puhtaana
- ✓ Sopii myös allergikoille
- ✓ Säilyttää muotonsa vuodesta toiseen pesun jälkeenkin
- ✓ Keskimääräinen käyttöikä 5-7 vuotta

[Lue lisää](#)

[Osta hintaan 94€](#)



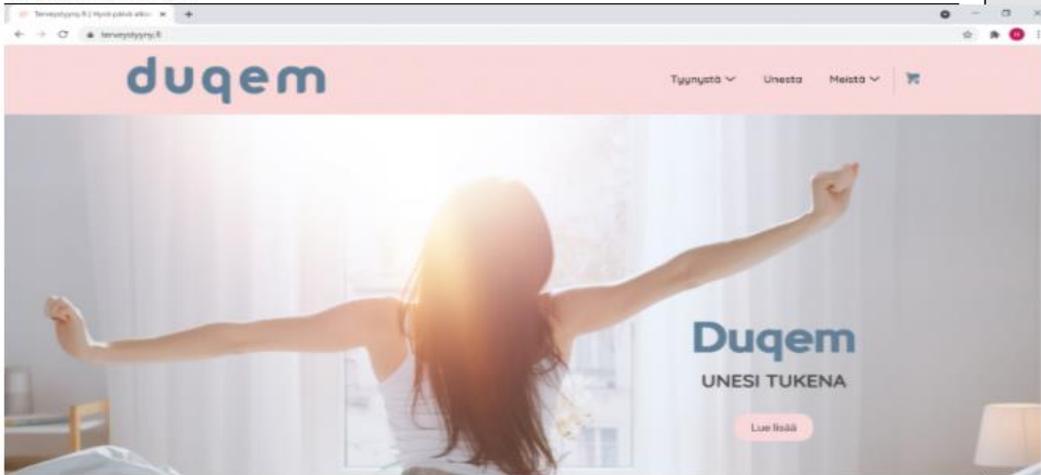
Suomalainen laatutuote
Terveystyyny on suunniteltu Suomessa ja sitä on myyty lähes 20 vuoden ajan. Tyynyn täyte on korkealaatuisia silikonipäälystettyä palkokuitua, joka tuoteaan vastuullisesti ympäristöä kunnioittaen.

Takuu 2 vuotta
Terveystyynyllä on 100% tyytymättömyystakuu. Korkealaatuisen ja kestävä Duqem-terveystyynyn takuu on kaksi vuotta. Tee hyvä päätös ja ajotta omaan hyvinvointiasi, tyytyäsi on kahden viikon palautusoikeus.

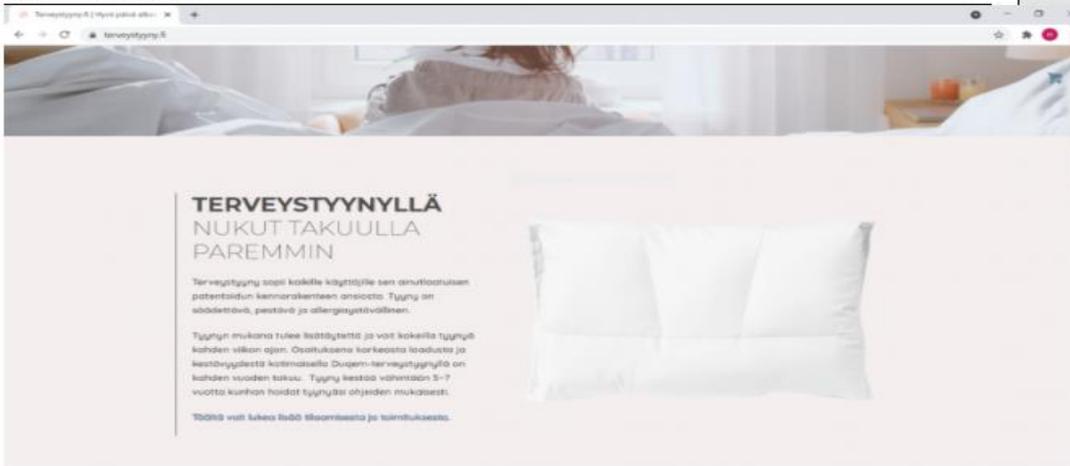
Konepestävä
Terveystyyny on konepestävä 60 asteissa ja se säilyttää muotonsa vuodesta toiseen pesun jälkeenkin. Tyynymme myös huulettaa korkealla lämpötilassa. Tyynyä kannattaa pestä pari kertaa vuodessa, jotta tyyntä pidetään puhtaana ja tuoreana. Lue tarkat ohjeet tyyntä koskevista asioista.

Tyynyn hävittäminen
Terveystyynyn käyttöikä on noin 5-7 vuotta, kunhan tyyntä huoltaa oikein. Silikonipäälysteinen palkokuitu ei peskuuhtuu, joten tyyntä ei tarvitse vaihtaa vuosittain. Vanha tyyntä hävitetään säkijätteessä.

Visual appearance 2.



Visual appearance 2.



Visual appearance 2.



With which devices would you consider to buy health products? You can choose multiple.

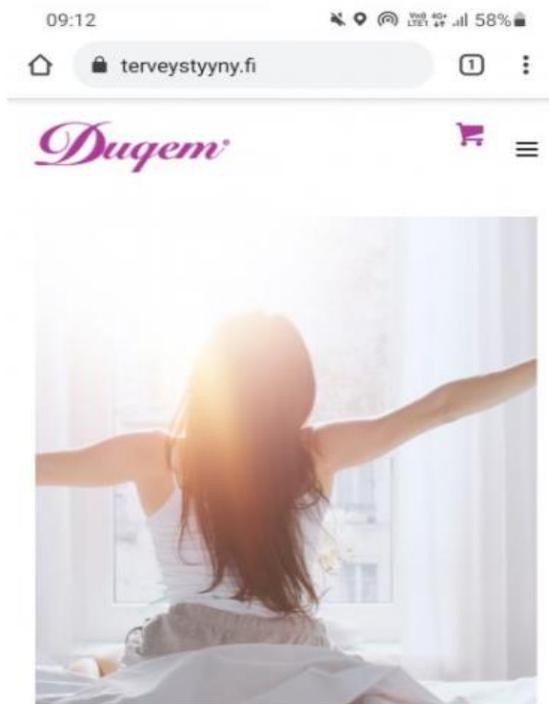
- Laptop/desktop
- Mobile device
- Tablet
- Some other device, which?
- I would not buy with any device, why?

Do you experience more risk when buying health products with devices other than a laptop/desktop? Why?

What factors would you appreciate when buying health products with mobile devices?

Below there are screenshots of two (2) different visual appearances of the website's **mobile version**. Compare the images and answer the questions after the images.

Visual appearance 1.



TERVEYSTYYNLLÄ NUKUT TAKUULLA PAREMMIN

Terveystyyny sopii kaikille käyttäjille sen ainutlaatuisen patentoidun kennorakenteen ansiosta. Tyyny on säädettävä, pestävä ja

Visual appearance 1.

09:12

📶 📶 📶 📶 📶 57%

PESTÄVÄ JA **SÄÄDETTÄVÄ** 🛒



Terveystyynyn tärkeimmät ominaisuudet

- ✓ Sopii kaikille säädettävyytensä ansiosta
- ✓ Anatomisesti muotoiltu: Tukee päätä ja kaularankaa oikealla tavalla
- ✓ Vähentää niska- ja hartiakipuja
- ✓ Hygieniapäällinen pitää tyynyn puhtaana
- ✓ Sopii myös allergikoille
- ✓ Säilyttää muotonsa vuodesta toiseen pesun jälkeenkin
- ✓ Keskimääräinen käyttöikä 5-7 vuotta

Lue lisää

|||

□

<

Visual appearance 2.





Which visual appearance (1 or 2) on a **mobile browser** is more aesthetically pleasing/beautiful? Why?

In your opinion, which visual appearance (1 or 2) on a **mobile browser** is more credible in a case of a website offering health products? Why?



We thank you for your time spent taking this survey.
Your response has been recorded.

