

HANNA WILLMAN-IIVARINEN

Consumer Media Choice

Towards a comprehensive model

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ACADEMIC DISSERTATION

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ABSTRACT

Understanding the deeper psychological decision-making process and the wide range of media choice-related concepts will help media companies develop their products, position them better, and build more attractive brands. Since the costs of media usage are mainly non-monetary, paying attention to these costs has the potential of improving demand and getting more satisfied customers. Understanding the consideration set composition process and the decision-making process will help the companies sharpen their marketing messages and target them better. The purpose of this dissertation is to suggest a comprehensive conceptual model of the consumer decision-making process. Moreover, the aim is to provide tools for consumers and companies in order to make the consumer choice process more understandable and manageable. The main interest is in how the choice is made rather than what is chosen.

The starting point has been media economics, which is a collection of themes involving the media industry, economics, and financial issues of media companies. Since media economics does not cover all the essential topics relevant to the choice-making process, attention in this study was turned to other related theories. Therefore, the approach used is multidisciplinary. Several theoretical frames are examined; for example, economics, communication, consumption studies, decision theory, and also some concepts of philosophy, psychology, sociology, and marketing are discussed. The research is developmental, including theoretical considerations and testing of a small sample of empirical data as an example. The data was collected with web-based questionnaires from 2014–2016. There were 336 respondents from all over Finland.

The suggested comprehensive media choice process discusses the steps of the choice and their interrelations. Using media requires the usage of scarce personal resources such as time and energy; their availability and the required amount of them set the limits and costs of the choices. Nevertheless, there is no conceptualization of how the scarcity of consumer resources affects media choices. This study fulfills these shortcomings and combines the elements into a comprehensive model.

The suggested model widens the traditional way of thinking about consumer choices (for example, with cost-benefit analysis) by adding and empirically examining the pre-mentioned elements of consumer resources and other subconsciously influencing elements, such as brand relationship, subjective costs, decision task, decision goals, and decision strategies. Furthermore, it is proposed how consumers' expectations can function as a missing link between consumer and opportunity set. The suggested model develops an understanding of media choice. The empirical results confirm the relevance of these variables. Many implications and other uses for the model (for example, examining voters' decision-making) are proposed, but the main message is the importance of paying attention to the decision goals and decision strategies since they ultimately dictate what will be chosen.

TIIVISTELMÄ

Kuluttajien mediavalintaprosessin ja siihen liittyvien psykologisten ja osin alitajusten elementtien ymmärtämisestä on hyötyä media-alan yrityksille tuotekehityksessä ja markkinoinnissa. Koska suurin osa median käyttämisen kustannuksista on muita kuin rahallisia kustannuksia, voidaan kysyntää ja asiakastyytyväisyyttä parantaa helposti näitä kustannuksia pienentämällä. Kuluttajien harkintajoukon muodostamisprosessin ymmärtäminen auttaa yrityksiä terävöittämään markkinointiviestintäänsä ja kohdentamaan sen paremmin. Tämän väitöskirjan tavoitteena on käsitteellistää ja mallintaa laaja-alaisesti kuluttajien päätöksentekoprosessia sekä auttaa kuluttajia ja yrityksiä ymmärtämään paremmin kuluttajien päätöksentekoprosessin vaiheita ja eri elementtien roolia päätöksenteossa. Tässä tutkimuksessa pääpaino on valintaprosessin selvittämisessä, eikä niinkään sen selvittämisessä mitä ihmiset valitsevat missäkin tilanteessa.

Lähtökohtana tutkimuksessa oli mediatalouden tutkimusala, mikä on kokoelma mediaan ja media-alan yrityksiin liittyviä teemoja. Koska mediatalouden tutkimusala ei kuitenkaan kata kaikkia kuluttajien valintaprosessin kannalta olennaisia elementtejä, on tässä tutkimuksessa hyödynnetty myös monia muita tieteenaloja. Tutkimuksessa käytetään aiheeseen liittyviä teoreettisia viitekehyksiä ja käsitteistöä taloustieteen, viestinnän, kulutustutkimuksen, päätöksentekoteorian, filosofian, psykologian, sosiologian ja markkinoinnin aloilta. Tutkimuksessa kehitellään ehdotettavaa mallia sekä teorian että pienen esimerkinomaisen empiirisen aineiston pohjalta. Empiirinen aineisto on kerätty verkkopohjaisilla kyselyillä vuosina 2014–2016. Vastaajia oli 336 eri puolilta Suomea.

Väitöskirjassa ehdotettu laaja-alainen kuluttajan medianvalintaprosessin malli käsitteellistää valinnan vaiheita ja niiden välisiä suhteita. Median käyttäminen vaatii niukkojen henkilökohtaisten resurssien, kuten ajan ja energian käyttöä. Johtuen resurssien niukkuudesta niiden käyttäminen aiheuttaa kustannuksia ja rajoittaa mediakäyttöä. Tämä tutkimus mallintaa perusteellisesti, miten kuluttajan ei-rahallisten resurssien niukkuus vaikuttaa hänen mediavalintoihinsa.

Väitöskirjassa ehdotettu malli laajentaa perinteistä ajattelutapaa kuluttajavalinnoista (esimerkiksi kustannus-hyötyanalyysin avulla) lisäämällä ja tarkastelemalla empirian avulla edellä mainittujen kuluttajien niukkojen resurssien lisäksi myös ja muita alitajuisesti vaikuttavia elementtejä, kuten brändisuhteita, subjektiivisia kustannuksia, päätöksentekotehtävää, päätöksentekotavoitteita ja päätöksentekostrategioita. Lisäksi tutkimuksessa tarkastellaan, miten kuluttajien odotukset ja preferenssit voisivat toimia yhdistävinä linkkeinä kuluttajan ja valintamahdollisuuksien joukon välillä. Ehdotettu malli laajentaa ymmärrystä median valintaprosessista. Empiiriset tulokset tukevat teoreettista päättelyä. Tutkimuksessa pohditaan mahdollisuuksia käyttää mallia myös muihin tarkoituksiin (esimerkiksi äänestäjien päätöksenteon tutkimiseen). Tutkimuksen tärkein havainto on kuitenkin se, miten tärkeää on kiinnittää huomiota päätöksentekotavoitteisiin ja -strategioihin, koska lopulta ne määräävät sen mikä vaihtoehto valitaan.

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1 INTRODUCTION: INTERESTING MEDIA CHOICE

Understanding the deeper psychological decision-making process and the wide range of media choice-related concepts will help media companies develop their products, position them better, and build more attractive brands. Since the costs of media usage are mainly non-monetary, paying attention to these costs has the potential of improving demand and getting more satisfied customers. Understanding the consideration set composition process and the decision-making process will help the companies sharpen their marketing messages and target them better. My own interest in consumer media choice began when I was working at the Turun Sanomat newspaper as a research manager. At that time, we made dozens of marketing campaigns every year, and we did a lot of research. I wrote nearly 100 research reports yearly. Despite this magnitude of research data, I wasn't able to answer the fundamental question of how consumers made their subscriptions or reading decisions. When we asked them in group discussions, in-depth interviews, telephone interviews, or questionnaires about why they did not subscribe, the only answers we got (repeatedly) were that the newspaper was too expensive, or they did not have enough time. These answers are quite easy to give, pretty rational, but unfortunately rather uninformative and slightly untruthful. People do have money for many other similar things, and they have quite a lot of time for other things—things they really value. This contradiction bothered me a lot, and the journey towards a comprehensive media choice model began in 2005.

A lot has happened since then. Media technologies surround us and saturate our daily lives. With smartphones, we have access to many media contents anytime and anywhere. Traditionally media products were gathered and edited by professional journalists; nowadays, a media product can be created by one single person who updates a social media profile, blogs, or vlogs. In addition to various social media products, there are also new kinds of media products, for example, Alnawas and Aburub (2016) consider mobile phone applications as media products. The

digitalization of traditional media products brings about new kinds of features. For example, Hayles (2019) argues that electronic literature is transforming the whole idea of literature. Electronic literature differs from digitalized print-based literature since there is hypertext fiction, network fiction, interactive fiction, components of gaming, etc. Digital media has also provided new ways for finding the media content such as recommendation systems and search engines (Webster, 2014). We save time by using a search engine or relying on recommendations. However, the search and recommendations can be biased due to algorithms that use, for example, our previous searches or people we know, as indicators of what we want. It could happen that we live in an information bubble, which is very different from the bubbles of other people, without even noticing it (Lezard et al. 2017; Pariser 2011). The concept of media itself is evolving, and new media products and audiences are created. When the traditional audience was mainly receiving media content, the audience nowadays is taking an active role. Media users create content for social media and share the content produced by others. Furthermore, there are small-scale acts of engagement, such as liking and commenting. These acts are practices of everyday audience agency (Picone et al. 2019). Since companies pay attention to these small acts, they affect the content of media and thus potentially change the way information is produced and distributed (Kleut et al. 2018). Social media connects people in a new way; people form a vast social network. When people are nodes in a social network, the value of their social connections is emphasized. People need to develop networking skills and work on maintaining social connections (Raine & Wellman, 2012). In order to manage, people use media as a tool for promoting their causes and themselves. One can use social media in order to brand oneself (e.g., Deckers and Lacy 2017). All of this means that from an individual perspective, media is more important than ever since it connects us, brands us, and determines our world views.

Traditionally journalists have functioned as gatekeepers, deciding which news is worthy of our attention and what is most important. As Napoli (2019) states, it is somewhat problematic when this agenda-setting power is transferred to algorithms and codes. This environment enables the spreading of fake news (Lazer et al. 2018). It seems that some institutions spread disinformation and do trolling intently and by skillful planning (Berghel & Berleant 2018; Aro 2016). Trolling seems to be used to twist public debate in order to weaken the societies by creating incoherence, distrust of government and officials, and internal tension. The threats to democracy include

all sorts of conspiracy theories and fake news (Runciman 2018). Many things over the centuries have threatened democracy, but this era of social media, fake news, and conspiracy theories threaten democracy in a way that is difficult to solve. According to Runciman (2018), Facebook and Google are also threatening democracy because Google and Facebook have a monopoly on many things. We are dependent on their services, which we need in order to communicate with others and gain information about the world. Furthermore, they affect what we say to each other by influencing what we hear and see. A single state can control neither of these companies. People do much more via Facebook than any political system. States may give security; Facebook gives us the feeling that we are loved. All of this is potentially problematic since we live in an era when, as Rees (2018) states that for the first time, we are in the situation that we as species control the world, which means that we also have the future of earth in our hands. This is a game-changer, and now more than ever before, we need critical widespread media that discuss values, moral imperatives, and critically examines power. Media products such as Facebook or Google, which base the newsfeeds on algorithms of our past behavior, cannot achieve this. The role of the media is much more critical than it has been. In a rather similar vein, Tegmark (2017) is worried about a future society where humans do not intently control technological changes and their impacts; they just happen. He remarks that we live in a time where things that used to be science fiction are becoming a reality. Technology enables life on earth better than ever before, but it also enables destroying life as we know it. It is more important than ever to ponder what kind of future we want and influence it before it is too late. Media has a crucial role in this discussion as a public sphere and as the watchdog of power. This means that as a society, it is vital to understand how people make their media choices. Naturally, it is also essential for media companies who have noticed that predicting audience's media choices has become more and more difficult (Webster 2014). This study aims to make the choice process visible from a multidiscipline perspective. This study provides aid for the companies and the society to better understanding media choice paths.

Since the consumer decision-making process is of the utmost importance for companies, it has been surprising to find out how few practical studies have been written about it. The papers related to **media choices** are typically interested only in a particular medium, usually television (Hawkins et al. 2001; Heeter 1985) or a

particular context—for example, mood (Bryant and Zillman 1984) or situation (Helregel and Weaver 1989; Webster and Wakshlag 1983). However, some more comprehensive models about media choices have been offered. In McQuale's (1997) model, the choice proceeds from a preference to content choice. Weibull (1985) argues that individual situation and social structure affects media orientation, which in turn explains media exposure. Becker and Schoenbach's (1989) model begin by forming motives (gratifications sought) from basic human needs, backgrounds, and social situations. The choice is further affected by available behavior, costs, and expectations. After consuming media products, people evaluate their experiences (gratifications received) and reform their expectations for the next media choice. In other words, motives and expectations affect the choice, which is made from a set of available behaviors. Webster & Phalen (2013, p.45) stress the influence of structural factors in addition to individual factors when examining audience behavior. These structural factors are such as coverage and content options. The context of media usage affects choices. We choose different media products while we are driving a car (usually radio, podcast etc.) or when we are spending time at home with family (television, Netflix, etc.). These contextual elements are embedded in the comprehensive media choice model developed in this study, which is looking at the choice from a chooser's perspective. The availability of products varies, and this variation is included in the concept of the opportunity set. We want different things in different environments, and this is included in motives, preferences, and decision goals. Similar to the Weibull (1985) model, this comprehensive media choice model puts much weight on social context and motives related to social connecting and belonging. Becker and Schoenbach's (1989) model is closest to the suggested comprehensive media choice model. The forming of motives (gratifications sought) is the basic starting point for both models; as well, the idea of costs and the role of expectations is important, along with the realization that not all media products are available all the time. As in Becker and Schoenbach's (1989) model, learning from past experiences is taken into account when building expectations. All these have been combined in addition to several other theoretical developments from other disciplines. Hartman (2009a) has edited a book called "Media choice" in order to gather the latest developments related to media choices, such as mood management theory (Bryant & Zillman 1989), social cognitive theory (LaRose 2009) and theory of planned behavior (Ajzen 1991; Hartman 2009b). The idea of mood management theory has been embedded in the Comprehensive media

choice model as some of the motives. The other two theories are not in conflict with the comprehensive media choice model, although not used in the model as such. The view represented by the social cognitive theory - that the audience can self-reflect, have expectations, learn from their experiences, and can reflect their behavior - is taken for granted in this study. In the comprehensive model of media choice, the underlying idea of human behavior is quite similar to the theory of planned behavior. That is, people follow their intentions (called motives in this study) and freely pursue their goals. Similarly, in both models, people have several options (which may have benefits and costs), and they ponder which one to choose. The difference is that the Comprehensive model of media choice encompasses more mechanisms and variables, such as composing the consideration set, forming expectations, analyzing decision goals, and decision strategies.

Among earlier studies, Howard's (1969) model of consumer's **brand choice** is a complicated chart describing 17 different variables, such as the importance of the purchase, time pressure, personality variables, information search, and motives classification. In his model, the brands have both symbolic and functional values. The model is not empirically tested, but the different impact on outputs (purchase behavior, intentions, attitudes, comprehension, and attention) are hypothesized. The introduced concepts and hypotheses have been used as a checklist in the model created in this study. Former research about marketing does not provide comprehensive models of the decision-making process, opportunity set forming, or comprehensive mechanisms on how the scarcity of consumer recourses affects choices. Even though buying behavior is discussed in many books, most famously in Philip Kotler's many books (ex. Kotler 1980; Kotler & Armstrong 1996; Kotler et al. 1996). However, in Kotler's model, the decision process goes from problem recognition to information search, evaluation, decision-making, and post-purchase evaluation. The model is a beneficial collection of variables that can be thought to influence buying behavior. However, it does not provide comprehensive mechanisms of how they affect behavior, nor do they include deeper psychological interdependencies of the different decision-making goals or strategies.

There are not many **economists**, either, who have explored the consumer's media choice. The noticeable exception is the branch of "program choice" research. It started when Peter Steiner (1952) studied how people choose which radio channels

they want to listen to. Steiner divided programs into program types and presumed that people have distinct and orderly preferences for each. He then assumed that a person has two choices: she/he will listen to their favorite program or no program at all. Steiner's work was soon applied (and extended) to television program choices (Beebe 1977; Klein 1971; Spence-Owen 1977; Noam 1987; Wildman-Owen 1985). Media researchers have criticized the "program choice" research for unrealistic assumptions and not really understanding the nature of media products (Napoli 2003). In addition to program choice literature, there is Mathewson (1972), who relies on highly unrealistic assumptions, and Seufert and Ehrenberg (2007), who were interested in individual media time allocation decisions. They found out that time availability explains part of electronic media usage. The idea of time availability has influenced the conceptualization of available resources used in the comprehensive media choice model discussed and developed in this study.

Neuroscientists are interested in human decision-making, among other topics. **Neuroscience** can explain the biological foundations of cognition, leading to different choices, that is, which parts of the brain are used when making choices (e.g., Radu and McClure 2013). Typically, neurology has examined rewards (good feeling), short term versus long term cognition, discounting future benefits, predictability of specific emotions and responses, and reactions to risks and negative outcomes (Purves et al. 2008; Sanfey 2007). Neuroscientists have also tried to explain media usage motives—in other words, how neural processes support social media usage (see, e.g., Meshi et al. 2015). Social media is typically used due to social motives, such as connecting with others, managing one's reputation, getting positive feedback, etc. Neural systems that support many forms of social cognition can be studied by observing what happens in brains when people use social media (Meshi et al. 2015). People's motives and expectations find support in behavioral neuroscience (LaRose 2009). According to Sherman et al. (2016), people are more likely to like such pictures on Instagram that others have liked already. Using fMRI, they have shown that this behavior was associated with greater activity in brain areas involved in reward processing, social cognition, imitation, and attention. Neuroscience provides much detailed information about choices, but it does not provide a comprehensive explanation of how people make decisions.

One academic branch that slightly resembles consumer decision-making is that of **voter decision-making**. Despite some apparent differences, the decision process is somewhat similar. Actually, Himmelweit et al. (1985) propose that the same principles hold in voting as in purchasing consumer goods; the voter searches for the best candidate, or product, similarly. Lau and Redlawsk (2006) apply behavioral decision theory to voter decision-making. Information gathering and processing are crucial parts of their model. Some of their ideas are referred to later on.

The former research does not provide comprehensive models of the consumer choice process, not to mention media choices; they do not include the comprehensive decision-making process, nor do they describe how the consideration set is composed. Additionally, former research does not explain how the scarcity of resources is related to consumer's media choices. Using media requires the usage of scarce personal resources such as time and energy. Their availability and the required amount of them set the limits and costs of the choices. However, there is no conceptualization of how the decision goals and strategies affect their media choices. This study attempts to fulfill these shortcomings and combines the elements into a comprehensive model.

The purpose of this dissertation is to build a comprehensive model of the consumer decision-making process and participate in scientific discussion with that model. Additionally, the aim is to provide media companies tools for a better understanding of consumer's media choice process and the factors influencing it in order to make the choice process more manageable. The research question, therefore, has two parts: what are the relevant variables affecting the consumer's media choices, and how do those variables affect it? The main interest is in how the choice is made rather than what is chosen. In this study, the word model gathers a set of perspectives, combines unrelated elements, and builds connections. That is, a model (in this study) is a construction of concepts related to each other, which are organized into a choice process. The model is a suggestion to be further developed in scientific discussion. The research is constructive and developmental; it is built piece by piece on top of former research. The research includes theoretical considerations and testing of a small sample of empirical data with correlation analysis as an example. The data was collected with web-based questionnaires from 2014–2016. There were

336 respondents from all over Finland. The respondents' ages varied from 15–74, and they represent Finnish people evenly.

The approach used is multidisciplinary. At first, several theoretical frames related to consumer's media choices are discussed: for example, economics, communication, and decision theory. The starting point has been **media economics** (for review, Picard 1989). This dissertation process started at Tampere University during the period of media leadership lead by professor Gregory Ferrell Lowe (ex. Lowe 2005). Typical subjects in media economics are studies about media administration and policy (Coeffey 2019). Media economics is a collection of issues mainly focused on the firms in producing and distributing the content, various components of the media industry, media ownership, or institutional behavior (Napoli 2003, p.6-7). Recently the interest has been on the development of technology and its impact on media economics research (Liu & Hsu 2019). Additionally, new issues in media economics are competition for audiences, audience engagement managing, and audience measurement (Arrese et al. 2019). However, the existing media economics research does not cover all the essential topics relevant to the choice-making process; attention in this study was turned to other related theories. **Uses and gratifications** theory examines media usage motives, gratifications sought and obtained from media usage (Krcmar & Strizhakova, 2009). The main idea is that users choose the content in order to gratify their needs. While very useful when examining preferences and motives, the uses and gratifications theory still lacks some crucial elements regarding the choice process. Therefore, **consumer theory** (economics) and **decision theory** are also needed to form a basic ground for the study by giving justification for several variables and the structure of the choice process. In addition to previously mentioned theories, several other theories have been used to provide a more comprehensive model. For example, mood management theory (Zillman), cost of thinking (Shugan), prospect theory (Kahneman and Tversky), the theory of decision goals and heuristics (Bettman), theory of habits (Verplanken; Wood), the theory of stuff and identity (Gosling). Donsbach (2009) argues that media studies have a very close connection to psychology. He writes that understanding psychology is essential when studying audience formation, group dynamics, mood management by media choices, and selective exposure to media content. This study uses applied psychology, especially in the form of consumption studies and decision-making studies. This kind of multidisciplinary approach to audience formation is not

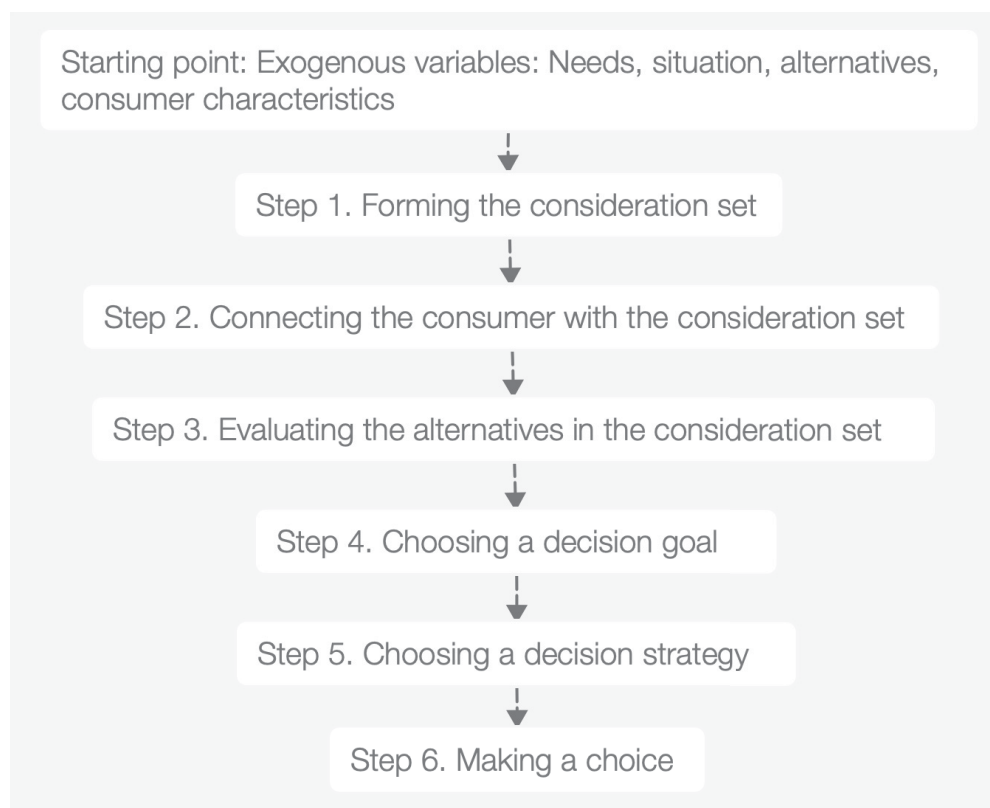
unheard of. For example, Webster (2014) combines economics, marketing research, psychology, political research, social network research, communication research, and cultural studies in his book about audience formation and attention marketplaces. Media studies and media economics are not sufficient: in this rapidly evolving digital world, we need concepts and ideas from other sciences. We cannot use only one theory if we want to aim for a comprehensive understanding. The challenges related to the multidisciplinary approach are examined in chapter 9.2

A simple step-by-step process displayed in Figure 1 forms the suggestion for a comprehensive media choice model. The process is based on the author's preliminary idea that four main groups of variables are considered exogenous (not dependent on other variables in the model): needs, situations, consumer characteristics, and alternatives set. These variables might be slightly related to each other (for example, needs can depend on situations and consumer characteristics), but these interrelationships are irrelevant in the model since the exogenous variables are jointly considered as frames for the choice.

It is presumed that the consumer's choice process has six larger steps. In the first step, consumers form the consideration set. The consideration set is formed from the opportunity set, which depends on needs, situations, and existing alternatives. In the second step, consumers connect with the consideration set by forming expectations about the alternatives based on their experiences and information. Expectations and preferences link the consumers to the alternatives in the set. While expectations are a kind of neutral link between the consumer and the alternatives, preferences add emotions to the connection. Expectations describe the belief that the alternatives will be able to gratify the needs, and preferences describe the desirability of different features. Since the consumer is now linked to the alternatives, it is possible to start to evaluate their benefits and costs. The third step is about evaluating the benefits and costs of each alternative. Benefits are a combination of gratified needs and benefits of the relationship consumers have with the products (brand relationship and habitual relationship). Unfortunately, the alternatives have costs in addition to benefits. These costs arise due to scarce resources (time, money, energy, and attention), psychological or social discomfort, or particular circumstances. In the fourth step, consumers choose a decision goal. The fifth step is about choosing a decision strategy. The choice of decision strategy is essential

since it determines what will be chosen based on the information gained in previous phases. The choice itself (step six) comes rather automatically in consequence of the previous steps. The exception to this six-step model is a habitual choice. When making habitual choices, the consumer's first choice is between continuing the habitual behavior or breaking the habit. If one chooses to act habitually, the choice is thus made, but if one chooses to break the habit, the choice follows the steps described in Figure 1.

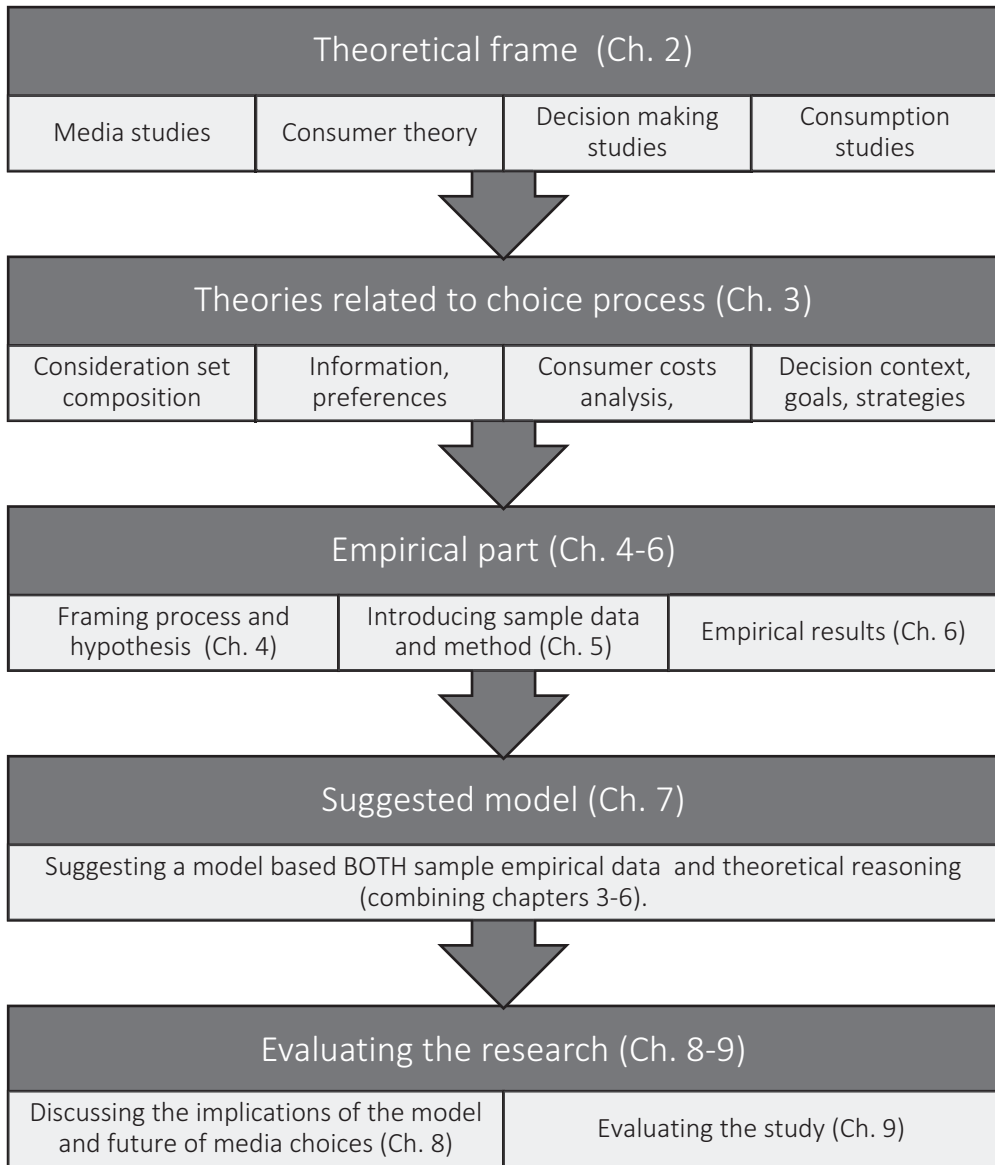
Figure 1. Illustration of presumed consumer's media choice process



1.1 The structure of the study

Chapter 2 introduces the main theories (consumer theory, media studies, consumption studies, decision theory) behind the model and sets the groundings for the model. Chapter 3 introduces the theories related to the choice process. These theories include such as consideration set composition, information gathering, preferences forming, consumer costs, decision-making context, decision-making goals, and strategies. After this theoretical section, attention is turned into empirical sample testing. Chapter 4 provides a framework for the choice process and presents some hypothetical interrelations of variables. Chapter 5 introduces the data and method, and Chapter 6 empirical results. The suggested comprehensive model for consumers' media choice is presented in Chapter 7. The model is based partly on the empirical sample results and partly theoretical reasoning presented in chapter 4 (which is based on previous chapters). In other words, the suggested model combines findings from chapters 2-6. Chapters 8 and 9 evaluate the research. In Chapter 8, the theoretical and practical implications of the study are presented, and the future of consumers' media choices are examined. Finally, in Chapter 9, the research is evaluated from the perspectives of philosophy of science, cross-disciplinarity, the choice of the empirical approach. The whole model of consumer media choice is based on the assumption of causality. The aim is to find a way to explain and predict the choice and propose possibilities to intervene with the process. The problems with causality are also discussed in chapter 9. Figure 2 illustrates how the study proceeds.

Figure 2. The structure of the thesis



2 CONSUMER'S MEDIA CHOICE – FOUNDINGS

2.1 Consumers as active audiences

People have many different roles when using media products. Sometimes they are **consumers** who buy an item—like any other item—and use it for a certain purpose. Sometimes a bunch of people who are reading the same newspapers or watching the same television show is called **an audience**. Denis McQuail (1997) says that in everyday language, we use the term audience without difficulty to describe *“readers of, viewers of, listeners to one or other media channel or of this or that type of performance.”* However, the term is more complicated in the academic world because the audience comprises so many different roles. Carpentier et al. (2014) argue that audiencehood is shaped by the social and technological environment and cannot be separated from these. Audiencehood is different in different circumstances. For example, online brand communities are important audiences for companies (Balducci et al. 2015). Picard (2002) argues that the concepts of audience and consumers are often used interchangeably, but a distinction is needed because the concepts differ in how the activities are measured and understood. Picard says that members of the audience may be consumers if they pay for the product. He also states that payment does not have to be monetary; time is a payment as well. One could argue that since we always pay for media use (money, time, or effort), we are always consumers—i.e., the audience is a group of consumers. The marketing departments of media companies call people who use media products **customers**. Sometimes the role of media and customers is intertwined. Customers participate in media and create their own content, distribute marketing material, and give feedback for product development (Malmelin and Villi 2017). The activity and the contents produced by the audience are commodities, which the media companies can sell (Fuchs 2010). When an audience (or, to be more precise, an audience's time) is sold to the advertisers by a media company, the audience can be called **a product** (Napoli 2016). The audience

also has an essential role as a data provider (Webster 2014). When companies like Google and Facebook collect data and monitor how people behave, they use this information to create even more tempting media content and more targeted search results, and in consequence, they can sell their accurately targeted audiences to the advertisers. There is a co-produced landscape, where the roles of media and audience are constantly interchanging (Noguera et al. 2014). An audience is seldom just a receiver; it is a hybrid sender-receiver (Couldry 2009). Here is how Carpentier (2012) clarifies the roles: *“if you are not paying for it, you are not the customer, you are the product”*. For example, the news recommendation engines are based on audience behavior creating content to be utilized by the companies (Thorson 2008). Noguera et al. (2014) argue that media companies need to rethink their business strategy in the case where participation and audience contribution are products.

As Carpentier et al. (2014) argue, it is vital to notice the change in the empowerment and power of the audience. The audience has more power to communicate and **participate** than ever before (Kotilainen and Rantala, 2009; Jenkins et al. 2018). Villi and Matikainen (2016) argue that audience participation in social media is mainly connecting. Another change is that media technologies surround us and saturate our everyday lives. Some propose that we live in a mediatized society (Hepp 2010; Livingstone 2009; Strömbäck 2008). According to Deuze (2009), the media becomes such a natural part of our life that it even becomes invisible. It is seamlessly integrated into everyday life, and, logically, people participate actively. According to Wasko and Mosco (1992), there are two different forms of media participation: namely, in the media and through the media. They argue that participation through the media means being an audience member in the traditional sense, whereas participation in the media means that one contributes to the content of media. Spyridou (2018) has also examined different forms of audience participation. She concludes that the audience is sometimes (or partly) lazy and sometimes (or partly) active.

In social media, people actually create the contents of the media—for example, Wikipedia, Facebook, Flickr, etc. These people are **producers** (Castells, 2013; Napoli, 2016; Smith and Kollock, 1999). People may blog, contribute to discussion groups, share content, and tweet. According to the 90-9-1 rule (1% write, 9% comment, and 90% lurk), this kind of creative participation is not so common. Sometimes ordinary people can produce content for the television news by cell phone videos or in newspaper stories by hints or pictures. Furthermore, ordinary

people can take pictures of celebrities and send them to gossip magazines. When internet users are not just watching or reading the content online but producing their own content, Bruns (2007) calls them producers (in reference to a mixture of consumers and producers, which cannot be separated). A related term, prosumption, means that people are both producers and consumers (see Fuchs 2011; O'Reilly 2007; Ritzer and Dean 2012; Song 2010).

In addition to user-generated content, the audience also takes an active part in distributing the content (Jenkins et al. 2018; Olmstead et al. 2011; Villi et al. 2016). Villi (2011) and Matikainen and Villi (2015) argue that one of the most important forms of audience participation is the distribution of media content by links, likes, and comments. The audience's role as a **distributor** is not new since people have shared newspaper clippings for ages; they have told each other about movies they have seen and books they have read. What is new is the ease of sharing the content. Napoli (2009) points out that audiences can have their own audiences when they share and comment on media content. There are small-scale acts of engagement, such as liking and commenting. These acts are practices of everyday audience agency (Picone et al. 2019). Since companies pay attention to these small acts, they affect the content of media and thus potentially change the way information is produced and distributed (Kleut et al. 2018).

Some people argue, however, that audience members are **citizens**, not consumers. We could call audiences citizens when they are watching elections or political debates or when they gain knowledge of how to live in society and what to think about political issues. In other words, audience members are citizens when they consume media in the role of citizens. O'Neill et al. (2013) argue that audiences for public services broadcasting can be identified as citizens rather than consumers. However, there are other ways a person can use media in the role of citizen. For example, the study of activists' media usage has shed new light on possible ways to use media. According to Gerbaudo (2012), activists are very skilled media users. They use different media products as tools (**media users**). They use Facebook intentionally to create an emotional space, to set the scene and date for action. Twitter is used for logistics, organizing events, and monitoring the mainstream media. The activists use YouTube to show the world what is going on (for example, police brutality), providing instant evidence and justifying their cause. Bennett and Segerberg (2012) note also that activists use media for sharing their ideas (i.e., marketing their cause) and for the formation of collective identities.

It is quite clear that several of these roles coexist. In this dissertation, people are called consumers or audiences when they are making decisions about what media products to use, even though using can be participating, producing, or distributing. Picone (2017) fancies the term “user,” but it is not suitable to describe people who not yet users, just about to make their decision, that is, planning to be users or potential users. However, in this vein, the media usage term is widely used in this study. The terms audience or consumers are used quite interchangeably in this study.

In this study, people make active choices all along: They choose to subscribe to papers, order movies, read netpapers, update Facebook, buy computers, buy internet access. The choices are made even in the seemingly passive case when we wander in front of a television that is on, because we decide if we want to watch it or not, for how long we will be watching, the context of use, the attitude toward usage, and the level of attention given. In accordance, Levy and Windahl (1984) have argued that a television viewer can be active to a program before, during, and after watching it. The activity is in the selection, commitment, or the intention to use the program for social or psychological purposes. Note the view of active audience theory in Blumler (1979) and Levy and Windahl (1984). Under that view, the audience is not a passive victim exposed to media content, but an active chooser. This is important to mention since there is a vast amount of research in the category of reception studies, based on the idea that the audience is a victim that should be protected from (certain) media content or excesses of media usage. Externalities are unintended outcomes, side effects, of media usage. In the model, the audience is perceived as an active chooser, even though some steps of the choice process can be taken quite automatically without conscious deliberation.

2.2 The choice as a cognitive process

Decision theory is introduced first since it provides a structure for the model. Consumer theory provides some useful concepts. Uses and gratifications theory and other media studies give information about media motives and usage. Decision theory is used in many disciplines (economics, psychology, philosophy, mathematics, statistics, game theory). All these disciplines have naturally contributed to this field. The result is a vast amount of excellent research, but it is very difficult to see the forest for the trees.

The writers about choice theories seem basically to agree on the steps in the choice process (Bettman et al. 1998; Tversky and Kahneman 1981). First, there is a need for something; in this paper, these needs are sometimes called motives. The terms “needs” and “motives” are used reciprocally. After the need is established, there is some set of alternatives, which is called an opportunity set. Typically, opportunity sets are too large to be examined, so people form a consideration set of more limited size instead. After evaluating the benefits and costs of the alternatives, a choice needs to be made. There are several different strategies, which can be used to make a choice. Due to limited cognitive abilities and the desire to lower decision-making costs, people usually use some decision-making strategies when making decisions. These strategies are called heuristics. In addition to heuristic decisions, people may decide intuitively or nearly automatically—that is, habitually (Bettman et al. 1998; Holland et al. 2006; Kahneman and Klein 2009; Klein 1998). People use a lot of heuristic rules when they make decisions. Instead of comparing everything (rational choice) or just grabbing intuitively one alternative, we may take the one that is cheapest, tastiest, or coolest. When we make a choice based on one superior attribute, we use a heuristic rule. Researchers in the decision-making field agree on the existence of heuristics, but they have quite different views on the role of heuristics in our lives. Some of these heuristics are used in consideration set composition (see section 3.1.2) and some in decision-making (section 3.3.3).

Simon (1955) argues that limited human capacity and imperfect information make people accept good enough solutions instead of seeking an optimal solution. Payne, Bettman, and Johnson (1993) represent a different view. They argue that people adapt their decision-making strategy to the decision task at hand. In other words, they use adaptive heuristics. Tversky and Kahneman (1973, 1974) had yet another very different view on heuristics. They concentrated on showing (firstly) that people use heuristics in their decision-making and (secondly) that those heuristics lead to human mistakes (biases). In other words, the usage of heuristics is problematic because it leads to systematic errors compared to rational decision-making. According to Gigerenzer and Todd (1999a), this is called the “heuristics-and-biases” approach. While Gigerenzer and Todd mainly agree with the findings of Kahneman and Tversky, they have a totally different view on the goodness of the heuristics. While Kahneman and Tversky point out problems and biases, Gigerenzer and Todd embrace the ingeniousness of heuristics. They say that heuristics are fast and frugal.

These different views of heuristics have been combined in this study. With deeper thought, there seems to be no contradiction, even though the views are different; the interest is in the usage of heuristics, not the accuracy of them. There are different choice situations and different people making choices. This study has adopted the idea that the choices of decision strategies and heuristics are adaptive and depend on personal preferences (section 3.2.2) as well as the decision context (more in section 3.3.1). The model is based on the idea of choosing one's decision goals and decision strategies.

Shugan (1980) wrote an article in which he compared different decision-making strategies. The strategies were compared on the basis of the costs of usage to the decision-maker. The costs in Shugan's model were the effort required and the number of mistakes. He found that a reduction in thinking costs often leads to a reduction in benefits, due to a growing number of mistakes. This seems quite a logical result. Later on, Payne et al. (1996) and Bettman et al. (1998) compared decision-making strategies on accuracy vs. effort framework. The basic idea is that each decision strategy can be characterized by its accuracy (level of mistakes) and the effort it requires. Decision-makers select strategies based on a compromise between the desire to make an accurate decision and the desire to minimize cognitive effort. The idea of an effort-accuracy framework led Bettman et al. (1998) to note that there can be different decision-making goals. Sometimes people prefer accurate decisions, some easy, fast, justifiable, etc. Decision goals are extremely important because they dictate (partly) the choice of decision strategies, which in turn affects what is chosen. These decision goals and choice-making strategies are introduced in detail in section 3.3.2.

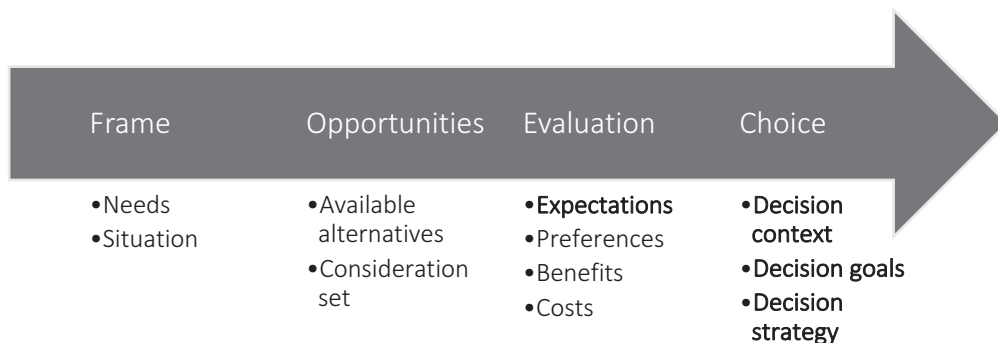
One of the cornerstones of decision studies is prospect theory (1981), developed by Daniel Kahneman and Amos Tversky. In short, prospect theory claims that people react to losses and gains asymmetrically; a loss is more devastating than an equal gain is gratifying. The implications of Prospect Theory for decision-making are interesting; first people frame the alternatives as gains or losses (framing effect) and then judge the possible outcomes as certain or uncertain (certainty effect). Then they choose (other things being equal) the certain alternative when facing possible gain and the uncertain alternative when facing possible loss. Prospect theory was not applicable to the model as such, since media choices are not very risky or uncertain. But the idea has been used in the model—namely, the idea that situations frame the choices (framing effect), though not dividing them into gains or losses. There are

numerous possible situations of media usage. Since the interest is in the choice process, not what is chosen, only decision maker-related situations are considered in this study, particularly the resources in terms of time, energy, attention, and mood. The media choices are mainly made in uncertain circumstances. When we decide to watch a movie, we rarely know exactly what kind of movie it is. We will not know beforehand how enjoyable the event of reading the morning paper will be. Therefore, the choices are based on expectations rather than knowledge (certainty effect).

2.2.1 Decision theory and the proposed model

Figure 3 illustrates how decision theory is used in the model. Needs, situations, consumer characteristics, and alternatives are seen as frames for the choice. This was inspired by prospect theory, which showed that framing the choice was extremely relevant. Prospect theory also showed how important the expectations (certainty effect) are for the choices. The studies of heuristics and decision-making strategies are used in the model as well as effort-accuracy framework-based decision-making goals. The decision-making process described in this chapter provides the basic structure for the suggested model of consumer media choice.

Figure 3. How Decision theory relates to the suggested comprehensive media choice model



2.3 Useful choice-related concepts of consumer theory

Consumer theory is part of economics. It is a theory of the world where all the pieces fit together elegantly and are described precisely. Economics has been claimed to be a language of its own (for example, Halko 2008; Vartiainen 2004). The main benefits of using an economic theory are the exact definitions of variables and processes. Economics is a logical way of thinking, organizing, and describing actions and their consequences. The problem with economics in its classical form is that it is based on rather unrealistic assumptions (perfect information, certainty, ordered preferences, etc.) It cannot really be used when modeling actual people's choices, which happen in a world of uncertain preferences, imperfect information, limited time, thinking costs, and other cognitive limits. In order to overcome this problem, Simon (1955) introduced the "Bounded rationality" – concept to describe the situation when people act rationally within certain limits (which are such as limited information, limited cognitive abilities, limited memory). Bounded rationality introduces a more realistic, alternative way to examine people's decision making than mathematical modeling widely used in economics. In this study, Simon's view is taken for granted. In other words, this study has somewhat adopted a behavioral economics view on consumer theory (for example, Rabin 1998; Frey 1994; Goldstein 2002; Vihanto 2012). To put it in a wider perspective, this means leaving the firm ground of neoclassical economics and stepping into a world of imperfections, uncertainties, and anomalies. Behavioral economics combines economics with psychology.

Consumer theory describes the decisions consumers make in order to consume something. Consumption does not necessarily mean only buying items with money and consuming them. Consumer theory and terminology can be applied to all the choices people make. For example, Gary S. Becker (Economics Nobel laureate 1992) has applied economics to various non-economic choices, mainly in education, family, and households (marriage, children, dividing tasks), crime, and discrimination. In consumer theory, consumers are expected to **maximize their utility**. Utility is something that makes one happy or satisfied. Utility can be monetary, but it entails many other things—for example, self-respect, social respect, satisfaction, conscience, others' well-being, etc. Maximizing utility means that a person tries to gain as much utility (satisfaction) as she/he can.

It is assumed that consumers **know their preferences**. Knowing one's preferences means that the consumers know what they want, which features they prefer to other features. In the suggested comprehensive media choice model, this knowledge does not have to be complete; vague ideas are enough. But there has to be some idea of preferences; otherwise the choices would be completely random and impossible to model or predict. The idea of preferences is relevant in the model, in recognizing which motives are more important than others and what is most important when making a decision (choosing a decision goal). Preferences will be discussed in detail in section 3.2.2.

There are two more aspects of consumer theory that are relevant in the model, namely, **scarcity of resources** and imperfectness of information. Due to scarce resources, we cannot use all media products available. In addition to the lack of potential interest, we do not have enough money, time, or energy. The scarcity of resources varies a lot from person to person and situation to situation. The concept of scarce resources is used in the comprehensive media choice model when forming consideration set, evaluating costs of media use, and choosing decision goal and strategy.

There are two main information-related theoretical settings in economics. Perfect information is the case when everyone has complete information on all relevant aspects of a matter. This is rather a case for theoretical considerations only since it does not apply in the real world. Most commonly, the case is that we have **imperfect information**. Since we are not in the world of perfect information, we actually cannot maximize our "real" utility, but we do maximize the expected utility. Due to imperfect information, there are also such phenomena as learning from past experiences, regret, and searching costs. The imperfect information concept will be used in section 7.4 when forming expectations.

Economists have applied the economic models of media choices when they have examined the television and radio program choices. This "Program choice"-research started when Steiner (1952) studied how people choose which radio channels they want to listen to. The model itself was rather simple. According to Owen & Wildman (1992), Steiner divided programs into program types and presumed that people have distinct and orderly preferences for each. He then assumed that a person has two choices: she/he will listen to their favorite program or no program at all. Furthermore, he assumed that the programs of the same type are perfect substitutes

(people like them as much). The idea was primarily to help radio channels to organize the programs in the channels optimally. Steiner's work was soon applied (and extended) to television program choices. Beebe's (1977) model expands Steiner's model by allowing people to have second and third choices in addition to non-viewing. These models are based on the idea that preferences determine which channels people choose (*ceteris paribus*) and that people can choose the content that will fit their preferences. The models are limited since they do not pay attention to the different intensities of preferences. Owen & Wildman (1992, p101) argue that even though the same program might be the first choice for two different viewers, the meaning of "the first choice" may vary. While the first viewer has waited for this specific program for a long time, the other viewer might just have picked the least objectionable option (Klein 1971). Spence-Owen (1977) model overcomes this problem by the concept of willingness-to-pay as a measure of preference intensity. Their model examines the benefits (willingness to pay) and the costs of program choices. After this, the program choice models have been expanded to include government interventions Noam (1987), advertising (Wildman-Owen 1985), and program quality (Waterman 1992). Media researchers have criticized the "program choice" research, for example, Napoli (2003, p.7) writes: *"Perhaps the best example of this disconnect between media economics and audience research is the extensive "program choice" literature developed primarily by media economists"*. This research has attempted to model the optimal to organize the television and radio programs under various constraints. It is assumed that *"audiences will distribute themselves across available content options"* (Napoli 2003, p.7). Since these theoretical models have very unrealistic assumptions, they are not very useful in practice (Napoli 2003). Napoli (2003) states that this is an example of the lack of a multidisciplinary approach; the economists' program choice models pay no attention at all on what is already known about audience behavior. Napoli (2003) argues that combining the models with media research results would have made them more useful. In this study, the concepts of economics are used instead of economic models.

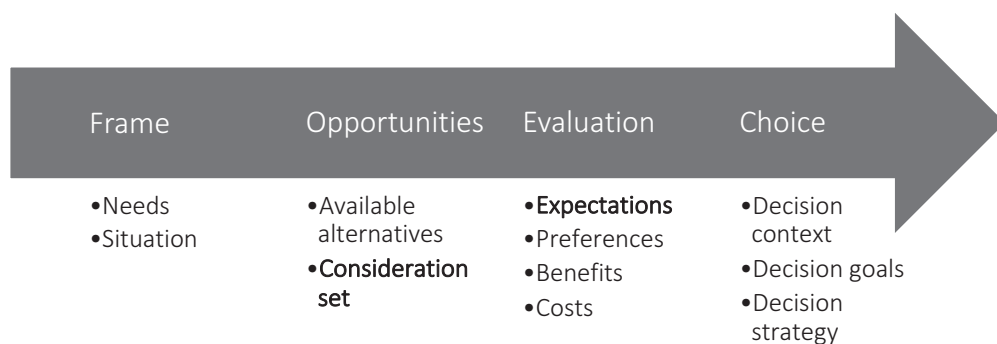
2.3.1 Consumer theory and the proposed model

When consumer theory concepts are added to decision theory, it makes consumer behavior more understandable by providing the aim (utility maximization) and the way (rational behavior). Utility maximizing and rationality are kind of philosophical

principles. If consumers were not rational or did not try to maximize their utility, it would be quite pointless to model any kind of behavior.

Consumer theory provides the basic philosophy for consumer media choice behavior. Figure 4 illustrates how consumer theory is linked to the model in a more detailed way. The concept of scarce resources is directly used when composing the consideration set. The problem of imperfect information is used when expectations are formed.

Figure 4. How consumer theory relates to the suggested comprehensive media choice model



2.4 Studies of media usage and audience behavior

2.4.1 Uses and gratifications studies

Uses and gratifications theory belongs to the mass communication field. Actually, many people argue that it could not be called a theory, but a bundle of theories (Blumler 1979; Katz et al. 1973; O’Guinn et al. 1991). However, there are some underlying similarities, and, for practical purposes, it is called a theory in this study. Uses and gratifications theory is interested in people’s media usage reasons, functions, and gratifications. The main idea is that the audience actively searches for the best media product which could satisfy (gratify) their needs. The needs (which are called sometimes called motives in this study, because motives are frequently used term in most references) arise from social situations and personal psychological characteristics. People have certain expectations of how different media products will gratify their needs. The audience chooses the product they think will gratify their

needs most successfully and consumes it. Afterward the audience evaluates the choice (gratification gained or not) and uses that information on the next media choice.

The choice process in uses and gratifications theory resembles a little bit the choice process described in decision theory (section 2.2). There are some striking differences; Uses and gratifications theory seems to be a circular, ongoing decision-making process, while in the decision theory, the process is more linear. **Expectations of media content** are an essential part of Uses and gratifications research. We have expectations about how well different media products would gratify our needs. Palmgreen and Rayburn (1985) have described this process cleverly. They say that first, we have gratifications sought, which leads to media usage, which leads to perceived gratifications and re-evaluation, before the next media choice. It seems people are rather good at choosing media content since the gratifications sought and those obtained correlate according to several studies (Levy and Windahl 1984; McLeod et al. 1982). Expectations based on information and experiences are discussed separately in section 7.4, and especially the idea of circular progressive preferences has been used in the model.

Media usage is based on needs. The needs and functions of media have been a significant part of Uses and gratifications research. There are several classifications of needs. One of the most cited categorizations is McQuail, Blumler, and Brown (1972), who have suggested that needs can be divided into four main categories: diversion, personal relationships, personal identity or individual psychology, and surveillance. Greenberg's (1974) classification of needs is also widely used. His list is based on a broad survey of schoolchildren. He found the following groups of needs: recreation, knowledge, something to talk about, habit, pastime, escape. More lists of media usage needs can be found in these much-cited Uses and gratifications studies: Blumler, Brown, McQuail (1970), Katz, Blumler and Gurewitsch (1974), Herzog (1944), McQuail, Blumler and Brown (1972), Riley and Riley (1951), Katz, Gurewitsch, and Haas (1973, p. 166–167), Blumler and Katz (1974), and Severin and Tankard (1997). Even though these “old” needs are still relevant, the media world has changed a lot since the 1990s. The major change is that media technologies surround us, and the audience has new roles (as participants, producers, distributors, etc.). Uses and gratifications approach has proven especially useful, for example, when studying why people use social media (Whiting & Williams 2013). Applying uses and gratifications approach Chen (2011) discovered that active Twitter usage

gratifies the need to connect and befriend with others, and Quan-Haase and Young (2010) found that there are different motivations for using instant messaging or Facebook. There are many new needs for media usage. The media usage needs are discussed in detail later in this chapter.

There are different sources of gratification. According to Katz, Blumler and Gurewitsch (1974), several studies have shown that audience gratifications can be derived from at least three different sources: media content, exposure to the media per se, and the social context in which the media is used. Nowadays this view needs to be widened due to the audience's new roles (section 2.1). One can gain gratification through participating in a media event (regardless of the of the present company or the content itself). Self-expression and signaling (via producing and distributing) are routes to satisfaction as well. Schramm, Lyle and Parker (1961) say that gratifications can further be divided into immediate and deferred. The complexity of needs has been used when identifying needs of media usage. Special thought has been placed upon short run and long run motives; the idea that content, context, or exposure itself can be the primary motive has been accepted.

A somewhat similar idea is that **people can use same media content to different purposes** (O'Guinn et al. 1991; Severin and Tankard 1987). There seems to be common agreement on the fact, that nearly any content can satisfy nearly any need (Katz et al. 1973; Rosengren and Windahl 1972). There are some very illuminating empirical research results that show how creatively people use media in order to satisfy their needs. Additionally, the same needs could be satisfied with several other non-media related actions. For example, the need to relax might be solved by television, chat, a book, a walk in nature, exercise, or a hot bath.

Webster & Phalen (2013) argue that mass behavior is best explained by reference to the structural factors. That is, **media structures** shape the mass audience. This argument is based mainly on structural factors that have been noticed to influence television viewing. Klein (1971) argues that people turn their tv sets on whenever possible and choose the least objectionable program. This two-staged selection process (first on or off, then the channel choice) has been used in many models of Program choice (for example, Beebe 1977; Owen & Wildman 1992). Additionally, inheritance effects are a few well-documented patterns of cumulative structural audience behavior. The term refers to a situation when the programs that are scheduled back-to-back on the same channel and the audience from the former

program stays in the channel to watch the following program (Webster & Phalen 2013, p.67-78). Structures are also relevant in other media products than just television. Digital media has also provided new structures such as recommendation systems and search engines (Webster 2014). We save time by using a search engine. However, the search can be biased due to algorithms that use our previous search as an indicator of what we want. Halavais (2017) examines how the search engine algorithms are affecting the society and the biases it causes to our knowledge, the way we organize our thoughts and social spaces. Recommendation systems give us lists of most read books, seen movies, bought items, etc. They also tell what “people like you have bought.” The idea behind all this is the wisdom of crowds. Personalized recommendations shape what we will find useful or interesting. Nevertheless, as Webster (2014, p. 75-96) argues, the item that people have clicked or bought does not mean it is good or interesting for us. The structures are significant in audience behavior due to the technical limitations of chosen platforms. Choosing to enter Apple’s I-world opens great possibilities and closes some doors to other platforms. When you buy your first iMac, you soon discover that you need to have an iPhone too, and it would be useful if the whole family would also have iMacs and iPhones since then you can use useful apps together. The platforms we use to change the way we see the world and the ways how societies function (Srnicek 2017; van Dijck et al. 2018). The platforms function as limiting media structures when they are closed systems (Plantin 2018). Even though these structures are not examined in this study as such, they are implicitly present when people form preferences (can be based on recommendations) or form their opportunity sets (can be influenced by search engines or limited by platforms).

The new media products and technology are changing the way we behave. Hight (2014) deliberates the often-neglected role software has played and is playing in changing the way we think and behave. Since nearly everybody uses software, the effects are tremendous. Software platforms and applications are not neutral tools (Truscello 2003); neither is media technology. According to Bucher (2012), the technological features of Facebook are changing the way we understand friendship. In social media we need to make dichotomic choices of whom to accept or invite as friends. YouTube transforms the idea of who is saying what to whom (Strangelove 2010); content is from ordinary people to their peers. The algorithms used by Facebook, Amazon, YouTube, iTunes, Netflix, etc. recommend content, books, friends, based on previous choices and preferences and affect our behavior (Hight 2014). See more about the effects and philosophy of software in Berry (2011, 2012).

There is a vast research area on media effects (ex. Bryant & Zillman 1989; Bryant & Zillman & Oliver 2002). The major part of this literature concentrates on negative effects. These can be such as physical effects (for example, obesity and health problems of media heavy users) or social effects (if media replaces the company of others). Media usage can have attitude effects (for example, negative body image, stereotypes, etc.). If media usage affects our attitudes, it is only logical that it affects our behavior as well (behavioral effects). Violence, eating disorder, and excess consumption has been connected to certain types of media content. It has been noticed that using social media can create negative feelings due to social comparison when using Facebook (Lin et al. 2017). Furthermore, it has been shown that the more time people use on Facebook, the more negative is their mood afterward (Sagioblou & Greitemeyer 2014). Most media effects are unanticipated and unnoticed by media users and thus cannot have any impact on the choices they make. This is why media effects research is not included in this study.

2.4.2 Media-using habits

Many media choices are strongly dependent on habits. For example, news consumption has been found to be very habit dependent (Arvind and LaRose 2006), as has television watching (Rosenstein and Grant 1997). Many people use Facebook habitually (Giannakos et al. 2013). But what exactly are habits? According to Verplanken and Wood (2006), Verplanken and Faes (1999), Verplanken and Orbell (2003), Wood and Neal (2009), and Holland et al. (2006), habits are nearly automatic behaviors that occur repeatedly in consistent circumstances. Habits are strongly dependent on environmental cues, such as places, times of day, presence of particular people, preceding actions, state of mind, et cetera. Habits are triggered by the cues people notice in their surroundings. For example, many people eat breakfast at home and read the newspaper at the same time. If they skip breakfast, they might skip the morning paper also.

Habits are formed when an action is repeated several times. According to Wood and Neal (2007) the psychologists explain habit formation by associative learning mechanisms and stimulus-response theory. Habits are linked to people's goals and intentions. Since these goals are rather stable in certain contexts, the actions repeat

themselves and habits are formed. However, once acquired, habits are performed without an intention to achieve the original goal. The combination of repetitive behavior, certain situations, and nearly automatic responses causes habitual behavior. Nearly automatic behavior means that consumers may act without conscious awareness. The difference between repetitive behavior and habits is that repetitive behavior is deliberated each time, whereas habit is a nearly automatic response to situational cues (Verplanken and Melkevik 2008).

Habits are beneficial for us because we can save time, energy, and effort by acting habitually. Habits also give structure to our lives and thus give a feeling of safety and comfort. Furthermore, a habit can be part of identity (Verplanken and Orbell 2003). Even though there are many benefits of habits, some habits are “bad” unwanted behavioral patterns. Bad habits can be smoking, overspending, overeating, etc. These kinds of habits are widely discussed in society. When we use habits, we at minimum miss the opportunity to choose other possible alternatives. Some habits may create social and psychological costs. It is a highly subjective question to judge which habits are good and which bad. It is likely that people in general are more satisfied with their habits than dissatisfied, because dissatisfactions provide an urge to change the habit. However, this is not easy, since habits are very strong. Habit strength is a combination of status quo bias supporting the habit, habit being a part of identity, costs of switching and resisting change. People are quite keen on maintaining the status quo. Status quo bias states that people tend to not change the established behavior unless they are compelled to it (Kahneman, Thaler and Knetsch 1991). The changing of habit requires time and energy; we need to find an alternative way of doing things, and we thus face searching costs and switching costs (Wernerfelt 1985). People tend to stick with the familiar and resist new, unknown opportunities. The switching costs occur when the previous behavior or product is replaced by new ones. Habits are used in the model when considering the benefits of media usage (section 7.5.1) and when making habitual choices (section 7.8).

2.4.3 Needs for media usage

In section 2.4.1 it was stated that media usage is based on needs, sometimes called motives. This section introduces the needs that are either frequently mentioned in uses and gratifications studies or connected to the audience’s new role as media

users, namely as participants, producers, or distributors. This means that some studies from sociology and social psychology related to group behavior are also examined below.

Gaining information and **getting entertainment** are probably the most important media usage reasons (for example, Blumler, Brown, McQuail 1970; Blumler and Katz 1974; Katz, Blumler and Gurewitsch 1974; Katz, Gurewitsch and Haas 1973, p. 166-167; McQuail, Blumler and Brown 1972; Severin and Tankard 1997, Hastall 2009). We want to know what is going on in the world and in our neighbourhood. It is good to know why something has happened and what might happen next. We want to gain understanding and surveillance. We want to find out more about the things we are truly interested in. We want to learn, understand, and educate ourselves. In addition to gaining information, entertainment is an important part of media usage. We want to enjoy and spend time pleasantly with media products. Maybe we want to follow sports, enjoy a movie, or live a moment in the fantasy world. Sometimes we want to relax, sometimes get excited. Getting entertainment is an aim itself. Notice that entertainment here is a need, not a genre. Nearly all media content can be seen to be both partly entertaining and partly informative. Sometimes when we get bored and have nothing special to do, we might want to fill the time with some activity—for instance, a media product. Therefore, an excess amount of time can be a motive for media usage. If time is going too slowly or we want to escape boring or unsuitable time, we can use media. It is quite remarkable, though, that in addition to **giving us something to do**, media also provides a **reason for not doing anything**. When we use media, we have an excuse for not doing housework or other not-so-enjoyable tasks.

People can **gain social knowledge from media**. Using media products, we can learn about other people's feelings, how they cope with some difficult issues, and how they solve tricky questions. We can also learn about our culture, other cultures, other times.... We get ideas of what to expect when we grow older or start a new phase in our lives. This is called social learning. We view models of how we are supposed to act in certain situations. According to Mustonen (2001), we recognize our own features and feelings more easily if we see them in other people. We learn different roles and feel empathy. We begin to understand how different people think and feel in certain situations. For example, Roberti (2007) has reported that people watch reality dating shows partly for social learning purposes. In addition to learning, media (at least social media) provides social support (Leung and Lee 2005; Sarkadi

and Bremberg 2005; Scharer 2005). When we learn skills that help us function better as members of society, this process is called socialization. This includes learning roles, social norms, and social sanctions (McQuail 1994). Some models the media conveys to us are not necessarily good; for example, soap operas suggest abnormally skinny ideal body images (Tiggeman 2005) or very stereotypical sexual attitudes (Ward 2003). The term “keeping up with the Joneses” refers to the need to achieve at least as much as one’s neighbors. Neighbors are used as a benchmark for social position. Failing to keep up with the Joneses might cause unhappiness, even for people whose status is high. This phenomenon is especially relevant among Facebook users. According to Kross et al. (2013), Facebook is not just a source of fun but can also cause negative feelings, especially due to social comparison and feelings of envy (Chou and Edge 2012; Tandoc et al. 2015).

Some part of media usage is escapist. Sometimes we are faced with worries or an irritating task we should do, but we want to postpone it. Media might give an excuse for postponing or at least take our mind away from it. In other words, we can **escape our thoughts** using the content for diversion (for example, Huang and Sheng-Fang 2018; Katz and Foulkes 1962). According to Valtonen (2004), people struggle to get some free time for themselves. However, if they succeed in finding a few hours’ time for themselves, it might be spoiled with intervening unpleasant thoughts about work or other worries. This problem is conquered by engaging oneself in an activity that requires thinking and thus gives an opportunity to escape the unwanted thoughts. In addition to the need for free time, sometimes we have such worries that we really want to escape into media world; we want something else to think about. This might especially be the case when people feel lonely. According to Johnstone (1974), Katz, Gurewitsch and Haas (1973), and Wenner (1985), people use media in order to **avoid feeling lonely**. According to Canary and Spitzberg (1993), the media choices are even affected by the nature of involuntary loneliness. If people are chronically lonely, they use media differently than situationally lonely people.

It has been shown that people use media a lot in order to **manage their moods** in general (Zillman 1988a; Zillman 1988b). Mood management through media products has been researched quite a lot as far as television program choices (Bryant and Zillman 1984; Helregel and Weaver 1989; Meadowcroft and Zillman 1987; Zillman, Hezel and Medoff 1980); music choices (Knobloch 2003; Knobloch and Zillman 2002); video rentals (Strizhakova and Krcmar 2007); and even news choices (Biswas, Riffe and Zillman 1994). However, there are many different ways to manage

mood. For example, people attempt to gain a better mood by walking, exercising, playing with kids or with a dog, going shopping, or using media (Luomala 2000; Thayer et al. 1994). The ideal mood management solution depends on what kind of original mood we have, and which method we expect is likely to help either maintain or change the mood. Mood management methods vary from person to person and situation to situation (Luomala 2002). Zillman's (1988b, 2000) famous mood management theory says basically only that when people are in a good mood, they try to maintain it, and when in a bad, they try to change it. The idea is to optimize mood by taking some action. According to Luomala (2000), people take certain actions deliberately to alter their bad mood and usually those activities are effective. In addition to maintaining a good mood and trying to change a bad mood, people might take preventive actions against a bad mood or simply escape the possibility of it. It has been determined that mood also affects the way we make decisions (Lewinsohn and Mano 1993; Schwarz 2002). Therefore, mood is used as a motive among other motives and situations affecting decision-making.

Luomala and Laaksonen (1997) introduce the concept of self-gifts, which are strongly related to mood management. They argue that self-gifts are rewards to oneself or therapeutic means. The analogy to mood management theory is quite clear; a reward self-gift can be used to maintain a good mood and a therapeutic self-gift can be used to alter a bad mood. Thus, media usage can be a **self-gift, reward or therapy**, as well. It has been noticed that consuming self-gifts is highly dependent on other contexts in addition to mood (Mortimer et al. 2015; Mouakhar-Klouz et al. 2016).

In addition to self-gifts, media can be used for self-branding. We can update Facebook, Twitter, or LinkedIn accounts in order to control the image we show others (Van Dijck 2013). As Cordeiro et al. (2014) say, "*In a mediatised society, we are free to create whatever image we want of ourselves.*" We can even experiment with different identities, with avatars. We can also use traditional media in order to give a **better image of ourselves** (Labrecque et al. 2011; Malik et al. 2016). People might choose educational or certain entertainment contents in order to attach certain qualities to themselves (for example, being knowledgeable, trendy, funny, relaxed, etc.) more directly. This does not succeed if others do not notice the choices. While walking around and carrying fancy newspapers or magazines might still work for some, others seek to convey the information via social media. Johnson and Ranzini (2018) have studied this phenomenon, namely sharing music or films on social media in

order to appear in a better light. They noticed that how different self-presentational motives brought about different sharing of media content. When people wanted to belong to a group, they shared more popular films and music, when they wanted to present their ideal selves, they shared higher quality music and films.

There are three kinds of reference groups: the groups we belong to, those we would like to belong to, and groups we do not want to belong to. Ollila (2008) has written an interesting book about groups (herds). She says that identity is like a patchwork; it is made of memberships of different groups. These groups have different values, aims, and ways. Groups are not very binding; one can easily part from them and join others. Ollila argues that people “shop” groups that signal their identity (i.e., join groups on the same basis that they consume products). Acting similarly with others (joining them) can be done quite unconsciously. Neurological studies convey that mirror neurons cause us to experience similar feelings to the people we see; they also create an unconscious desire to imitate other people’s behavior, especially those we consider to be happy, successful, or otherwise have the qualities we ourselves wish to achieve (Lindstrom 2010). In addition to social learning, media can be used as social currency in order to join or detach from different groups. Media provides a lot of topics. For example, popular television shows, newspapers, and magazines provide **topics for everyday conversations**. Being able to participate in everyday conversations is an important reason to use media. In order to be able to participate in discussion, it might be important to use **same media as one’s friends**. Some media products might be essential to follow in order to belong to a certain group (Johnstone 1974; Riley and Riley 1951; Suoninen 2004).

2.4.4 Beyond content: Benefits of media brands

In addition to needs, people have emotional connections to different media products. There are products people like and dislike (or even love and hate). Brands explain these types of relationships. All products have a brand. That is, all products, product groups, companies, institutions, politicians, and even ordinary people have a brand. The brand is the image that others have about the product, company, or person. Brands can be understood narrowly as trademarks (Facebook, Twitter, etc.) or broadly (as in this study) as media groups like daily newspapers, afternoon papers,

etc. This is in line with the concept of channel loyalty used in program choice -studies (Goodhardt 1987). Channel loyalty describes a phenomenon that people just seem to return to a specific channel more than others. Earlier program choice -studies build a lot on the concept of program-type preferences (Napoli 2003, p. 43-48). This and channel loyalty are close to the concept of brand relationships used in this study. People come to expect that they like the programs from a specific channel or of a specific program type. This subjective feeling is similar to the relationship people have with consumer brands. In other words, the channel or program-types function as brands do in other consumption environments. We connect emotionally with brands because brands have symbolic features and personalities (Aaker 1999; Belk 1988; Fournier 1998; Rio 2001). According to Dessart et al. (2015), this engagement is shown in cognitive, affective, and behavioral ways. These symbolic features make brands extremely interesting since they add many unique elements to products. Due to symbolic features, brands can be used for many purposes: identity building and signaling; mood management and regulating feelings; connecting and disconnecting with others; symbolizing values, aims, etc. This resonates with social reasons to use media and is thus worth a closer examination.

According to Belk (1988), Fournier (1998), and Escalas and Bettman (2005), consumers use possessions and brands in identity building. We use brands in order to define ourselves (Escalas and Bettman 2005) and because brands are connected to or enable certain social roles (Kleine et al. 1993). The things people own reveal a lot about what kind of people they are (Gosling 2008). Brands can become **a part of person's self-image**. Sometimes brands people use do not reveal their real self-image, but rather an ideal image (Chernatony and McDonald 1998). One can appear to be different, a better person. Some items people own function as identity claims. Those items are symbols for one's identity, achievements, or future goals. For example, Henriksen et al. (2018) explain how young Swedish consumers buy luxury items in order to construct their identities; Jain (2017) goes further and explains that consumers in India buy luxury goods in order to develop their digital selves. According to Gosling (2008), identity claims can be meant for ourselves or for others. The identity claims meant for ourselves remind us what kind of persons we are or want to be. The identity claims meant for others are situated in visible places and signal how we want others to see us. Brands can be used as identity claims due to their ability to transfer brand qualities into user qualities. Therefore, one can easily attach certain desirable qualities to oneself simply by buying those brands (Kleine et al. 1993). People think that by using brands, some of the qualities of the brands will

become the qualities of themselves. Walker (2008) says that a brand attaches an idea to the product. When this is done well, people want to consume the idea by consuming the product. Or they want to attach the idea to their personality by consuming the product. The qualities of the products will be transferred to us. This makes sense, since part of brands' symbolic power is created by user group. If a certain kind of people use a certain brand, buying that brand signals **belonging to that user group**. It has been noticed that consumers tend to choose products that fit their personality and social identity (Aaker 1999; Govers and Schoormans 2005). This is quite logical since consumers use brands to signal their personality and values. And since we know that people tend to use such brands as fit their self-image, it can actually be concluded that the features of the brand also describe the features of the user. Moreover, media also facilitates a sense of belonging (Cordeiro et al. 2014). One **can connect with other people** by using the same media products, because of shared experiences and due to participatory potential (O'Neill et al. 2013). For example, YouTube can be used for expressing oneself (Strangelove 2010).

While identity building is something we do for our inner purposes, self-branding is something we intend to show others. Very few of us want to reveal all our thoughts, interests, and behavior to others. The rest of us do some conscious or unconscious planning as to what we reveal and to whom. Which parts of our identity we wish to signal to others depend on the situations and the roles we adopt. We can brand ourselves by amount and type of consumption, status consumption, or with usage of certain brands. Media can be used in self-branding as well; for example, Deckers and Kyle (2017) discuss widely how one uses social media in self-branding and Brems et al. (2017) have studied journalists' self-branding on Twitter. Brands can be used as **a signal of values and identity** (Belk 1988; R o et al. 2001), or of our ideal selves (Malhotra 1988). For example, according to Kim and Kim (2016), audiences' involvement with brands within Facebook depends on their self-expression and social motivations. We buy brands in order to signal certain personal characteristics to others. Brand is a communication tool. Using brands is an easy way to express personality and values (Belk 1988; Fournier 1998). Brands can be seen as shortcuts, easy tools to use to signal identity to others.

Brands create psychological benefits for the users, as they are status symbols (Pelsmacker 2001). We might want to impress others with the fancy design magazines or perhaps we want to appear to be more successful by carrying around the foreign financial papers. There is also a status value linked to the user group. If

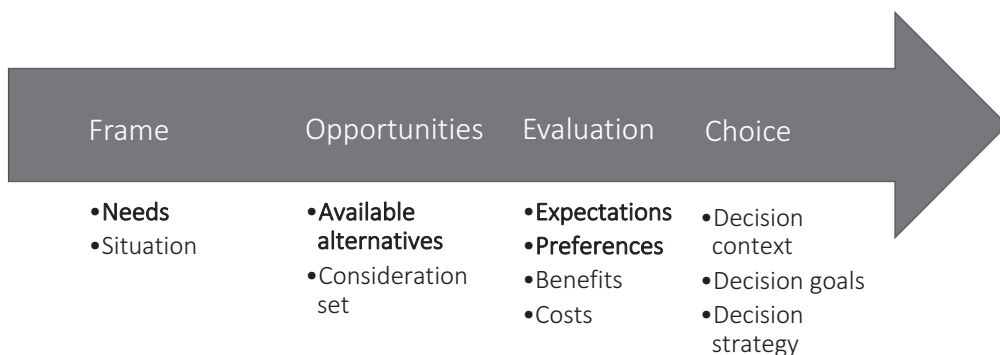
brand users are of a certain type, buying a brand connects one with the other users. A brand is a **symbol for belonging to the group**. Therefore, it is not insignificant what kind of people use the brand. Since brands are used as symbols, using a brand connects us with the other users. People prefer brands that have a user group they feel similar to and want to belong to (Govers and Schoormans 2005). Brands can therefore be used as social currency. We use brands to signal belonging to certain groups or distance ourselves from them. We buy brands in order to signal certain personal characteristics to others.

Some brands remind us of nice things. They make us feel good and can even function as a reminder of our aims and make us work harder. Gosling (2008) calls this kind of usage of things as **feeling regulators**. We buy brands to comfort and delight. Consumers can use brands in order to regulate their feelings, for mood management purposes, as a reminder of nice things, or even as a symbol of achievements or future aims. The idea is the same when people use media for mood management, self-reward, or as therapy (see section 2.4.3) The benefits of brand relationships with media products are part of the benefits of media usage.

2.4.5 Media usage studies and the proposed model

Adding uses and gratifications theory to the other theories gives a deeper understanding of needs which provide the frame for the choice within a given situation. Uses and gratifications theory provides knowledge of expectations and how they are developed. In consumer theory, expectations are important, but mainly given. The audience's active role is a basic assumption; there would be no point in talking about choices if there were in fact no choices. However, some steps might be taken without conscious deliberation. There are different sources of gratification. The same media content can be used for different purposes, which means that one needs to consider available alternatives and preferences with an open mind. It might be that some people find news entertaining and soap operas informative. The existing media usage habits create compelling needs for media usage. There is a wide variety of needs for media; some people want to gain information, some get entertainment, others want to escape their thoughts, etc. Gratification of needs is a benefit of media usage. Figure 5 illustrates how media studies are related to the proposed model.

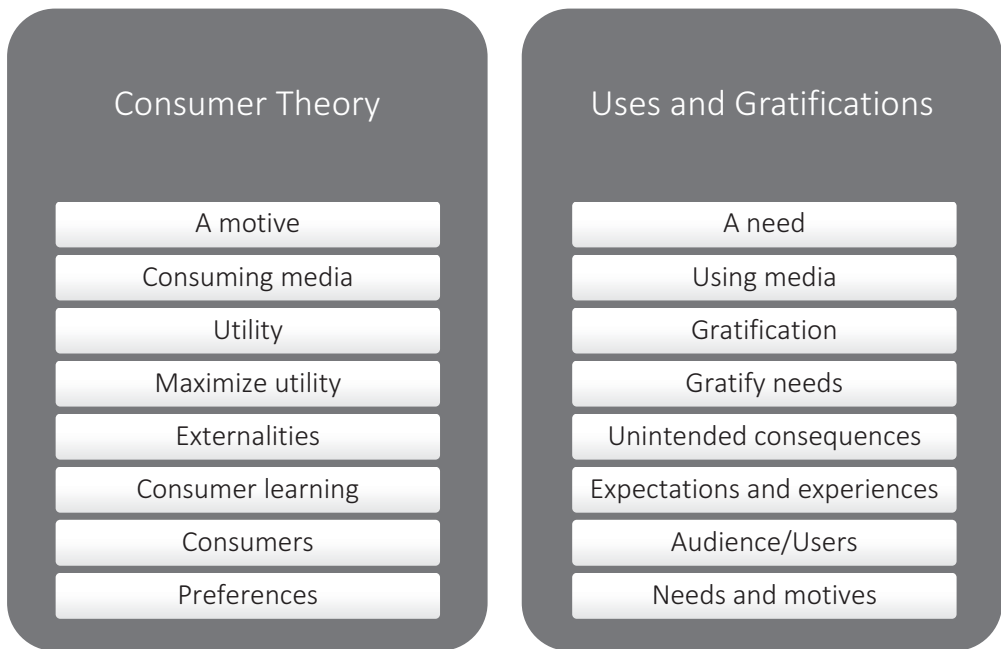
Figure 5. How media studies relate to the suggested comprehensive media choice model



2.5 Critical aspects of different approaches

So far, this chapter has introduced three different theories related to consumers’ media choices. Now we discuss the similarities and differences among these theories (namely consumer theory and uses and gratifications theory) and some problematic issues. Uses and gratifications theory and consumer theory are surprisingly similar, if we get past the differences in terminology. These theories share the same ontological origin: the assumption of the inner rationality of actions (Marewski et al. 2009). In economics consumers maximize their utilities, and McQuail (1997) says that rational utility maximizing is a very important aspect of Uses and gratifications, too. He says that an audience is assumed to know its needs, and all relevant variables are assumed to be measurable (motives, gratifications, media choices). Gratifications sought and utility can be seen as the same phenomenon. According to Dimmick (1993), gratification is quite close to the economics term utility. Dimmick notes that gratification is a term familiar to media researchers but neglected by economists. A few terms have been juxtaposed in Figure 6 to illustrate reciprocity of the terminology:

Figure 6. Differences and similarities in economics and uses and gratifications studies



The other variables are quite similar also. Consuming and using media are the same thing. Other consequences are called externalities in economics. Expectations are quite similar in both disciplines. The evaluation of the media experience for future decisions is called consumer learning in economics. Both disciplines see that audience members/consumers are perfectly able to make the decisions, that they expect to gratify their needs best/will provide the maximum utility. The disciplines also agree that audience members are aware of their needs and motives/that consumers know their preferences.

The main difference between uses and gratifications theory and consumer theory is the structure of science. Consumer theory is part of a well-organized, well-defined, mathematically precise system of theories, which are all interrelated. In order to create a perfect setting for mathematical calculations, the economists have been forced to make some quite far-fetched assumptions that are a long way from reality as such. Uses and gratifications theory is more practical, but unfortunately not that well-organized. The scope is naturally very different in these sciences: Uses and gratifications is interested in media use, and consumer theory in consumption of all products and services in general. One major difference, which is relevant to this study, is the attitude towards motives. Uses and gratifications theory has been very

interested to find out what the needs are and how people use media in order to gratify the needs. Economists presume that the motive to consume simply exists. The origins and characteristics of the motives are left for other sciences to explore.

These two theories have been combined in this study, which takes elements from both and uses the common elements. One of the principal common elements is the assumption of causality; the media use decisions are caused by some other variables or actions. Since there are so many similarities between the disciplines, the criticism towards them is also somewhat similar.

There have been quite a lot of critical discussions about consumer theory and its assumptions. The criticism has been heard from economists and those in other disciplines as well. Some of the criticism is based on misunderstandings (mainly from other disciplines), and some is more justified. The main misunderstanding is about the **concept of rationality** (which in economics means inner consistency of the decision process; to others, it means reasonableness). Since Uses and gratifications theory resembles consumer theory in many ways, it is not surprising that it, too, has been criticized for the concept of rationality. In Uses and gratifications theory, people are assumed to know what their needs are and to have an understanding about which media content might satisfy those needs. Some researchers have argued that people cannot know their needs exactly and their expectations might be “wrong” (Pietilä 2007; O’Guinn et al. 1991). In this study it does not matter if needs or expectations match the objective reality. People make their choices based on their subjective perceptions.

Sometimes the economic term “utility” is confused with the utilitarian way of thinking, which is a completely different concept. Utilitarianism is a moral philosophy concept, in which the moral goodness of an act can be judged only by the amount of utility. Some people have argued that economics is a science of **selfishness** and the fact that people do behave unselfishly (charity) proves that economic theory does not hold. This is a misunderstanding. The argument of selfishness is based on the limited view of utility. But utility is not only monetary; it contains such variables as the well-being of others, social respect, self-respect, etc. Some economists agree with this view (Gravelle and Rees 1992, p. 7; Hirshleifer 1984; Vihanto 2004), but others do consider utility maximizing a selfish goal and thus see unselfish behavior as irrational by definition (Sen 1987; Uusitalo 1997). The main problem of economics is not the rationality issue, nor the selfishness claim, but

the lack of connection to reality. Economics is way too mathematical and in love with the methods (Luukko 2001; Vihanto 2012). The basic assumptions (for example, perfect information) and the usage of complicated methods lift the economics far beyond practical use. Tammi (1997) argues that the problem is caused by the economists' desire to bring economics as close to the natural sciences as possible. This is why, in this study, only the useful concepts of economics (listed in chapter 2.3) and the language are used, not the methods. Whereas economics is seen to be too theoretical, uses and gratifications is criticized for the quite opposite: namely, **lacking the theory** (McQuail 1994; Severin and Tankard 1987). Furthermore, Uses and gratifications theory has been accused of being too **vague in key concepts** (McQuail 1994; Severin and Tankard 1987; Swanson 1977). The combination of economics and uses and gratifications theory attempt to solve this problem in this study.

3 TOWARDS THE MODEL OF CONSUMER MEDIA CHOICE: DISCUSSING THE CHOICE PROCESS

Chapter 2 introduced the basic grounding for the model based on audience and media studies, decision theory, and consumer theory. A combination of these studies forms the basic frame and structure for this study (as presented in figures 3-5). This chapter introduces the theories related to different phases of the choice process.

3.1 Available and accessible media products

3.1.1 Size of opportunity set and the nature of media products

The opportunity set is the set of available products that can satisfy the need in question (Deaton and Muellbauer 1980, p. 4–13). The opportunity set in media products is huge and ever-expanding. There are traditional media products (newspapers, magazines, radio and television channels) and a growing number of media products based on internet or mobile devices (blogs and discussion sites, news sites, shopping sites, game sites, Google, YouTube, Flickr, Facebook, LinkedIn, Twitter, Wikipedia, etc.). Digital media changes the availability and amount of options we have. Media consumption does not depend on time or space anymore.

Media products differ from other products in several aspects. Many media products are **free of monetary payment**. Buying media and consuming it **does not happen at the same time**. For example, people pay for newspapers and magazines before they get them and can read them. Television equipment and license fees are paid in advance. Media products are bought under **uncertainty**. One cannot be sure what one gets before consuming. Some media products can be **redistributed easily**. **Timely properties** of media products limit the choice. Some products can be used only at certain times. Even though availability is expanding, it is still relevant. Some media products have **very short life cycles**. People do not want to read yesterday's newspaper. Many media products have **an interactive nature**. Using media is

potentially a very social activity. The social aspect comes from using it together, using the content to connect with others, etc. Media companies get their main funding on two different sources, namely advertising and audience payments (**Dual market**). The companies that get money from advertisers actually sell their audience to the advertisers. This dual product feature shapes the content of the product. Some media products specialize solely in advertising (direct mail, ambient media, brochures, and catalogs). In addition to the other media products, media competes with other activities—for example, spending time pleasantly, enjoying family, learning and exploring, self-expression, etc. One could consider, for example, watching a movie with friends or going to dinner with them. The alternatives are not even necessarily related to consumption. They could be anything: sleeping, working, eating, or whatever. If one considers all the options, the number of alternatives one confronts daily is quite obviously far “too many” in most decisions: What to eat today? How to spend the next holiday? Which media product to consume? In these ponderings the decision costs would be tremendous, if one actually considered all the options.

Iyengar and Lepper (2000) were perhaps the first ones to explore the size of the opportunity set and its effect on choices. They made several interesting laboratory tests, which clearly showed that people are better off with smaller sets. That is, even though they like large selections, they make better choices and are happier with their choices when the choice is done from a smaller set (Chernev 2003; Iyengar and Lepper 2000). Barry Schwartz popularized the overchoice phenomenon in his book *The Paradox of Choice* (2004). It has been shown that the size of the opportunity set affects how fair one considers the price to be (Maxwell 2005) and how much people regret their choices (Su et al. 2009). The bigger the set is, the more forgone alternatives there will be and possibilities that we have lost a better option. Iyengar and Lepper (2000) say that participants in the extensive-choice condition reported their decision-making process as being simultaneously more enjoyable, more difficult, and more frustrating.

Iyengar and Kamenica (2010) discuss how very large opportunity sets (overchoice) affect whether one consumes or not. They show that the size of opportunity set not only determines whether one consumes or not, but it also determines what is consumed. In other words, the choice varies if the size of the opportunity set varies. They provide both laboratory data and field data from retirement investments and drug plans to support their argument. Iyengar and

Lepper (2000) point out that there are some choices with a lot of alternatives that do not lead to choice overload: If people have prior strong preferences, they do not mind if the opportunity set is large. Due to the chooser's previous experience, these choices are perceived as limited in number—even if there are plenty in reality.

3.1.2 Composition of consideration sets

Usually people do not even try to consider all the options, instead they form a much smaller set - consideration set. The decision is made from this set rather than from the whole opportunity set. The process of deleting alternatives from the opportunity set is called composition of the consideration set (for example, Kardes et al. 1993; LaRoche et al. 2003). The consideration set is thus the set of alternatives people evaluate when they make the choice.

The consideration set can be the same as the opportunity set (when there are very few alternatives), but usually it is significantly smaller. According to Chernev (2006), Moe (2006), and Ursic and Helgeson (1990), the opportunity set is usually diminished down to a couple of alternatives by some elimination method; typically it is done without much conscious deliberation—semiautomatically. There are several things that can limit the opportunity set and thus help to form the consideration set—for example, **limited memory**. Memory capacity affects a lot the options one even can consider. If one does not remember the products at all, they cannot enter one's consideration set either. According to Alba et al. (1991), the products or brands we remember first (without help) are typically top-of-mind brands we prefer and are most likely to end up in the consideration set. The researchers divide memory roughly into two; there are things we remember without help and things we remember with some aid (Alba et al. 1991; Bettman et al. 1991; Cowan 1988; Lynch and Srull 1982). Some things we do not remember at all (even with aid), and some things we have never known. It is highly relevant for companies to know how memory affects the consideration set composition, since products that are not in the consideration set cannot be chosen. For example, Kardes et al. (1993) say that we remember recently, or frequently encountered brands better than brands encountered long ago or infrequently. According to Lau and Redlawsk (2006), memory can be further divided into short-term memory and long-term memory. When we pay enough attention to something, it goes to our long-term memory. This is why some marketers put a lot of effort into getting people involved with an

ad/commercial. There are puzzles, word games, odd connections, etc. The more people think about the ad (and the more time they spend interacting with it), the better they remember it.

In addition to limited memory, the opportunity set is also limited by the **categorizing phenomenon**. Instead of considering all the possible options, people categorize them and consider only one category at the time. The choice is made from the chosen category and people disregard all the other options that do not belong to that chosen category (Alba and Hutchinson 1987; Sherman and Corty 1984). Categorizing is essential for consumer decision-making. Alba et al. (1991) state that brands which are typical for a category are remembered first. The very first brands we remember are shown to be very significant (Alba et al. 1991; Moreau et al. 2001). According to Alba et al. (1991), the brands we remember first affect which brands we remember next. The first remembered brands function as category cues, as prototypes, for the next ones. They define the category. Alba and Chattopadhyay (1985) tested how the brands people remember are affected by different suggested categories. Their results showed significant changes in the brands people remembered.

People use some **heuristic rules** (rules of thumb) when they consider alternatives. There are several possible heuristics rules they may use. For example, one could delete options one does not like or whose user group one does not want to belong to. The most commonly used heuristic rule in consideration set composition is some method of cutting out unsatisfactory options (Laroche et al. 2003; Su et al. 2009). For example, it has been noticed that people solve the problem of too many television channels by developing their repertoire, a set of channels which they only consider (Ferguson & Perse 1993; Taneja et al. 2012; Hasebrink & Popp 2006, Hasebrink & Domeyer 2012). Studies have shown that the number of alternatives, product complexity, and familiarity influence which decision heuristic is used in consideration set composition (Kaas 1984; Lussier and Olshavsky 1979; Payne 1976). People do not use heuristics in consideration set composition all the time. It has been shown that when one remembers a lot of alternatives and has a lot of information about their attributes, one usually uses heuristics (Kardes et al. 1993). Furthermore, it seems that the complexity of the decision task gives us the urge to delete some more options. By contrast, this means that when the choice is simple, and one has only a few options, one probably does not deliberately compose any

consideration set. The consideration set composition process is further developed in section 4.2.

3.2 Evaluating the alternatives in the consideration set

3.2.1 Gaining information

Consumers need some information about products in the consideration set in order to make satisfactory choices. They need information about the alternatives, their availability, prices, and attributes. There is a dilemma of oversearching and undersearching. It has been noticed that people tend to overseek and evaluate more information than is needed in order to make their decisions (Botti and Hsee 2010; Quinlan and Cameron-Jones 1995; Shu 2008). Many people think that the more information we have, the better the decisions we make, even if that extra information is seemingly irrelevant to the decision. This tendency and good availability of information cause a problem of information overload (Jacoby et al. 1978; Malhotra 1982). In contrast to the oversearch problem, it has also been shown that sometimes people seek a surprisingly small amount of information, even when the decision is important (Jacoby et al. (1978; Moorthy et al. 1997). In order to cope with information overload, people typically use stopping rules, which are heuristic shortcuts, to tell them when to stop searching for more information. (Gigerenzer & Todd 1999a). These shortcuts are used automatically, without conscious deliberation.

According to Sujan (1985), Moreau et al. (2001) and Ozanne et al. (1992), people classify information they get and store it with other related or similar pieces of information. This classification is highly relevant when we try to remember. When we remember something, it helps us to remember other related things also. Lau and Redlawsk (2006) explain that the memories are linked by nodes in the long-term memory. These nodes form an associative network. If one node is activated, it activates the other nodes to which it is connected, and the whole set moves to short-term memory (immediate memory). The nodes are activated by cues. These cues can be seeing the product or brand, hearing the name or related music, remembering related items, remembering things that happened at the same time, etc. However, we do not remember everything. Bettman et al. (1998) say that people fill in the blank

spots by more or less sophisticated guesses. The knowledge on information gathering and processing is used in building a suggested model on forming expectations-based information (see section 7.4)

It has been shown that the way people acquire information affects their evaluation process greatly (Bettman et al. 1991; Lau and Redlawsk 2006). We can gather a lot of information or just a little. We may search information by alternative or by attribute. When we search by alternative (for example information about certain films), we might gain a lot of information and remember it well. If we search by attribute, however—for example, Woody Allen films—only a small amount of information may suffice in order to make the choice. The evaluation gets more difficult when we have different amounts of information about alternatives, gathered at different times and sequences. The tendency to seek information based on either alternative or attribute will have a great effect on the choice of decision-making method. (See more in section 4.2.)

In addition to acquired information, people also gain information through their experiences. Consumers learn from information and experiences. According to Einhorn and Hogarth (1987), learning requires both forward and backward thinking. When we form an expectation, we need to look forward and make predictions and look backwards to diagnose the past. In other words, we form expectations about the future based on past experiences, and learning happens when people compare past predictions to what really happened. In order to learn from experiences or information, they need to be evaluated. (See more about consumer learning: Ackerberg 2003; Alba et al. 1991; Fishbein and Ajzen 1975; Hoch and Deighton 1989.) The experiences are extremely important since our choices are found to be path dependent. If the experience with a product is satisfactory, we do not want to change our following choices radically but will typically either choose the same or adjust slightly. So subsequent choices tend to pivot on the first one (Hoefflera et al. 2006). If, however, the initial choice proves to be unsatisfactory, the next choice will typically differ significantly from the initial one. Hence the level of satisfaction with the initial choice will cause the upcoming search (and choices) to be biased. Furthermore, if the first product tried was satisfactory, it gains an advantage over the other products, because the consumer's uncertainty and risk levels are lower. People know that the tried product is satisfying, but they do not know if the other ones would be worse (or better). Tversky and Kahneman (1974) stress also the importance of first experiences. They say that people tend to rely heavily (anchor) on one piece

of information—for example, the initial experience—when they make their decisions. When the anchor is set, there is a bias in adjusting and interpreting the following information accordingly.

The information, whether gained by active seeking or experiences, is imperfect (see section 2.3) due to the changing nature of media products. Only books and movies we have seen or read remain the same over time, but even when reliving those, the experiences vary from the original one. Therefore, consumers need to make expectations based on their acquired information and experiences. The information gathering, consumer learning, and knowledge of experiences will be used later on when developing a model for forming expectations (see section 7.4).

It is good to notice that expectations are far more important than just helping to evaluate the alternatives, since they influence our experiences directly. As a famous marketer, Harry Beckwith (2011), says: *“Expectations do not just influence the experience, the expectations are the experience. We taste what we expect to taste, we see what we expect to see, we experience what we expect to experience.”* If we are told that the wine in the glass is expensive, we assume that it will taste good, and so it usually does. If we see a Jennifer Aniston film, we expect it to be funny and it is. There has been some interesting discussion about the James Bond film Skyfall. Some people felt quite disappointed with the film, even though they agreed that it was a good film, as such. The disappointment arose because the film was not a typical Bond film—it was not what they expected. This is in line with the argument by Alasuutari and Kytömäki (1991) who say that in order to understand and even like the media content, it needs to fit the expectations people have. If the media content does not reflect the expectations, we do not like the experience. This idea of expectations being a part of experiences was used when building the model in section 7.4.

3.2.2 Recognizing preferences

Preferences are an expression of what people value and like; they add emotions and values to whatever people are evaluating. Consumers use preferences when they evaluate the alternatives, their features, and the subjective importance and desirability of certain features. People prefer some brands more than others, and they might have a preference for a certain type of brand relationship. For example, they might prefer certain journalists or a certain kind of journalism. The expected gratification

form media usage depends on our preference for certain media products (brand relationships), content, features, and the motives themselves.

There are different preferences. Some preferences seem to be **quite stable**. In later years we might still like the same kind of music we liked when we were teenagers, and the brands we preferred in our youth may still be quite appealing (Puohiniemi 2006). By contrast, some of our preferences **change** a lot. Many feel slightly embarrassed when remembering some decades-ago fashionable clothes they used to wear. Some of our preferences are **context dependent or adaptive** (see Payne, Bettman and Johnson 1992; Simonson and Tversky 1992; Tversky and Simonson 1993). In different situations and different moods, people prefer different things.

Sometimes one does not have prior experiences or any contact with the product category; therefore, one might not have any particular preferences to begin with. Preferences are **constructed on the spot**. This also underlines the context dependency of preferences. (See more about constructive preferences in Bettman et al. 1998; Bruckner 2009; Fischhoff 1991; Simonson 2008.) According to Novemsky et al. (2007), consumer choices are often systematically influenced by the ease of forming the preferences (preference fluency). Difficulties in constructing preferences or **uncertainty of preferences** causes stress in decision-making situations. The choice becomes difficult if preferences are uncertain; it requires a lot of time and energy and may lead to deferral of the decision (see, for example, Dhar 1997; Dhar & Nowlis 1999; and Novemsky et al. 2007).

Preferences may depend on other people's preferences or recommendations and are therefore **socially dependent** (Escalas and Bettman 2003; White and Dahl 2006). The social aspects of preferences are due to several sources; we want to belong to certain social groups and therefore adopt the prevailing preferences of the group. Of course, we might also want to separate ourselves from certain groups and then adopt contrary preferences. Some preferences can be socially unacceptable (Sha and Allenby 2001).

According to Hoefflera et al. (2006) and Heilman et al. (2000), the initial experiences are extremely important because preferences are **path dependent**. If the initial experience with the brand is satisfying, one does not want to change one's following choices radically, but either choose the same or adjust only slightly. So

subsequent choices tend to be dependent on, or be anchored to, the first one. If, however, the initial choice proves to be unsatisfactory, the next choice will differ significantly from the initial one.

All these features of preferences have been kept in mind when working on the model. Special attention has been paid to context dependency and framing of the choices with different situations. In the model it does not matter if preferences are stable, changing, constructed, uncertain, socially or path dependent, as long as they exist. However, these features have been kept in mind especially when building the model of expectations (see section 7.4).

It is quite difficult to find any common attributes people prefer, since products are so different that they seldom share attributes. Marketing expert Harry Beckwith (2011) has made several observations about consumer choices during his career. For example, he argues that consumers like playfulness, surprises, personalization, symmetry, and familiar, simple, and beautiful things. In media choices, this could mean that we like predictable familiar features (like genres and structures), but we want the content to be nicely surprising.

3.2.3 Evaluating the costs of media choice and usage

Even though most media products can be used without any instant monetary payments, nearly all media acquisitions cost money (Scherer & Naab 2009). People subscribe to newspapers and magazines typically for some period of time. People buy television equipment and perhaps some extra channels and pay a cable company for the service. People buy computers, tablets, smart phones, etc. and pay someone for the connection to the Internet. These buying costs are called **acquisition costs**. Monetary payments for one single media usage event are typically rather small (paying for a single article, program, newspaper, magazine, or film rental). However, if people want to pay for the possibility to read the newspaper every day, a magazine monthly, or subscribe to extra television channels, the cumulative costs may be significant.

The media products are typically acquired and used at different times, and the decisions to buy a media product and to use it are quite different. This dissertation concentrates on usage decisions, rather than buying decisions, acknowledging that

only some media products are available at the time of the usage decision. When people buy media products, *they mainly buy an opportunity to use them*. They might even buy media products that they do not use at all— for example, they might only occasionally read the newspaper and magazines they subscribe to, whilst the unread papers and magazines fill up their bookshelves. Ordering television channel packages is a clear example of this; one cannot watch all the channels simultaneously.

Since the usage of media products requires the use of scarce resources, such as time and energy, they are called costs in this study. There are some other inconveniences related to media usage, namely, social or psychological, which are called costs as well. This is done in a similar fashion to Raijas (1993), who has researched the costs a consumer faces when visiting a grocery store. Since media usage takes **a lot of time and some effort**, these are potential costs of media usage, too. Sometimes the effort required is quite small—for example, listening to music from the radio or watching something easy on the television. Sometimes using a media product can require a significant amount of effort—for example, reading a novel in a foreign language. The scarcity of these resources affects consumers' choices not only as a limit but also because they want to save them (Hamilton 2019).

The time cost is very relevant for media products which make revenue from commercials or advertisements. Media companies get their revenue mainly from the audience or the advertisers. The audience pays subscriptions and user fees; advertisers pay for an opportunity to reach the audience with their message. Quite a large part of media content is funded by advertisements or commercials. The advertisers have thus bought a fraction of the audience's time and the possibility to get their attention. Consumers do not always consider the time and energy they spend on advertising as a cost, since advertising can be seen as interesting and useful content. Some ads in the newspaper give useful information on job openings, new products, sales, etc. Ads in magazines are usually considered an entertaining and informational part of the content. Television commercials can be fun and entertaining— or boring and irritating. However, sometimes advertising can be solely irritating. For example, pop-up ads on the Internet are highly unpopular. The alternative revenue streams have so far been more or less successful attempts to sell re-edited content or use some form of sponsorship or product placement. From the consumer's point of view, this means the price for media is either money or time or both.

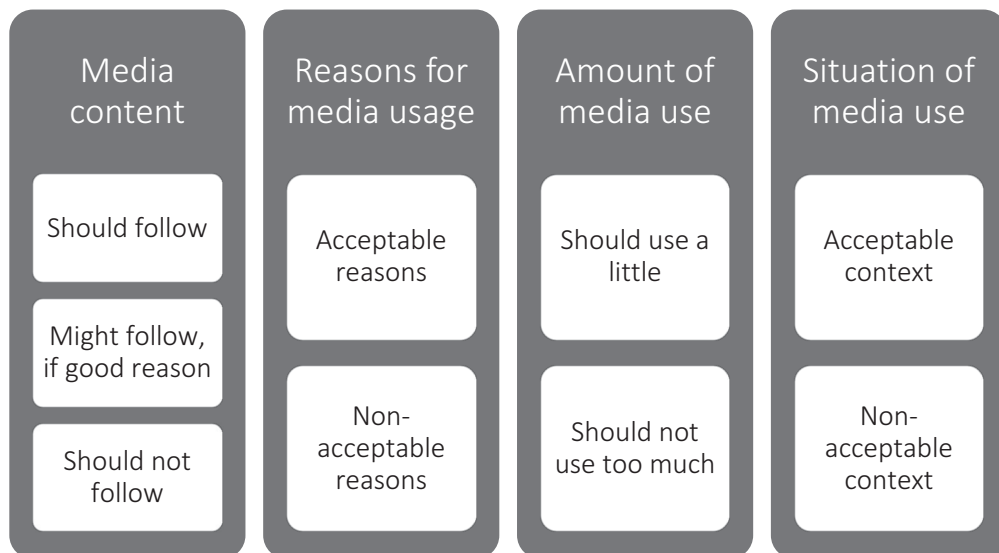
Media usage requires at least a little bit of **attention** from us, otherwise people cannot really say they use media. Human attention is a scarce resource and we can only focus on a limited number of items at a time (Lynch and Scull 1982). The amount of information and advertising, as well as the number of products and services, is growing all the time, and there are many things demanding our attention. People try to cope with growing demands on attention by ignoring certain information and by multitasking. Lynch and Scull (1982) state that attention varies in intensity, and if people pay more attention to one thing, they notice less the others. The more we do, the less we notice.

There are many kinds of **psychological costs**. Some might be compromises we need to do when making choices. These compromises occur when none of the alternatives meet our wishes clearly, and we need to compensate for suboptimal features with some other ones. Sometimes we might even have to consider brands we do not like very much. We might experience negative emotions during usage (Fahr & Böcking, 2009). Sometimes consumers fear to make wrong choices—for example, purchasing substandard products, buying useless products, buying products that will be on sale next week, etc. Regret theory (Loomes and Sudgen 1982; Loomes and Sudgen 1983; Loomes, Starmer and Sugden 1992; Sudgen 1993) describes a phenomenon where after we have bought something, we find out that the other alternative we considered would have been a better choice and we consequently feel regret over not choosing that one. Fear and regret are such uncomfortable feelings that we try hard to avoid them. Risk reduction and regret avoidance actions are not the only causes of psychological costs. For example, Fardouly and Vartanian's (2016) research about Facebook shows that social media usage may increase worries about one's own body image. So there can be negative feelings caused by the content. Psychological costs can be so large that one chooses to avoid an option (see Luce 1998). One psychological consequence of media usage is guilt. (If guilt is anticipated, it is an expected cost.) People feel guilty about many media-related things. Gauntlett and Hill (1999) have provided an interesting list of different kinds of guilt people feel in relation to television viewing based on a wide empirical study. These feelings included concern about wasting time, guilt over watching television in the daytime, worry about not doing something more constructive, anxiety over watching purely to satisfy one's own desires, and guilt about imposing one's own programs on others who were not so keen. According to Dhar and Wertenbroch (2012), people face psychological costs (guilt) also when they give up their principles (for example, they do not buy healthy food and buy unhealthy

products instead). Surrendering to temptation is a sign of weak willpower, and resisting temptations is a sign of strong willpower. There is an evolving market for people who want to get rid of guilt. Willman-Iivarinen (2012) writes about buying a clean conscience by compensating for bad behavior with good. For example, one can compensate for buying vanity (Yves Rocher cosmetics) by donating a tree to the desert. We can still fly everywhere and eat meat, if we donate money to repair the damage. Perhaps people feel the need to compensate somehow if they use media products that make them feel guilty.

In addition to psychological costs, there are **social costs** related to media usage. Sometimes media consumption might have social consequences; people might get social rewards or punishments from their media usage. There are plenty of social rewards from media usage, as discussed in section 2.4.4. Media provides good topics for discussions and facilitates joining different groups. Based on literature related to social costs of television usage (Alasuutari 1992, 1996; McQuail 1994; Suoninen 2004), costs were classified in this study into four groups: those related to the content of media, reasons to use media, amount of media use, and situation of media use. Social costs are normative: based on sensitivity to social norms, some people may not feel them at all while some may face severe social costs. Figure 7 summarizes the social costs.

Figure 7. Social costs related to media usage



Some media content seems to be more acceptable than other content (Alasuutari 1992, 1996; Suoninen 2004). For example, it is generally appropriate to follow the news and documentaries. Actually, it is not just appropriate; it is highly recommendable, whereas lacking the knowledge of news can cause social sanctions. Using some other media products, for example, reading gossip magazines or watching soap operas, might be activities people want to hide, or at least they may feel the need to explain their behavior. Alasuutari (1992, 1996) has observed in his empirical research that some television programs are valued significantly more highly than others. According to his studies, it is socially acceptable to watch the news, documentaries, and sports, but entertainment is something that viewers feel a need to explain. Some television programs are socially so unacceptable that one feels the urge to explain why one watched it. Suoninen (2004) has verified the results, but she says that younger people are not as ashamed to watch entertainment as elderly people. She has noticed that the reasons to use media can be socially significant. It is socially acceptable to follow media in order to gain knowledge about something, but not so acceptable to use it for the purpose of entertainment solely. The amount of media usage can be problematic. It is quite acceptable to use media a bit, but when people watch a lot of television, play games, or use the Internet for hours, it becomes socially unacceptable. For example, addiction to social media is considered to be a problem (Blackwell et al. 2017). If the amount of media usage is too large, it is seen to be harmful, unsocial, and unhealthy. There is no data on the amount of media usage, but according to McQuail (1994), several studies show that the amount of media time and lack of social skills and contacts are related, even though it is not clear which is the cause and which the effect. Some situations are socially unacceptable for media usage. For example, while entertaining guests, it might be quite impolite to watch television or browse the Internet (unless it is an activity all guests want to join).

When we buy a product or decide to use one, we miss a chance to do something else. The misery of losing these other opportunities is called **opportunity cost** (Shane et al. 2009). If we choose to use one media type, we lose the opportunity to use another media type or do something else with our resources. For example, we might have to choose whether to watch a soap opera alone or an action movie with a spouse (or the other way around). If we choose the soap opera, we miss the opportunity to spend time with our spouse. Sometimes we might feel the urge to go to the gym, yet find it extremely tempting to sit on the sofa and watch television. The opportunity costs for watching television are thus the loss of great muscles and

failure to burn few hundred calories. Opportunity costs vary all the time: they are different for each consumer and for each decision. Opportunity costs can be a combination of many variables or we might consider only one variable. Sometimes the opportunity costs can be very specific, for example, making a choice between two options; then the opportunity cost is the option we lost by choosing the other one. Sometimes we might have quite vague ideas about opportunity costs. We might think loosely about other things on which we could be dedicating money, time, energy, or attention to. Naturally, there are endless opportunities we miss when we choose to buy or do something. Shane et al. (2009) have noticed that in real life, people do not seem to pay much attention to opportunity costs. This observation gave them the idea to test this empirically. They made an interesting series of experiments, which proved them right. In one experiment they had two groups of people: the standard group and the test group. They described a \$14.99 film for both groups and asked the standard group if they were willing to buy it or not. The test group was asked if they were willing to buy the film or save the \$14.99 for other purposes. Theoretically there should be no difference, since not buying the film is equal to saving the amount for other purposes. However, when the opportunity costs were spelled out this way, the results were stunningly different: 75% of the standard group were willing to buy the film and only 55% of the test group were willing to do so. By only hinting (the obvious) that if one does not spend the money on the film, one can spend it on something else, the consumption behavior was changed. According to Shane et al. (2009), it seems clear that people often neglect opportunity costs, but change their behavior if they are reminded of them. Since people can use only a limited number of media products at the same time, the opportunity costs are relevant in all media choices which had an opportunity set larger than one. These costs will be used in the model section 7.5.2.

3.3 Consumer decision-making context and elements

3.3.1 The effect of context for decision-making

Consumers' decisions are found to be highly context dependent (for example, Klein and Yadav 1989; Simonson 1989; Tversky 1972). Decision context differs from the consumption situation, because decision context variables describe the

features of the decision task, whereas a situation describes psychological, physiological, and social surroundings of product usage.

In this study, decision task is defined as a description of the decision assignment as a job description given to somebody else. Decision task describes such variables as time pressure, complexity of choice, size of consideration set, importance of decision, etc. See below for examples of descriptions of two different decision tasks:

Decision task 1	Decision task 2
<ul style="list-style-type: none">• You are in hurry• You may postpone the decision• You have many alternatives	<ul style="list-style-type: none">• You have a lot of time to decide• You cannot postpone the decision• You have two alternatives

Subjective **importance of the choice** affects how much we seek for extra information (Posavac et al. 2003). If the choice is important for us, we give the matter more effort, search for more information, ask advice, and agonize over difficult trade-offs. According to Shi and Markman (2001), the importance of the task leads to different comparisons and affects thus the way the decision is made and moreover what is chosen. The more important the task is, the more difficult we may find it (Bettman 1973).

Sometimes there is no time limit for our choices; sometimes the choice must be made before a certain deadline. **Time pressure** affects how much information is gathered and processed, how many alternatives and attributes are considered, how the choice will be made, and what will be chosen (Bettman et al. 1998; Edland and Svenson 1993; Payne, Bettman and Luce 1996). Time pressure affects information search and processing. If we have time pressure, we search for less information (Ariely and Zakay 2001; Payne, Bettman and Johnson 1993; Payne, Bettman and Luce 1996) and accelerate the process, spending less time on each piece of information (Bettman et al. 1998; Payne, Bettman and Johnson 1988). This seems logical; when we do not have much time, it makes sense to consider less information and process it faster. When under time pressure, information is processed more selectively. People concentrate on important information (Bettman et al. 1998;

Payne, Bettman and Johnson 1988) and negative information rather than positive (Ariely and Zakay 2001; Bettman et al. 1998; Payne, Bettman and Johnson 1988,1993). It is natural that we want to consider more details only if we have more time. It is also natural to concentrate on negative information, since we want to avoid making bad choices we may regret. The researchers have noticed (for example, Bettman et al. 1998; Payne, Bettman and Johnson 1988) that time pressure affects the decision differently according to how severe the pressure is. When we are in a hurry, we want to simplify our decision-making process. Therefore, we use faster heuristics; we consider attributes rather than alternatives (Bettman et al. 1998; Payne, Bettman and Luce 1996). The more people experience time pressure, the more difficult they find decision-making. According to Ariely and Zakay (2001) and Payne et al. (1993), time pressure leads to noncompensatory heuristics. Time pressure can shift the decision maker's goals from accuracy to efficiency (Payne, Bettman and Johnson 1988).

Consumer decisions can be easy to make (nearly automatic) or extremely difficult. The decision task can sometimes be really complex. **The complexity of decision task** has a direct impact on choices. Bettman et al. (1998) argue that if the decision task is more complex, people ease their decision-making style accordingly and use simpler heuristics rules. If the task is too complex, it may prevent people from choosing at all. Sometimes, while evaluating alternatives and attributes, we can face a conflict between values. These conflicts are called trade-offs. For example, a typical trade-off difficulty arises when we try to decide which we value more: low price or safety of the product. Some of these trade-offs can be so frustrating that people try to avoid them by postponing the decision (Luce 1998; Tversky and Shafir 1992) or otherwise minimizing the negative emotions during decision-making (Luce 1998; Luce et al. 1999). The choices are more difficult if there are many options in the consideration set. **The size of the consideration set** influences the choice of decision strategy (Bettman et al. 1998; Iyengar and Lepper 2000). If there are many alternatives, it is likely that we do want to process all of the alternatives and attributes but use some other heuristics to make decisions easier. If the consideration set is large, the decision-making costs for considering all the alternatives would be high. Bettman et al. (1998) and Dhar et al. (2000) claim that an increase in the number of alternatives leads to a greater use of non-compensatory strategies.

It has been noticed that **mood** influences judgments and processing strategies. In section 2.4.3 it was described that people are rather skilled in managing their moods,

and that mood management may be an important motive for media usage. Mood can also be seen as a situation which affects choices. Mood has been noticed to influence mental processing, memory, attitudes, intentions, and decision-making (Hill and Gardner 1987; Luomala 1998). If we are in a bad mood, we do not want to or are not able to process very much information. According to Schwarz (2002), when people are in a bad mood, they use detail-oriented, bottom-up processing strategy and they trust data and details. According to Lewinsohn and Mano (1993), when in a good mood, people deliberated longer than when in a bad mood. According to Schwarz (2002), in a good mood, people trust themselves. **Emotions** have been shown to affect cognitive processes (Isen and Patrick 1983) and play a rather important part in decision-making (Pfister and Böhm 1992). The negative emotions during the decision process arise especially when the decision task is difficult (Luce 1998) or when we have time pressure. Previous research reveals that that people have a strong tendency to repeat decisions made earlier, maintaining the status quo, rather than reevaluate and change their minds (Hartman et al. 1991; Kahneman et al. 1991; Samuelson and Zeckhauser 1988). Postponing a decision is relatively easy; if we cannot postpone it, the decision costs increase.

To conclude the findings in this section, the elements of the decision task (time pressure, importance of the choice, mood, complexity of the choice and size of consideration set) affect how the decision is made. It has been shown that time pressure, importance of the choice, and mood affect how much information one gathers and how one processes it. Furthermore, complexity of the choice and time pressure have been shown to affect the choice of decision goals. These findings will be used when developing the comprehensive model consumer's media choice process when choosing a decision goal and decision strategy.

3.3.2 Effort-accuracy framework and decision-making goals

People reach their decisions by various methods. These methods are called decision strategies. It is quite common to compare these decision-making methods on an accuracy vs. effort framework (Bettman et al. 1998; Payne et al. 1996; Shugan 1980). The basic idea is that each decision strategy can be characterized by its accuracy (the level of mistakes) and the effort it requires in any given situation. Decision makers select strategies based on a compromise between the desire to make an accurate decision and the desire to minimize cognitive effort. A number of studies

have validated the effort and accuracy model of strategy selection (Creyer, Bettman and Payne 1990; Stone and Schkade 1994).

In addition to wanting to make decisions as accurately as possible and longing for effortless decision-making, people have other goals for their decision-making. These goals describe what is important in the decision-making (Bettman et al. 1998) and vary from person to person and situation to situation. Sometimes people want to make as accurate choices as possible; sometimes they want to choose with minimum effort. Occasionally, we might be especially afraid of regretting our choices, or perhaps we want to be able to justify the decisions afterwards. According to Bettman et al. (1998), four of the most important goals for consumer decision-making are: maximizing the accuracy of the choice, minimizing the cognitive effort required to make the choice, minimizing the experience of negative emotion when making the choice, and maximizing the ease of justifying the decision.

These goals have been renamed for practical purposes. When we try to make as accurate choices as we can (making as few mistakes as possible), we need quite a lot of cognitive effort. We need to acquire and process information, make comparisons and evaluations. Therefore, the goals of pursuing accuracy (**MAX accuracy**) and minimizing effort (**MIN effort**) are rather opposite. In fact, many people believe that the more they use resources in decision-making, the better (more accurate) decisions they make. Shugan (1980) has written an interesting article about "thinking costs". He compares the decision-making costs with the number of decision mistakes. He concludes that a reduction in thinking costs often leads to inaccurate decision-making (more mistakes).

Negative emotions during the decision process arise especially when the decision task is difficult (Luce 1998) or when we have time pressure. People want to minimize negative emotions when making their choices (**MIN emotion**). If people expect that they are required to justify their choices to others (or themselves) afterwards, their choices change (Ashton 1990, 1992; Simonson 1989). Simonson and Nowlis (2000) and Shafir, Simonson and Tversky (1993) propose that when justifying the choices (**MAX justification**), the motive is more important than what alternative is chosen. It is more important to be able to explain why than which.

In addition to the four goals listed by Bettman et al., two more decision goals have been added, namely, minimizing regret and maximizing the speed of decision.

Regret theory, developed by Loomes and Sudgen (1982) and Bell (1983), describes a phenomenon that after buying something, we find out that the other alternative we considered would have been better, and we consequently feel regret that we did not choose that one. In other words, people regret their choices if another, rejected, option outperforms the chosen one. Regret theory is based on the idea that a consumer might compare the options again after the choice has been made. Minimizing regret (**MIN Regret**) as a goal was added because regret avoidance has been shown to influence choice (Bell 1983; Inman et al. 1997; Larrick and Boles 1995; Shane et al. 2009; Zeelenberg and Beattie 1997). Furthermore, maximizing the speed (**MAX Speed**) of decision was added because time pressure has been shown to influence information processing, the number of alternatives and attributes considered, the way the choice is made, and ultimately the choice itself (Bettman et al. 1998; Edland and Svenson 1993; Payne et al. 1996). When one is under time pressure, one probably wants to speed up the decision process. Decision goals are an important part of the model, and their effect on decision strategy and usage will be hypothesized in section 4.2.

3.3.3 Decision-making strategies

Classical economic theory assumes that we make rational choices: we evaluate all possible alternatives and attributes, we rank our preferences, we have all possible information, and there is no uncertainty. Then we choose the option that maximizes our utility. These requirements are pretty harsh in modern society where we have an overload of choice and information. Even though rational decision-making in its pure form is hypothetical, it felt necessary to include it to the explored strategies, for two reasons. Firstly, it is theoretically interesting, and it is the only theory used in economics. Secondly, many people have the illusion that they have made their decisions **using rational decision-making**. The reason for this misapprehension is mainly terminological. In everyday language, the opposite of “rational” is irrational or stupid. Who wants to admit making irrational or stupid decisions? Most our everyday decisions are neither irrational (stupid) nor rational. The difference between the concepts of academic economic rationality and everyday rationality is enormous. The economic term rational choice means that the consumer considers all alternatives and all their attributes, has unlimited cognitive and memory skills, has an unlimited amount of information, is able to rank preferences in order, and is able to calculate the solution for his/her utility maximizing problem. In practice the rational

choice strategy (or near-rational choice) could be used in very important decisions which have only a limited number of alternatives and attributes. Considering all the decision-making costs and human limitations, rational choice is so expensive a strategy to use that people rarely do it. Furthermore, as Gigerenzer and Todd (1999a) point out, rational choice is only ideal when there actually exists an optimal solution. In reality, this is seldom the case. Instead of using rational decision-making, people have a number of other ways to reach a decision, namely, using heuristics and habitual and intuitive decision-making.

Heuristics are methods of simplifying the decision process by eliminating and ignoring some information and paying attention only to certain aspects of alternatives. Using heuristics means that we use a very small part of the available information when making decisions rather than trying to process all of it. According to Marewski et al. (2009, p.121), in the world of information overload, it is more important to be able to ignore information than to try and process all that is available. Marewski et al. (2009, p. 116) argue that these heuristics are useful, since they use the clues in the environment and human capacities (such as memory). The heuristics introduced in Bettman, Johnson and Payne (1991) and Bettman, Luce and Payne (1998) have been used as a base in this study, because it was the most practical categorization of heuristics found. However, recognition heuristics was added, which might be highly relevant in certain media choices (Marewski et al. 2009). Some heuristic rules have also been renamed. The heuristic decision-making strategies are introduced in the following section. The names and main characteristics are from Bettman, Johnson and Payne (1991), Bettman, Luce and Payne (1998), but the explanations and examples are the writer's own creations. Some heuristics need to be used intentionally and deliberately, while some can be quite automatically used, even without our consciously noticing (Shane 2002). However, all heuristics can be used deliberately, if one wants to. Payne, Bettman and Johnson (1993) call people adaptive decision makers when they use heuristics intently in order to avoid effort. Gigerenzer and Todd (1999a) argue that due to decision-making costs, heuristics are the form of intelligent decision-making. The heuristics that require less effort and deliberation are introduced first, followed by the ones that need more deliberation.

The recognition heuristic can only be used in a situation when we recognize one alternative, but not the other ones. This heuristic can be used only if the recognition is correlated with the aim. Recognition is a binary feeling; we either recognize or not. REC was introduced by Goldstein and Gigerenzer (1999). It is very

simple to use; if we recognize one alternative, we can stop searching. Recognition heuristic might be used, for example, when a person is choosing a movie to watch (Marewski et al. 2009). For example, I might choose a film by Jennifer Aniston because she is so entertaining. But I would avoid choosing a film with Arnold Schwarzenegger because he has been starring in violent and dull films.

If one uses **the satisficing heuristic**, one considers the alternatives one at the time, in the order they occur. The value of each attribute is examined and judged whether it meets the determined cut-off level. The first acceptable alternative is chosen. If none passes the evaluation, the requirements may be relaxed slightly, and the process will start again. Satisficing heuristic is a classic strategy in the decision-making literature, introduced first by Simon (1955). In this heuristic, the consumer simply chooses the first satisfactory choice, the one that is good enough. Bendor et al. (2011) describe satisficing as a stopping rule; the search can be terminated when an acceptable alternative has been found. Satisficing can be rather easy to use in practice, but in theory, people need to make several decisions (Gigerenzer and Todd 1999b). For example, we need to decide what is the aspiration level, which attributes are considered, and in which order we shall consider the alternatives. Then we need to consider each alternative at the time and deliberate whether or not the attributes meet the criteria. Satisficing is exceptionally useful if we do not have the whole opportunity set available at once but have to confront the alternatives one by one. Consider, for example, choosing a novel from a bookshelf and reading the back covers, one by one, until you find a good enough selection.

If one uses **the lexicographic heuristic**, the most important feature will be chosen first and the alternatives will be ranked accordingly. For example, the cheapest, the fastest, the most trustworthy, etc. In the lexicographic heuristic, the consumer is a little bit more selective and will not be satisfied with the first possible choice (Keeney and Raiffa 1993; Payne, Bettman and Johnson 1993). He/she chooses the best alternative with the chosen attribute. For example, when I drive my car alone, I quite often feel really bored and usually turn on the radio to listen to good music. First, I browse through all my favorite channels and finally choose the channel with the best music at the moment. This heuristic is sometimes called the one-reason heuristic (Gigerenzer and Todd 1999b) or take-the-best heuristic (Gigerenzer et al. 2002). So far, we have been discussing such heuristics that can be used automatically. The following heuristics require a little bit more deliberation.

The eliminating by aspects heuristic means that first one considers the most important aspect and then eliminates those alternatives below the cut-off level. Then one turns his/her attention to the second most important feature and repeats the process until only one alternative remains. This method combines elements of both the lexicographic and satisficing strategies. This method was first introduced by Tversky (1972). In the elimination by aspects heuristic, one needs first to decide what is the most important aspect and reject those alternatives which do not meet the criteria. Think about the previous example of wanting to listen to good music in the car. Using the elimination method, I would browse through all channels and first eliminate those which do not play music at all. Next, I would eliminate those channels which do not play rock, then channels with slow or melancholic rock, then the channels with unfamiliar bands, etc. until one option is left (or none, at which point I would have to relax my standards a bit, and start over).

Sometimes the decision maker makes a list of the good and bad attributes of each alternative and then counts the sum of good and bad attributes of all alternatives. This system is called **the frequency of good and bad features heuristic**. The sum of bad attributes is subtracted from the good ones and the alternative with highest score will be chosen. The decision maker needs to decide the cut-off level, which separates good attributes from the bad ones. This heuristic might be used in a situation when the media choice decision is important—like how to spend an anniversary evening with one's spouse. The alternative with the most net good qualities is chosen.

When using **the majority of confirming dimensions heuristic**, one compares all attributes, but considers only two alternatives at a time. The better of the two remains and is compared to the next alternative, until one alternative has proved to be superior to all other ones. The majority of confirming dimensions strategy was first described by Russo and Doshier (1983). This heuristic is a pair comparison method. One form of it is used in sports playoffs (for example, ice hockey and football); two teams play against each other and the winner stays on to play for the cup, the loser goes home. This method might be used when a group of people (e.g., pupils in a class) are deciding together which movie they want to watch.

An equal weight heuristic means that each attribute is given a value; then all the values for an alternative will be added up, and the highest score wins. This method does not separate the attributes into important/unimportant or good/bad.

This kind of method is used in school evaluations or on Likert scale questionnaires. The alternatives have a score (or mean value in Likert scale), and the one that has the best average score is the winner. It is hard to imagine any media choice being made using this method.

There is one more interesting decision-making strategy: **intuitive decision-making**. Naturally, people may use some other methods or versions not covered here, but it is hoped that these heuristics catch the most important aspects of consumers' media choices. Different writers have used quite different names and there can be several versions of these heuristics already discussed. For example, some people like to choose the same as their idols have done (follow an authority) or they might want to do the opposite of what another authority—parent, teacher, wife—tells them (reject an authority). Both of these decision bases (authority) can be seen as one form of lexicographic method. The most important attribute is the authority's choice. There is growing excitement over intuitive decision-making. This is due to some popular books, for example, Malcolm Gladwell's 2007 work *Blink: The Power of Thinking Without Thinking*, and the appealing thought of saving the effort of thinking while still making the right choices (Taleb 2007). Academic researchers have also contributed to this field, even though they do not usually talk about intuition, but consider the naturalistic decision-making approach (NDMA; Kahneman and Klein 2009) or recognition-primed decision strategy (RPD; Klein 1998).

According to Kahneman and Klein (2009), the naturalistic decision-making approach (NDMA) is based on the expert's intuition. The approach was inspired by DeGroot's (1978) work on successful chess players. He used a "thinking aloud" method and noticed that the chess grand masters were able to identify the most promising moves rapidly, while mediocre chess players sometimes did not even consider the best moves. Some years later Klein, Calderwood, and Clinton-Cirocco (1986) analyzed and described the decision-making of fire ground commanders, who need to make important decisions under conditions of uncertainty and severe time pressure. Their hypothesis was that commanders would analyze a pair of options, but this hypothesis proved to be incorrect. The commanders were found to consider only a single option, and that was usually all they needed. The option popped up from their experience and expertise. If they felt the option was inadequate, they modified it. If the modification could not be done, they rejected the option and turned their attention to the next alternative.

In a rather similar way, Gary Klein developed the recognition-primed decision (RPD) model (1998). In RPD the decision maker thinks about possible actions in given situations and selects the first suitable course of action. There are three different types of RPD (Klein 1998). The experienced decision makers are able to recognize when situation is known or similar to some other ones they have experienced or heard of. Furthermore, the experienced decision maker is able to judge which known options to use in a known situation and also evaluate which known options are best in an unknown situation. If known options are not available, they can develop new ones. The challenges of RPD are the need for extensive experience among decision makers and the ability to identify situations and actions as known or unknown. Even experience does not give direct answers in unknown situations, and some method of deciding other than RPD is thus used. RPD has been tested on nurses and stock dealers, and in system design, military command and control, and management of offshore oil installations (see a review in Klein 1998). RPD has proved to function well under conditions of time pressure and in situations where information is partial and goals poorly defined. Even though both NDMA and RPD stress the importance of expertise in making accurate choices, it does not stop the Joneses using intuitive decision-making. People think they have made an intuitive decision when they have chosen without conscious deliberation. Most of the “intuitive” choices consumers think they have made, have probably in fact been heuristic. For example, someone can call a decision intuitive when actually it has been based on the fact that one likes a certain option more than others. This phenomenon has been called affect heuristic or like heuristic (Slovic et al. 2002). Our emotions provide immediate and automatic evaluation of “goodness” or “badness” of a feature or possible consequence (Slovic et al. 2007). People especially rely on their emotions when the decision is difficult, when there is a limited amount of information, or when they feel the emotions are relevant (Schwarz 2002). Even though emotions are rapid, and in many cases accurate, the downsides are context dependency and the fact that emotions are easily manipulated (Shane 2002; Slovic et al. 2002). The variables affecting the choice of decision strategy will be hypothesized in section 4.2.

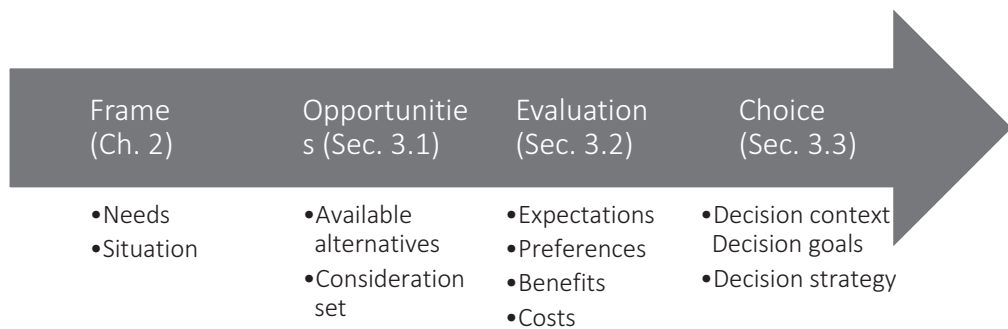
4 MAPPING THE CONSUMER'S MEDIA CHOICE PROCESS

Based on the theoretical reasoning presented in Chapters 2 and 3, this chapter forms theoretical bases for testing empirically some hypothesized relations and variables. The empirical case study presented in Chapter 6 provides additional information to the theory as a small sample for pre-testing the ideas.

4.1 Elements

Chapter 2 and 3 have introduced several theories related to consumers' media choice. Chapter 2 discussed the groundings and wider perspectives and Chapter 3 the decision-making process in detail. Figure 8 displays the framework for consumers' media choice process based on theoretical reasoning presented in previous chapters.

Figure 8. The framework of the study



Section 3.1 has been discussing “Opportunities”, section 3.2 “Evaluation”, and section 3.3. “Choice”, as presented in Figure 8. The framework combines the theories discussed in detail in Chapters 2 and 3. The variable groups discussed in previous chapters are also displayed in Figure 8. **The audience has certain needs,**

reasons for its media usage (section 2.4.3). If they did not have a need, there would not be much intently chosen media, either. The need might be information, entertainment, task prioritization (getting something to do or avoiding doing something), or mood management. The needs can also be subconscious needs, needs the chooser is not aware of, such as identity building, self-branding, or getting social currency (section 2.4.4). Media use happens in a certain time and place; in other words, **the situation limits the options. Available alternatives** form an opportunity set, which is typically huge (section 3.1.1.). The opportunity set is reduced into a few alternatives, i.e., **a consideration set** is formed by certain actions. This is called composing the consideration set (section 3.1.2). Consumers **form expectations about** the products in the consideration set based on information search, processing, and consumer learning (section 3.2.1). They like certain features and certain products more than others; these are **preferences** (section 3.2.2). Gratifying needs (section 2.4.3), benefiting from using habits (section 2.4.2), and brand relationships (section 2.4.4) are **benefits** from media usage. Used time, money, energy, and attention along with suffered psychological and social costs are **costs of media usage** (section 3.2.3). The complexity of the decision task, time pressure, and importance of the choice are features of **decision-making context** (section 3.3.1). Sometimes an audience wants to make an easy decision and sometimes an accurate one. These are examples of **decision goals** (section 3.3.2). One can consider all the options and features or choose to consider only some by using a method—a **decision strategy** (section 3.3.3).

This framework will be further developed by empirics. Nearly all the elements in Figure 8 will be empirically examined in forthcoming chapters. Some elements (expectations, preferences, and situations) are only shallowly examined due to limited length of the questionnaire.

Up to this point we have been examining the elements of the choice process. Now we turn our attention to how they are related and interact.

4.2 Hypothetical interrelations

In section 3.1.1 it was shown that large opportunity sets cause problems and that the opportunity set is usually diminished to a couple of alternatives by some

elimination method. This process of reducing options from the opportunity set is called consideration set composition. Some phenomena that diminish the size of opportunity set were also discussed in section 3.1.2, namely, poor memory, categorization, and usage of heuristic rules. Consumers' limited memory capacity reduces the number of options. Consumers tend to categorize the alternatives, and typically they only consider one category at the time, deleting the alternatives in other categories. Moreover, consumers might use some heuristic rule in order to purposely shrink the opportunity set more. In addition to the prementioned methods, it is hypothesized that scarcity of consumer resources might limit their opportunity sets also. When thinking about the choices consumers make, the situations they are in, and the costs they face, it seems clear that consumer resources could have an important role. Consumers have several scarce resources, money been the most obvious. Scarcity is a concept in economic theory, as was discussed in section 2.3. When considering media choices, money is not so important as in many other consumption decisions, since many media products available for free or with a relatively low price. In this setting the human resources (time, energy, attention) are of great importance. In this study, time, energy, and attention (ability to concentrate) are considered to be the most relevant human resources. The others, such as skills and abilities, function as limits or frames for the choices. Time and money have a different nature than the other resources, since they have definite boundaries—the more one uses them, the less one has them. There is only so much time or money, but the boundaries for energy and attention can be stretched by willpower or extremely interesting content. The usage of energy or attention diminishes the “stock” in the short run, but in the long run the use might cause the “stock” to grow. The more one uses these resources, the more skilled one becomes. To conclude, it is hypothesized that:

H1: People use lack of resources (not having enough time for example), categorization, poor memory, and heuristic reasoning as methods when deleting options from the opportunity set and thus forming the consideration set. Some options are deleted due to the fact that they are not available.

Several different needs for media usage were introduced in section 2.4. It is likely that consumers' media choices are influenced by many needs. The more motives there are, the more potential benefits there are, because there are more possible sources of gratification. However, it is also possible, that motives contradict each

other and result in less gratification. It is believed that the benefits of having several motives dominate the downsides. Therefore, it is hypothesized:

H2: The benefits of several motives dominate the possible downsides and therefore the more motives one has, the more satisfied one is with the choices.

The motives introduced in section 2.4 can be regrouped and combined into: need for information, need for entertainment, need to manage time and tasks, escapism, mood management, self-branding, gaining social knowledge or social currency. It is believed that all these dimensions affect media choices and that each type of media has its own set of typical usage motives. In other words, it is hypothesized that:

H3: Need for information, need for entertainment, need to manage time and tasks, escapism, mood management, self-branding, gaining social knowledge or social currency are relevant motives for some media choices, and that the motives for using different media products differ.

Chapter 2.4.4 introduced several possible benefits a brand relationship may offer consumers. Brands can, for example, be used in identity building, communication, self-branding, social currency, identity signaling, attaching qualities to oneself, and as regulating feelings. People connect emotionally with brands due to those symbolic features and might start to see brands as parts of themselves. Since these features seem very beneficial for consumers, it was thought that media products can be used in similar way and that people form brand relationships even with media types (intermedia level), not just with the trademark. The benefits people gain from their brand relationships were explained in section 2.4.4 and those can be roughly divided into benefiting from the identity claim, feeling regulator, or social currency. It is believed that all three dimensions of brand relationships affect the satisfaction of media users. To be more specific:

H4: The stronger the brand relationship is as identity claim, feeling regulator, or social currency, the more satisfied people are with their media choices.

The benefits of habits are discussed in section 2.4.2. The previous research shows habits can be a part of identity and can bring feelings of safety, control, and comfort for a consumer. People enjoy their habits. Therefore, it is assumed that media habits

are also a source for gratification, unless the media habit is one of the bad, unwanted habits, of course. It is hypothesized that:

H5: The more people are satisfied with their media habits, the more satisfied they are with their media choices.

In addition to benefits, the alternatives have some costs. In order to consume, people must use at least some of their scarce resources: money, time, effort, or attention (see discussion in section 3.2.3). In addition to these, there might be some psychological or social unwanted consequences, which are called psychological and social costs in this study. It is assumed that all of the prementioned cost types affect media choices. To be more specific:

H6: All these dimensions of costs (money, time, effort, attention, social and psychological costs) are relevant costs of media usage, and the costs of using each type of media are typically different.

Using media requires a lot of time, effort, and attention. If the consumer does not have much time, he/she will experience the time cost required for media usage subjectively higher. When one is tired and has a low level of energy, the effort required looms larger. If one has problems concentrating, the required attention seems subsequently more difficult to pay. Therefore, it is hypothesized that:

H7: Level of resources affects the level of experienced costs. If resources are low, the subjective costs are higher.

The decision task is one of the key elements in decision-making (section 3.3.1). Since there are numerous possible variables in the decision task, only such task variables are explored in this study which have aroused a lot of academic discussion (see section 3.3.1) and are potentially relevant to the choice—namely, time pressure, importance of the choice, and decision difficulty. In addition to these, it is suggested that the level of consumer resources is relevant to choices also, because different decision goals and strategies require different amounts of time and energy. It is hypothesized that the choice of decision goal depends on the decision task (time pressure, importance of the choice, and decision difficulty) and consumer resources (energy). The level of time resource is not included as a consumer resource at this point since time pressure (decision task) signals the same thing more efficiently (is

decision-making context-specific). To be more specific, Table 1 presents the hypothesis of how each element of the decision task or consumer resource described above affects the choice of decision goal. The (+) refers to expected positive correlation and (-) to negative. The reasoning is explained below.

H8: The choice of decision goal depends on decision task (time pressure, importance of the choice, and decision difficulty) and consumer resources (energy) as described in Table 1.

	MAX accuracy	MIN effort	MIN regret	MIN emotion	MAX speed	MAX justification
DECISION TASK						
Importance	+	-	+		-	+
Time pressure	-			+	+	
Difficulty				+		
CONSUMER RESOURCES						
Level of energy	+	-			-	

Table 1. Hypothesis 8. How the different elements of the decision-making task and energy level of the decision maker affect the choice of decision goal

When we try to make as accurate choices as we can (MAX accuracy), that is, to make as few mistakes as possible, we need quite a lot of cognitive effort. We need to acquire and process information, make comparisons and evaluations. Therefore, the goal of pursuing accuracy requires a lot of energy. The goal of minimizing effort (MIN effort) is quite the opposite. It has been argued that decision accuracy and effort are two sides of the coin; one can have either one, but not both (see effort–accuracy framework in section 3.3.2). It is assumed that people want MAX accuracy when the choice is really important for them and MIN effort when it is not. If one has time pressure, one cannot aim for accuracy. Emotions influence decision-making in two ways. Firstly, there are some emotions we experience that affect the choice during the decision process. Secondly, there are emotions that we expect to feel after the decision as a result of the decision. These feelings might be joy, disappointment, or regret. The decision goal MIN emotion refers to minimizing negative emotions during the decision process and the decision goal MIN regret refers to the emotions we fear having after decision-making. It was seen in section 3.3.1 that negative emotions during the decision process arise especially when the decision task is difficult or when we have time pressure. Therefore, MIN Emotion is chosen as a

decision-making goal when the choice is especially difficult or a person experiences time pressure. Regret is based on the idea that a consumer might compare the options again after the choice has been made. It is assumed that the more important the choice is, the more people want to avoid regret. If people expect that they are required to justify their choices to others (or themselves) afterwards, their choices change (see section 3.3.2). It is assumed that the more important the decision, the more we want to be able to justify it (MAX justification). It is assumed that when we have only a little bit of time, we do not want to spend much time making decisions. The scarcity of time, or time pressure, encourages us to maximize the speed of decision-making. But if the choice is important, we do not want to speed it up. Therefore: MAX speed is chosen as a decision-making goal when we have time pressure or when the decision is non-important. If one does not have a lot of energy, one might also choose MAX speed as a decision goal.

Decision strategies describe the way the decision is made. The decision-making strategies introduced in section 3.3.3 are renamed with short names for practical purposes. See Table 2.

RAT	Rational choice - Careful deliberation system
REC	Recognition heuristic - Recognition system: The one that is recognized
SAT	Satisficing - Good enough system
LEX	Lexicographic - Best characteristics system
EBA	Elimination by aspects - Elimination system
FRO	Frequency of good and bad features - Pluses and minuses system:
EQW	Equal weight heuristic - School grade system, best average
MDC	Majority of confirming dimensions - Cup system: comparing pairwise
INT	Intuitive decision-making - Intuitive system: <i>Trusting instincts</i>

Table 2. Decision-making strategies briefly explained and renamed

Some strategies are accurate, some are easy. It has been argued that the choice of decision strategy depends a lot on the accuracy vs. effort trade-off (see section 3.3.2.) However, the accuracy-effort trade-off does not seem to be adequate if one considers all the possible decision-making situations and variables presented in this study. Therefore, in addition to accuracy-effort trade-off, the decision strategies should also be examined and compared due to their other features like fast vs. slow, alternative based vs. attribute based, sequential vs. parallel dimensions. The compensatory vs. non-compensatory classifications are based on Bettman et al. (1998); the other classifications are formed in this study. Easy strategies are also fast

to use, with the exception that SAT might take time if the chosen option is not among the first examined. All these strategies (except RAT) ignore large parts of information. In fact, REC uses only a minimal amount of information: only the fact if we recognize something or not. Therefore, REC is very fast to use. Some strategies are alternative-based some attribute-based. Attribute-based means that one attribute is examined for all alternatives before moving on to the next attribute. For example, LEX is attribute-based. One considers all the alternatives according to one superior attribute. Some strategies are sequential, considering one alternative at the time, while some are parallel, considering all the alternatives at the same time and comparing them by attributes. Some strategies can be compensatory, meaning that poor attributes can be compensated for by other really good ones (Bettman et al. 1998). These aspects of decision-making strategies are the columns in Table 3.

RAT is very accurate, but it is not easy or fast, since one needs to consider all alternatives, all attributes, and possibly do compensation decisions. REC is very easy, but the accuracy can be very uncertain. SAT is not accurate, either; it might be fast and easy, if the satisfactory alternative is among the first examined. LEX is very easy, and it could be accurate, if we only cared about one feature. It could be fast, too, if the information is easily available for comparison. EBA is rather accurate; at least the worst options are deleted. However, it is a very slow method because one needs to consider all alternatives and many attributes. MDC is extremely slow and difficult if there are a lot of alternatives and attributes. It might give rather accurate choices, though, because poorer features can be compensated for with better ones. FRO is slow; one needs to consider all alternatives and attributes. It might be inaccurate, if some attributes are more important than other ones. EQW might be slightly faster than FRO, since one can choose to score only certain attributes, but it faces the same inaccuracy problem as FRO. INT is easy and accurate if a person is an expert, but for novices, the method is inaccurate. Table 3 summarizes the discussion and forms a base for building a hypothesis about decision strategies presented later in this chapter.

	Accurate vs. easy (and fast)	Fast vs. slow	Alternative vs. attribute- based	Compensatory vs. non-compensatory	Sequential vs. parallel
RAT	Accurate	Slow	Both	Compensatory	Parallel
SAT	Easy	Depends	Alternative	Non-compensatory	Sequential
LEX	Easy	Fast	Attribute	Non-compensatory	Parallel
EBA	Accurate	Slow	Attribute	Non-compensatory	Parallel
FRO	Depends	Slow	Both	Compensatory	Parallel
EQW	Depends	Slow	Both	Compensatory	Parallel
INT	Easy	Fast	Alternative	Non-compensatory	Sequential
MCD	Accurate	Slow	Alternative	Compensatory	Sequential

Table 3. The classification of decision-making strategies according to different dimensions

Based on the discussion in section 3.3.1, it is suggested that decision task variables (importance, time pressure, difficulty) affect the choice of decision strategy. It seems reasonable to assume that energy level has an effect, too, since some of the decision strategies require quite a lot of effort. Energy is not the only situation-related variable that affects decision-making, since it has been noticed that mood affects the choices also (section 3.3.1). Table 4 presents the hypothesis of how each element of the decision task, mood, or consumer energy level affects the choice of decision strategy. The (+) refers to expected positive correlation and (-) to negative. The reasoning is partly based on Table 3. and explained below. In short it is hypothesized that:

H9: The choice of decision strategy is affected by importance and difficulty of the decision task, possible time pressure, the mood, and the energy level of the decision maker as described in Table 4.

	RAT	SAT	LEX	EBA	FRO	EQW	MDC	INT
Importance	+	-		-	+	+	+	
Time pressure	-	+	+	-	-	-	-	+
Difficulty		+		-				+
Energy level	+	-	-	+	+	+	+	
Mood	+		-					+

Table 4. Hypothesis 9. How different decision task variables and mood and energy level of the decision maker affect the choice of decision strategy

When the decision task is **very important for us**, we want to make as accurate choices as we can (choose RAT, EBA or MDC); see column 1 in Table 3. In important choices we might also appreciate the possibility to compensate for poor qualities with good ones, which means that EBA is not used (see column 4 in Table 3). This implies that when the decision is important, we could use RAT or MDC. We could also use EQW or FRO, since they can be both accurate and are compensatory (see Table 3, columns 1 and 4). It is unlikely that in important decisions people would settle for good enough strategy, therefore SAT is unlikely. **When we have time pressure**, we want to simplify our decision-making process. This implies using non-compensatory fast strategies, which suggests the use of LEX or INT (column 2 in Table 3). SAT could be fast, too, if the satisfactory choice is found quickly. It is unlikely that slow methods like RAT, EBA, FRO, EQW or MDC would be used. When the decision **task is really difficult**, it might be reasonable to simplify decision-making by using an easy decision strategy: SAT, LEX or INT (column 1 in Table 3). But, if the task is very complex, it is likely that we cannot identify one single attribute to be the base for the choice and thus we can delete LEX. Furthermore, it is unlikely that EBA would be used when choices are difficult, since it requires parallel examinations and decisions about cut-off levels. When people **have a lot of energy**, they could use RAT, since it requires a lot of it. It is also possible to use EBA, FRO, MDC or EQW. When energy levels are low, people will use SAT or LEX, which are the easiest strategies. **Mood influences** judgments and processing strategies. According to Schwarz (2002), when people are in a bad mood, they use detail-oriented, bottom-up processing strategy and they trust data and details. This implies the usage of LEX, EBA, MCD, FRO or EQW when in a bad mood. However, according to Lewinsohn and Mano (1993), when in a good mood, people deliberated longer than when in a bad mood. Since EBA, MCD, FRO and EQW are time-consuming heuristics, this leaves only LEX to be used when in a bad mood. According to Schwarz (2002), in a good mood, people trust themselves. This implies the usage of RAT and INT when in a good mood.

When one considers decision goals, it seems evident that some decision goals are connected to certain type of decision-making strategies. For example, if the decision goal is to maximize accuracy, it is more likely that the chosen decision-making method is rational choice than satisficing. It hypothesized that different decision-making goals lead to different decision-making strategies. Table 5 illustrates hypothesis 10: which decision goal leads to which decision strategy. The (+) refers

to expected positive correlation and (-) to negative. The reasoning is explained below. In short it is hypothesized that:

H10: Different decision-making goals lead to different decision-making strategies as illustrated in Table 5.

	RAT	SAT	LEX	EBA	FRO	EQW	MDC	INT
MAX ACCURACY	+	-	+	+	+	+		
MIN EFFORT	-	+			-	-		
MIN EMOTION			+	+	+			
MAX JUSTIFICATION	+		+		+			
MIN REGRET	+	-	+					
MAX SPEED	-	+	+	-	-	-	-	+

Table 5. Hypothesis 10. How different decision goals affect the choice of decision-making strategy

If one wants to maximize accuracy (MAX Accuracy), the most accurate strategies are RAT and EBA, since they are parallel and accurate. FRO and EQW can also be used (column 1, in Table 3) If one values only one aspect, LEX might be accurate too. SAT is not very accurate. Someone who wants to minimize effort (MIN Effort) will probably use SAT, since it is very easy. LEX could be easy, if the choice of the most important attribute is easy, but it might be difficult to find out. RAT, EQW or FRO would be unlikely, since they require considering both attributes and alternatives, i.e., take a lot of effort (see Table 3, column 3). The negative emotions during the decision process are fear, frustration, intolerance to uncertainty, etc. These feelings can be avoided (MIN Emotion), by doing the decision in a mechanical sort of way. Some decision methods can be seen as mechanical: in LEX the best alternative according to one attribute is chosen; in EBA the alternatives are eliminated by a system; in FRO the good and bad attributes are counted. Consumers who want to be able to justify a decision (MAX Justification) will probably choose a method that is easy to explain convincingly. RAT is the most likely choice, but since it is difficult and time-consuming, one might also use some other method. For example, LEX and FRO are rather easy to explain. According to Inbar et al. (2011) and Das and Keer (2010), people do not regret their choices so much if they feel that their decision process was adequate. RAT clearly requires the most effort and SAT least. Therefore, it is likely that RAT is used, and SAT is not when avoiding regret (MIN Regret). One might also use LEX, since it is easy to justify. If one chooses

based on one single clear criterion, there is no base for regret. The fastest methods (MAX speed) are LEX and INT. SAT can be fast, if the chosen alternative is among the alternatives considered first. RAT takes a lot of time, as do EBA, MDC, FRO and EQW.

Finally, since the alternatives in the consideration set have different benefits and costs, it is assumed that with the given options in the consideration set, the choice of different decision goals leads to different media choices. For example, consider the case of three media products in the consideration set. Product A is superior in price while other features are not known, product B has many good features, none dominant, and product C has really good features, but also some bad ones (safety, for example). If the decision maker uses LEX and is primarily interested in price, she will choose product A. If the decision maker uses EBA and is primarily interested in safety, she will choose product B, since the feature in A is unknown and in C poor. If the decision maker uses FRO, she might choose C, if the good features compensate for the bad ones. Therefore, it is argued that:

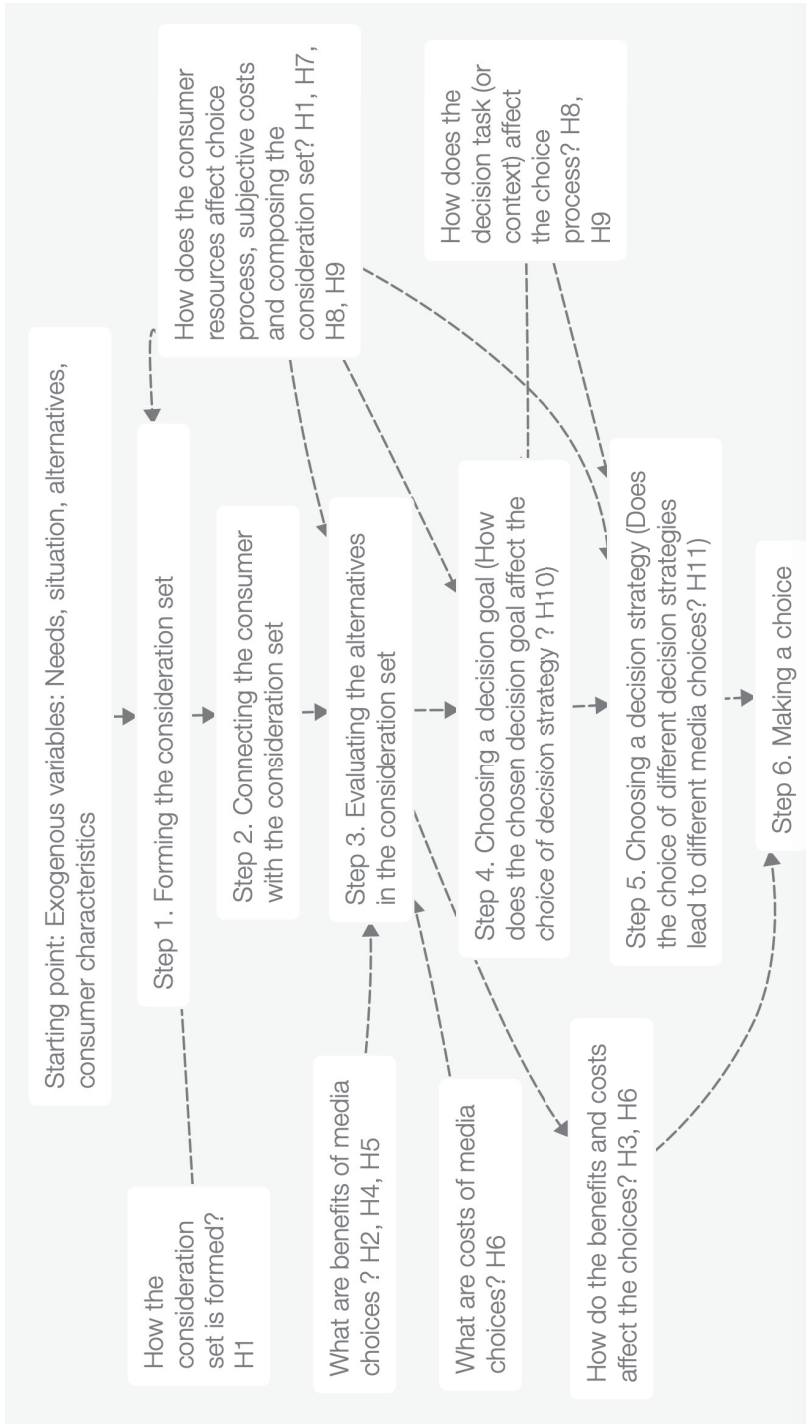
H11: Different decision-making strategies lead to different media choices. That is, media choices differ if the used decision-making method differs.

4.3 How the hypothesized interrelations are related to the suggested model

The hypotheses built in this chapter shed light on some of the phases of the decision-making process described in Figure 1 in the introduction chapter. Figure 9 illustrates which parts of the suggested model the hypotheses are connected to. Hypothesis 1 suggests different methods of composing the consideration set. The motives are benefits of media usage if they affect media choices (hypothesis 3) and if it is true that the more motives one has, the more satisfied one is (hypothesis 2). The brand relationships are benefits of media usage if it is true that the stronger the brand relationship is, the more satisfied people are with their media choices (hypothesis 4). Furthermore, existing enjoyable habits and usage of them are benefits of media usage if the satisfaction with media choice grows with the satisfaction of the habit (hypothesis 5). Hypothesis 6 suggests which costs are relevant for media choices. It is argued that consumer resources affect the subjective feeling of costs, choice of decision goal, and strategy (hypothesis 7, 8 and 9). Furthermore, it is argued

that the elements of the decision task affect the choice of decision goal and decision strategy (hypothesis 8 and 9). Furthermore, it is argued that the choice of decision goal affects the choice of decision strategy (hypothesis 10). Finally, it is argued that different decision-making strategies lead to different media choices (hypothesis 11).

Figure 9. The illustration of how the hypotheses built in this chapter relate to the suggested comprehensive media choice model



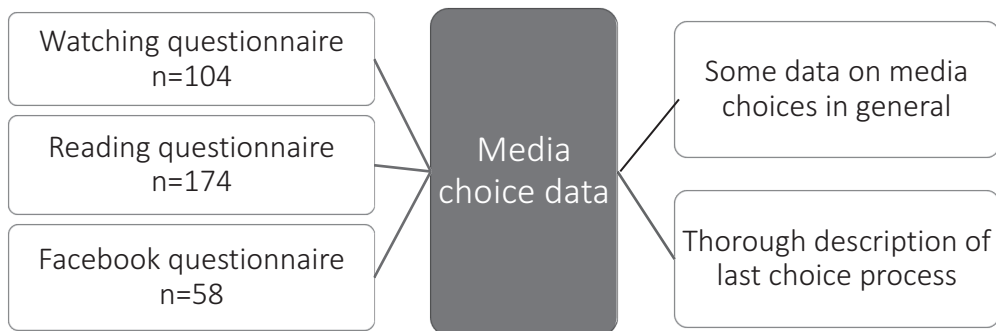
5 EXAMINING EXAMPLES OF MEDIA CHOICE WITH QUANTITATIVE DATA

Based on hypothesized empirical connections presented in Chapter 4, the needed data sets and variables are formed in this chapter. Forming of the variables is based on theoretical discussions in Chapters 2 and 3.

5.1 Forming the data sets

The chosen method for gathering empirical data is a web-based survey. Since there are plenty of variables affecting media choices, a lengthy questionnaire is needed in order to find out interdependencies between the variables. There were 52 questions in the questionnaire (appendix 2) proving 190 variables. There were questions related to media usage and preferences in general and questions about demographics, but the main part of the questionnaire was dedicated to the last media usage event. The respondents were asked to ponder which media products they considered, media usage motives, situations, habits, and the way they reached their decision. Due to the vast number of variables and the length of the survey, the questionnaire was split. Figure 10 describes how the data set was formed.

Figure 10. Description of empirical design of this study



Splitting the questionnaire is not unheard of in quantitative research; see more about Split Questionnaire Design in Chipperfield et al. (2015) or Gonzalez (2012). The questionnaire was divided into two parts, namely “The choice of media to read” and “The choice of media to watch” (see Figure 10). After the split, both questionnaires had 48 questions. The split was necessary in order to get the questionnaires even remotely respondent-friendly, but it was problematic, too, for two reasons. Firstly, it meant that the interrelations on questions that were only in one questionnaire but not the other one could not be analyzed. For some variables, this was not a problem, since they were only descriptive, and no correlations were needed. Secondly, the number of respondents per question were also split, of course. Again, for some variables, this was not a problem due to the nature of the question. For example, in the question about habitual media usage, it was assumed that many people have media habits, therefore, there would be enough answers to habit-related questions in only one of the questionnaires. In order to overcome these problems, some questions were the same in both questionnaires, some varied. Some variables were left out due to the length of the questionnaire. For example, it was decided that the forming of the expectations would not be tested empirically, due to a great number of questions it would have required. Some variables were excluded because they were difficult to measure in a survey—for example, how to measure the amount of information one has. The questionnaires were combined afterwards making one pretty large database. There were 336 acceptably completed questionnaires in total. Some answers were very incomplete and therefore they were not included. Three people used email, and even though it is media, it is so different that those respondents were excluded.

The data was gathered during summer 2014. To provide an incentive for participation, a 50€ prize was drawn among the participants. The questionnaires and sweepstakes were marketed on the Internet and on Facebook. Because of the inadequate number of responses (probably due to the length of the questionnaire), the questionnaire was further marketed in the Tampere University’s doctoral student email list and an invitation was sent to Miratio’s (a marketing research company) mailing list. Later an additional data set was gathered, themed “Facebook usage”, containing many of the same questions but also some new ones. This new data set was needed in order to get more reliable results (more data per question). The additional data set was gathered in fall 2016. Even though the sample is collected from several sources, it represents Finnish people rather well by age, living area, and education (see Appendix 1, Table 17). The respondents were more educated than

people on average, according to Statistics Finland data. Younger adults were also overrepresented in the study. The clear difference is that there are many more women among the respondents than in the population on average. This bias has been solved by analyzing all the results by sex and reporting if there are significant differences. Sex mattered only in very few questions.

In addition to the split, the questionnaires were customized for each respondent according to their answers in order to provide only relevant questions for each respondent. Therefore, the number of respondents for each question varies a lot. This feature creates the phenomenon that significance levels for each question vary according to the number of respondents. Significance levels are marked by * for one sided ANOVA and ** for two sided ($p < 0.05$). The results were considered as statistically significant using the 5% probability level. Many questions are formed with 5-step Likert scales and analyzed with Spearman correlation, which is applicable for ordinal scales. Even though there is some missing information (people did not answer all questions), it has not been patched with averages as Metsämuuronen (2002) suggests. The analysis has been done with those who answered the question, and in the case of comparing two or more questions, the analysis has been done with those who have answered both questions.

The respondents were advised to choose one recent media usage situation which they remembered well: *“Choose one of the listed media usage situations you have had quite recently, and you remember well. There will be more questions about that specific media usage situation later”*. Respondents chose the media from a list of media groups (see figure 11) and provided details of the chosen media in an open question (channel and program, name of the newspaper, etc.). The open questions were used to control the classification of media groups. Since many people mentioned watching YouTube or reading Facebook in the open questions, they were coded as alternatives in the study even though they were not in the original list. Figure 11 illustrates the alternatives on their own in the study. After the data was collected, the questionnaires were combined into a one data set.

Figure 11. The media “groups” used in this study

Watching media	Reading media
<ul style="list-style-type: none">• I watched a program from television• I watched a program or video from net• I watched a program that was recorded, rented or bought• I surfed in the net for fun and to pass time• I watched YouTube	<ul style="list-style-type: none">• I read papery newspaper• I read a newspaper, afternoonpaper or other news site from the net• I read something other than news from net (for example blog or Facebook)• I read papery afternoon paper• I used Facebook

The alternatives are called brands later on in this study, even though there were only two actual brand names in the research (Facebook, YouTube). Calling newspapers, netpapers, or television a brand might feel confusing for some readers. However, there are several reasons for this practice. Firstly, it is believed that everything has a brand. That is, every person, product, task, or idea has a brand (see section 2.4.6). Since brand is an idea of product qualities in every person’s mind, even the media groups have brands. Secondly, treating media groups as brands allows us to test the bond people have with the media groups by using concepts familiar from brand research.

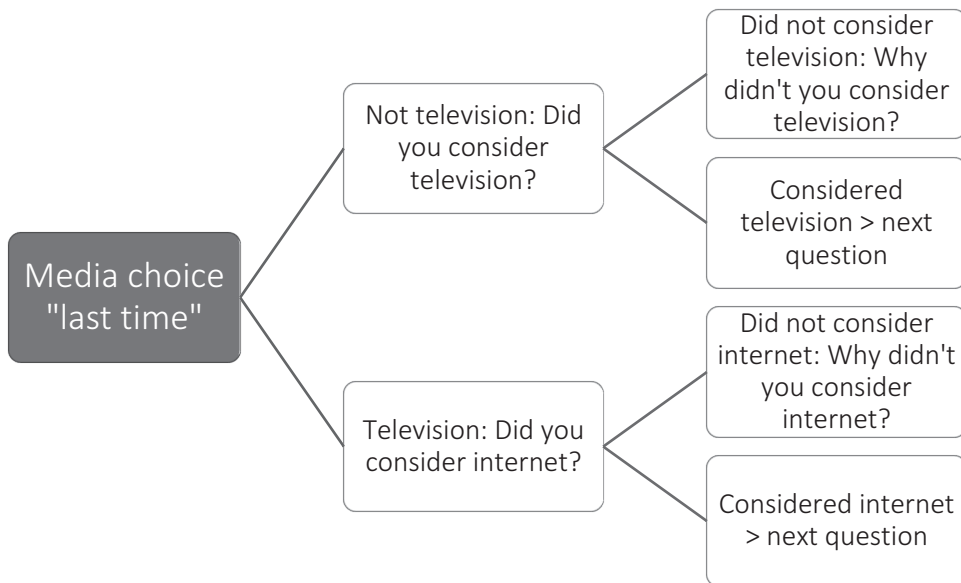
5.2 Forming the variables

5.2.1 Forming the consideration set-related variables

It was quite challenging to figure out how to explore the consideration set composition (section 3.1.2), because the consideration set is typically composed without conscious deliberation. The concepts related to consideration set composition are also somewhat complicated, and the respondents could not be asked directly how they “composed their consideration sets” either. Finally, the problem was solved by inventing a “revealing the process by making suggestions”

method (see Figure 12). First, the respondents were asked to think about a media usage situation in which they have been quite recently and which they remember well (chosen media). Then, they were asked if they considered the other products (provided in a list) when they made their choice. The list of products was adjusted for each respondent according to their chosen media. The list of alternative products was constructed to include such media products as intuitively seemed to be most relevant alternatives. For example, if the respondent had been watching videos from the Internet, they were asked if they considered television broadcasting, recorded television programs, renting a movie, or another internet site. However, the list of possible alternative media products contained each time one of these media products: television, internet, and newspaper (unless the respondents had already chosen them) in addition to other products. This was done in order to gain enough answers for each of the chosen media (television, internet, newspaper) for reliable analysis. Then the respondents were asked randomly why they did not consider television/newspaper/internet (if they had not). A list of possible reasons was provided with an open alternative. Figure 12 clarifies the invented method. In Figure 12 there is only television as an example, but internet and newspapers were asked in a similar way.

Figure 12. A research method of "Revealing the choice process by making suggestions"- invented in this study in order to find out how the consideration set was composed



According to many studies (for example, Buschow et al. 2014; Wilson 2016; Pond 2016), especially young people, tend to use many media products at the same time. There was a control question in this study to make sure that the media choices examined were primary media usage situations. They were. All respondents said that this was either only media or activity they did or that it was the primary activity. This makes sense since the respondents were asked to choose one media usage situation that they remembered well; it was unlikely that someone would choose a situation where media was not in a central role.

Naturally, the method described in figure 12 does not provide knowledge of how many products were in the considerations set, since the list was predetermined (and contained only media products). But it does tell us the minimum quantity of products in the consideration set. **The methods of composing the consideration** were suggested in hypothesis 1 (not available, poor memory, categorization, heuristics, scarce resources) and the variables were measured by statements in question Q6: “*Why did you not consider television/ netpaper/ newspaper?*” And the statements were coded as:

<i>Variable</i>	<i>Statements</i>
<i>Availability</i>	<i>It was not available</i>
<i>Poor memory</i>	<i>It did not come to mind / I did not remember</i>
<i>Categorization</i>	<i>It was not appropriate for my need</i>
<i>Heuristics</i>	<i>I did not like some feature</i>
	<i>I do not want to belong to user group</i>
	<i>I was not in the mood</i>
	<i>I am not used to that media</i>
<i>Scarce resources</i>	<i>I did not have time</i>
	<i>I had no energy</i>

Some heuristics (“rules of thumb”) were chosen to represent the heuristics method in general. It was thought that “liking features” was pretty vague and would cover many possible features. The idea to test the attractiveness of user groups was based on brand theory introduced in section 2.4.6. And since people were shown to be skilled at managing their moods by selecting media products, it was thought that the wrong kind of mood might be a reason to delete a media type from the opportunity set (section 3.1.2). Keeping in mind that some people are (especially elderly) not very skilled using the internet and social media and some younger people are not used to reading newspapers, the statement “not used to that media” was added to catch those.

5.2.2 Forming the accuracy of expectations and satisfaction

Measurement of expectations (see section 3.2.1) was highly problematic in the study, since people have expectations—which are hard to deliberate as such—about each alternative in their consideration set. And since the respondents were asked about the choices they had made after their media usage situation, they might not be able to elaborate on their preconception expectations. This problem was solved by using the **satisfaction with the choice** done as an indicator of the accuracy of expectations. The variable satisfaction is used when testing hypothesis 4 and 5. The expectations were considered to be accurate if expectations are met and inaccurate if expectations are either above or below expectations. In practice, this was asked with Q29: “*How satisfied were you with your media choice?*” The answers were coded as:

<i>Coded as</i>	<i>Statements</i>
<i>Inaccurate</i>	<i>It was above expectations</i>
<i>Accurate</i>	<i>It was as expected</i>
<i>Inaccurate</i>	<i>It was below expectations, but tolerable</i>
<i>Inaccurate</i>	<i>It was way below expectations</i>

Due to the structure of the study (examining the last choice done), there is no data on expected gratification of needs. It would have been highly inaccurate to ask the respondents about expectations when people had already used the media. Furthermore, it would have been very difficult for the respondents to deliberate their expectations, and it is probable that memory of the expectations might have been influenced by the experience. Therefore, the actual (not expected) gratification is measured by asking about the degree of satisfaction (as explained above). Satisfaction represents the benefits in this study, and a higher level of satisfaction the more benefits a choice had.

5.2.3 Forming motives, brand relationships, and habit variables

Hypothesis 3 stated that gaining, information, getting entertained, getting something to do, avoid doing anything, escapism, avoiding feeling lonely, using the same media as friends, giving a better image of oneself, managing mood, self-gifts (reward and therapy), identity building, gaining social knowledge, and getting topics for conversation are reasons to use media. The variety of **media usage motives** is so large that there is no point in trying to identify them all. These prementioned

motives were chosen for the study, since there was a lot of theoretical evidence on them. The purpose of this study is to model the media choice process in general; it is not necessary to include all possible variables. However, identity-building was not examined empirically, since it was thought that the respondents might not be aware of it. It is unlikely that people would be able to elaborate on their identity-building process. If asked about needs, a person usually provides only one need, the one which sounds most reasonable. In order to overcome this problem, the respondents were provided a list of possible media usage motives in the questionnaire, and the respondents were asked to evaluate how much these affected their choice with Q26: “*Why did you use the media last time?*” The 3-point scale was: great effect, some effect, and no effect/not relevant. The statements were coded as:

<i>Motives used in the study</i>	<i>Statements</i>
<i>Need for information</i>	<i>To get the latest news</i> <i>To gain information on a specific matter or topic</i>
<i>Need for entertainment</i>	<i>To spend time pleasantly</i>
<i>Manage time and tasks</i>	<i>To avoid doing anything</i> <i>To get something to do</i>
<i>Escapism</i>	<i>To get something else to think about</i> <i>To avoid feeling lonely</i>
<i>Mood management</i>	<i>To gain better mood</i> <i>To reward myself from something</i> <i>To comfort myself</i>
<i>Self-branding</i>	<i>To provide a better picture of myself in conversations</i>
<i>Social knowledge</i>	<i>To gain information on how others think and live</i>
<i>Social currency</i>	<i>To use the same media my friends/acquaintances do</i> <i>To know what people are talking about</i>

It was expected (hypothesis 2) that people had several motives for their media usage. **The number of motives** was formed simply by counting the number of motives the respondent had said had great or some effect.

Based on earlier literature (section 2.4.6), the possible brand relationships were divided into three dimensions: feeling regulator, identity claim, and social currency. Hypothesis 4 assumed that the stronger the brand relationship is the more satisfied people are with their media choices. The relationships were measured by Q27: “*How would you describe your relationship with the paper you read or media you used?*” and a 5-point Likert scale was used. The last line about the mood was obtained by Q24: “*Did your mood change in consequence of media usage?*”

<i>Coded as</i>	<i>Statements</i>
<i>Identity claim</i>	<i>The paper is like a part of myself Reading the paper signals my values and style I am completely dependent on this paper. I could not do without it</i>
<i>Social currency</i>	<i>Reading the paper connects me to the other people in the area The paper symbolizes my connection to certain group or area I want to belong to the readers of this paper</i>
<i>Feeling regulator</i>	<i>The paper symbolizes my future aims The paper reminds me of nice things Media usage got me into better mood</i>

The base for a habitual relationship is **the existence of a habit** (see section 2.4.2). This was deduced simply by asking the respondents Q30: “*How habitual was this choice for you?*”. If they chose “*I have a habit of reading this paper/media*” instead of reading often, making a random choice, or having a habit of reading another paper, the choice was considered habitual (habit existence). Hypothesis 5 argued that the more people are satisfied with their media habits, the more satisfied they are with their media choices. Habits were measured only in the reading questionnaire. Since some habits are good and some bad, a measure of habit satisfaction was formed. This was obtained by Q32: “*How correct are the following statements according to your media habits?*” and a 5-point Likert scale. **Habit satisfaction** was measured by agreeing with the statement: “*I am satisfied with my habit*”.

5.2.4 Forming of experienced costs variables

After pondering options for the empirical measurement of costs (discussed in section 3.2.3), it was realized that costs cannot be directly empirically measured, since they are alternative related ideas in each consumer’s mind. In order to measure expected costs, the consumers would have to be able to evaluate different costs of each alternative they had in the consideration set. It is unlikely that consumers would have been able to deliberate, if asked. It is likely that consumers analyze costs automatically without conscious deliberation. This problem was solved by asking people what kind of costs they experienced when they used their chosen media. This way they only had to evaluate one alternative, which they already had chosen and were thus more motivated to evaluate. This variable is called **experienced costs** in this study. Since expectations were mainly met (85%), it can be assumed that experienced costs and expected costs are nearly the same, although people typically have a tendency to evaluate more positively the choices they have made, not wanting to admit they have made poor judgments (regretting was discussed in section 3.2.3).

Hypothesis 6 stated that money, time, effort, attention, social and psychological costs are relevant costs of media usage and the costs of using each kind of media are typically different. The costs were asked with Q33: “How big were the following harms of this media usage event for you personally?”. A three-point scale was used. (The scale 0= Not at all, 1= some harm, 2= a lot of harm). The statements were coded as:

Variable	Statements
Time cost	<i>It takes a lot of time to read the paper</i>
Effort cost	<i>It requires effort to read the paper</i>
Attention cost	<i>It requires concentration to read the paper</i>
Time and psychological cost	<i>The ads/commercials in the paper irritate me</i>
Money cost	<i>It was expensive to acquire the paper</i>
Psychological cost	<i>It was uncomfortable to read the paper</i>
Social cost	<i>Reading the paper embarrasses me</i>
Opportunity cost (time)	<i>Reading the paper takes time from other activities</i>

Notice: the question was modified slightly for each respondent, depending on their chosen media. This example is about reading the paper; users of other media products were asked “*When you used media, etc. . . .*”

In the questionnaire the acquisition costs and user fees were not separated, since the question might have seemed stupid for most media users who did not pay any user fee. The questionnaires were kept as relevant to all respondents as possible. Therefore, the respondents were ambiguously asked to evaluate if the monetary costs were big, small, or nonexistent by the statement: “*It was expensive to acquire the paper/media product*”. The exact amount of monetary acquisition costs of devices or user fees was not asked due to the need to keep the questionnaires short. The acquisition costs of media devices were not possible to evaluate, either, because the price levels vary so much. Additionally, attention as a cost was found to be a little bit problematic to measure empirically, since people do not normally notice how they use it. They just do it – pay attention to some things and ignore others. Concentration was used instead of attention, because people are usually able to say if they concentrated on the media usage or not. Concentration and attention are related but have significant differences. People must pay attention in order to concentrate, but no concentration is needed in order to notice something (pay attention to something). Attention wanders from one item to another and it is easily caught by quite random stimulants. Concentration is a more conscious process: either people are so interested in a task that concentration comes rather automatically, or they have to force themselves to concentrate by willpower. The variable of psychological costs

was created by the statement: “Media usage was uncomfortable” and social costs measured by the statement “This media choice was embarrassing to me”. This measurement is not completely satisfactory, since it does not capture compromises, guilt, fears, risk, or regret. The problem is that the questionnaire was already quite long. It is believed that these statements provide a good approximation of the cost types, although not providing the whole picture.

5.2.5 Forming of decision task-related variables including resources and mood

It was stated in section 3.3.1 that decision context is important and decisions depend on **how important the choice is**, if there is time pressure, and if the decision task is difficult. Hypotheses 8 and 9 suggested that the elements of the decision task might be important when choosing a decision-making goal and strategy. These elements of the decision task were simply formed by 5-point scale Likert statements. The question was Q28. “How did you experience the time while you used your chosen media last time?”. The statements were coded as:

Variable	Statements
Time pressure	<i>I did the media choice in a big hurry</i>
Importance	<i>This media choice was especially important to me</i>
Difficulty	<i>Making media choice was easy (disagree)</i>

Hypotheses 8 and 9 suggested that consumer resources are important when choosing a decision goal and strategy. Furthermore, it was suggested in hypothesis 7 that **the level of resources** affects the level of experienced costs. If resources are low the subjective costs are higher. The respondents were asked about their resources at the time they used their chosen media with question Q28. “How did you experience the time while you used your chosen media last time?”. A 5-point Likert scale was used. The statements were coded as:

Variable	Statements
Level of time resource	<i>I had a lot of time</i>
Level of attention resource	<i>I felt it was easy to concentrate</i>
Level of energy resource	<i>I felt energetic</i>

Since **mood** was shown to affect consumers’ decision-making (section 3.3.1) and suggested to have an effect on decision strategy in hypothesis 9, it was important to

find out what mood the respondents were in at the moment of media usage. This was obtained by Q23: “How was your mood when you used the media?” The options were good, bad, or neutral/not in any specific mood.

5.2.6 Forming of decision-making goals and decision strategies variables

Decision goals express what is important in the decision-making (see section 3.3.2). Hypothesis 8 stated which elements affect the choice of decision goal, and hypothesis 10 how the decision goals in turn affect the choice of decision strategy. Decision-making goal variables were formed by presenting a list of different decision-making goals and asking the respondent Q34: “Which of the following things did you consider important when you made the choice? Please mark all the alternatives you considered important”. This method allowed the consumers to choose many different goals. The statements were coded as:

Variable	Statements
MAX speed	I wanted to decide fast
MIN regret	I tried to minimize the risk of regret
Min emotion	I attempted to minimize the agony of decision-making
MIN effort	I tried to decide with as less effort as possible
MAX justification	I made sure, that I can justify my decision afterwards
MAX accuracy	I tried to choose the best of all possible alternatives

The decision strategies were discussed in section 3.3.3. Hypothesis 9 and 10 suggest which variables affect the choice of decision strategy. The respondents were asked which decision strategy they used when making their media choice. Since it was believed that the decision strategies are unfamiliar to many respondents, an introductory question was provided first and the respondents were led to think about their way of decision-making in general. This was done with Q35: “Which of the following decision-making styles do you use at least occasionally? (please mark all styles you use)”. A nice side effect of this tactic was knowledge of the preferred (typically used) decision-making strategies. To be more precise, **the preference for decision strategy** was formed with question Q35: “Which of the following decision-making styles do you use at least occasionally?” After this, respondents were asked to choose from the same list the strategy they used when making their media choice last time. The chosen decision strategy was formed by Q36: “Which of the decision-making systems did you use when making this media choice?” The alternatives are listed below. The statements provided a short explanation in order to clarify the used terms.

<i>Variable</i>	<i>Description</i>	
<i>Rational</i>	<i>RAT</i>	<i>Careful deliberation system: I deliberated carefully all the alternatives and compared their properties</i>
<i>Recognition</i>	<i>REC</i>	<i>Recognition system: I chose the only option I recognized</i>
<i>Satisficing</i>	<i>SAT</i>	<i>Good enough system: I chose first suitable option, that came to my mind</i>
<i>Lexicographic</i>	<i>LEX</i>	<i>Best characteristics system: I chose according to one superior feature</i>
<i>Elimination by aspects</i>	<i>EBA</i>	<i>Elimination system: First I eliminated all the options that did not meet my criteria</i>
<i>Majority of confirming dimensions</i>	<i>MCD</i>	<i>Cup system: I compared options pairwise and deleted the inferior one</i>
<i>Frequency of good and bad features</i>	<i>FRO</i>	<i>Pluses and minuses system: I counted pluses and minuses and chose the best one</i>
<i>Equal weight heuristic</i>	<i>EQW</i>	<i>School grade system: I gave alternatives grades and chose best</i>
<i>Intuitive</i>	<i>INT</i>	<i>Intuitive system: I trusted my instincts and chose the alternative that felt best without deliberation</i>
<i>Habitual choice</i>	<i>HAB</i>	<i>Habitual system: I chose the same option I am used to without much deliberation</i>

The economic term *rational choice* means that the consumer considers all alternatives and all their attributes, has unlimited cognitive and memory skills, has unlimited amount of information, is able to rank preferences in order, and is able to calculate the solution for his/her utility maximizing problem. In this dissertation these demands have been relaxed slightly, and it has been accepted that consumers have used RAT if they say so—in other words agree with the statement description: “*Careful deliberation system: I deliberated carefully all the alternatives and compared their properties*”.

6 EMPIRICAL RESULTS OF A CASE STUDY

This chapter presents the empirical results of the case study, which has been developed theoretically in Chapter 4 and variable-wise in Chapter 5. Since the empirical case study covers only fraction of the consumers' media choice process, the empirical and theoretical results are combined and presented in Chapter 7.

6.1 The chosen media products

The respondents were free to choose a media product they had used recently and remembered well from a predetermined list. The chosen media products and number of respondents per media type are listed in Table 6. The respondents had read quite a lot of newspapers, netpapers, and Facebook. Some people had been watching programs from television and some from the Internet. The Internet had also been used for reading other than netpapers and just surfing. Few people had rented a film. There were not many gender differences, except men had read more newspapers and women had watched more videos from the internet. Age divided the respondents more. The most striking difference was between newspaper (elder) and Facebook or watching programs from the Internet (younger).

It seems that people are rather skilled in forming expectations and making media choices, since the most media choices (85%) met expectations, although 4% of media experiences were above and 7% below expectations. The media usage in this study happened mainly at home (81%) and alone (84%). The rest used media with spouse, kids, friends, or other family members. The respondents were mainly in a good mood (57%) or neutral (41%). Since only 2% were in a bad mood, the mood management motive of media usage could not be tested in this study. However, mood as a scale variable can still be used when examining the mood's effect on the choice of decision strategy.

	Respondents
Newspaper (paper)	77
Facebook	59
Program from television	44
Netpaper (like hs.fi)	35
Program from net (like Areena/Katsomo)	23
Afternoon paper (net)	27
Net other reading (like mtv3.fi)	23
Recorded/rental	20
Surfing in the net	15
Afternoon paper	7
YouTube	6

Table 6. The chosen media products in this study (n=336)

It seems that people had quite a lot of resources when they used media. Energy was the scarcest resource, yet 44% of respondents felt energetic (very energetic or quite energetic). People felt also able to concentrate on media (80%) and had enough time to use media (62%). It is good to notice that these are not levels of resources in general, but the results display the level of resources only at the moment of last media choice, when in fact there were enough resources for that use. If the resources had been too scarce, there would not have been any media usage.

6.2 Composing the consideration set

Most people (53%) considered only the chosen media. Over one-third (37%) pondered between two options, and the rest (10%) considered more options. Naturally, the used method (section 5.2.1) does not provide knowledge on how many products in total were in the consideration set, since the list was predetermined (and contained only media products). But it does tell us the minimum number of products in the consideration set. The average number of media products considered was 1.6. Interestingly, the size of consideration set gathered by this method does not differ much from other observations. For example, Narayana and Markin (1975) reported that consideration sets usually have 1.3 to 3.5 brands. According to Moorthy et al. (1997), people said they considered about 3 car brands when their car buying process was active.

The results show that all the methods suggested in **hypothesis 1** are relevant in consideration set composition (see Table 7), which confirms hypothesis 1. In the open questions the respondents did not provide any additional methods of deleting the alternatives, either, which implies that the suggested methods cover the main tactics for consideration set composition. Media being inappropriate for the need (wrong category) was the main reason for not considering it. 47% of respondents rejected media products due to this reason. This was even more relevant than media not being available (24%). It is somewhat surprising that wrong mood was quite significant (21%), since people were mainly in a good mood. Some people deleted media products also due to poor memory, scarcity of time and energy, and heuristics. Even though remembering is undoubtedly as important for media as any other products, the results in this study do not exactly reveal this. This is probably due to the familiarity of media product groups. If the actual brand names (newspaper titles, websites, or television programs) had been asked, the results might have been very different. We know that there are newspapers, television, and Internet, and it would be quite unlikely, that people would not remember their existence. However, the results in Table 7 reveal that the Internet “*did not come to mind*” as often as other media. The main reasons for rejecting the different media products from the opportunity set vary a lot. While newspapers were mainly rejected due to not being available, internet and television were not appropriate for the purpose (wrong category). Scarcity of resources do not seem to be that distinctive when composing the consideration set. Lack of time or energy affect less than 10% of choices. This is probably partly due to the fact that one media type was definitely chosen at the time of decision-making, so there was at least some time and energy available. It is interesting that newspapers, which require the most effort, were least rejected due to scarcity of energy. Heuristics have been used in consideration set composition. Interestingly, it seems that Internet and television require a special mood, whereas newspapers do not. Among some people newspapers seem to have a suspicious reputation, since reasons of “*did not like*” it and “*not used to*” were highest for newspapers.

	All	Internet	Newspaper	Television
Categorization	47%	68 %	28 %	54 %
Did not remember	15%	18 %	6 %	10 %
Heuristic: Did not like	7%	0 %	16 %	4 %
Heuristic: Not used to	18%	11 %	12 %	4 %
Heuristic: Wrong user group	6%	3 %	6 %	1 %
Heuristic: Wrong mood	21%	29 %	6 %	32 %
Not available	24%	0 %	62 %	26 %
Scarcity of energy	5%	11 %	2 %	7 %
Too expensive	13%	0 %	44 %	0 %
Scarcity of time	9%	0 %	12 %	15 %

Table 7. Methods used in consideration set composition when using Internet, newspaper, or Facebook (Only those media products are presented in the table, since the other media products did not have enough answers regarding this question), (n=217)

6.3 Benefits of media usage

Most people had more than one motive when they chose media: 16% of people mentioned only one motive, 44% mentioned a few, and 40% mentioned 4–15 different motives that affected their choices. It was delightful, but not altogether surprising, to notice that all motives had effects on media choices (see Table 8). The top motive for media usage was the desire to spend time pleasantly. Information-related motives (getting latest news and get information on something) seemed to be important motives as well, as was the related motive of know the topics of discussions, which has been categorized as social currency in this study. Gaining social knowledge was rather important as was getting something to do. Self-comfort, self-reward, and avoiding loneliness are mood-dependent specific motives, related to certain kinds of situations. Therefore, it is not surprising that they are not very significant motives in media choices in general. **Hypothesis 2** stated that the more motives one has, the more satisfied one is with the media choice. The hypothesis is confirmed. The satisfaction and number of motives correlated strongly (0.19**).

Even though newspapers have sometimes been criticized as containing only “yesterday’s news”, they are still strong in the news business. 90% of people who read newspapers in this study did so in order to gain the latest news (see Table 8). It is rather remarkable that people used Facebook a lot (85%) in order to gain the latest news. People seem to understand the concept of news pretty broadly. Although social media is incredibly fast at spreading the most interesting and surprising news,

the coverage of topics is rather random. The same media groups that are used for the news are also widely used in order to gain information on something. Spending time pleasantly was important for all media groups. Top in this category was surfing the net for fun (100%). Surfing the Internet for fun was mainly done for mood management purposes. People surfed because they wanted to get something to do (80%), avoid doing something (47%), gain a better mood (67%), avoid feeling lonely (47%), and distract their thoughts (67%). It was also used for self-reward (27%) and self-comfort (27%) more than any other media type. Television is relevant in managing tasks, such as getting something to do (80%), avoiding doing something (59%), and distracting thoughts (68%). Facebook is a pretty good provider of something to do and self-comfort, but in other mood management-related motives, it lags behind surfing in general and watching television. It is remarkable how big a part of media usage is getting something to do. Newspapers were used least for this purpose, and still 53% of newspaper readers claimed they read the paper in order to get something to do. Distracting thoughts is important for all media groups. Reading the netpapers seems to differ quite a lot from reading the newspapers on paper. Netpaper reading is more opportunistic; the netpapers are read in order to get something to do, avoid doing anything, gain a better mood, reward oneself, and distract one's thoughts more than newspapers. Newspapers and netpapers are mainly used for getting the news. But an even more important reason to use the newspaper is that people want to "know topics for the discussion". Gaining social knowledge and giving a better image of oneself are also strengths of newspapers in comparison to netpapers. Knowing topics of discussion (social currency) is a newspaper strength, even though respondents used netpapers and other reading from the Internet in order to find topics too. Newspapers are also rather widely used for self-branding purposes (46% read newspapers in order to give a better image of themselves). The Internet, especially Facebook (77%), was the main source for gaining social information. But newspapers are not far behind in this. One important part of Facebook usage is also the desire to use the same media as friends.

Hypothesis 3 stated that media choices are affected by the following motives: need for information, need for entertainment, need to manage time and tasks, escapism, mood management, identity building and signaling, social knowledge, and social currency and that the motives to use each media type differ. The findings in Table 8 confirm hypothesis 3.

	All	Newspaper (on paper)	Netpaper	Net (other reading)	Net (surfing for fun)	Facebook	Program (Net)	Program (Rec/rental)	Program (Television)
Latest news	78 %	90 %	89 %	87 %	67 %	85 %	44 %	25 %	52 %
Get information	73 %	78 %	61 %	91 %	73 %	85 %	68 %	35 %	64 %
Spend time pleasantly	89 %	87 %	72 %	74 %	100%	88 %	92 %	90 %	93 %
Get something to do	67 %	49 %	56 %	57 %	80 %	81 %	72 %	65 %	80 %
Avoid doing anything	39 %	18 %	35 %	35 %	47 %	42 %	44 %	40 %	59 %
Get something else to think about	57 %	39 %	50 %	48 %	67 %	62 %	48 %	55 %	68 %
Avoid feeling lonely	24 %	13 %	9 %	26 %	47 %	27 %	32 %	5 %	27 %
Gain better mood	42 %	24 %	33 %	48 %	67 %	35 %	64 %	25 %	55 %
Reward myself	22 %	9 %	19 %	22 %	27 %	19 %	36 %	25 %	27 %
Comfort myself	18 %	10 %	11 %	22 %	13 %	23 %	24 %	5 %	20 %
Give a better image of myself	31 %	45 %	26 %	35 %	20 %	23 %	20 %	5 %	30 %
Gain social knowledge	56 %	60 %	41 %	70 %	60 %	77 %	52 %	20 %	41 %
Use same media as my peers	25 %	21 %	11 %	35 %	27 %	35 %	28 %	10 %	23 %
Know the topics of discussions	73%	93 %	80 %	87 %	47 %	69 %	52 %	20 %	48 %

Table 8. Motives used in media choices of different media products (n=316)

The consumer-media brand relationships seemed to be rather satisfactory. The results in Table 9 show how important the social and identity-related aspects are in media usage. Many media products seemed to have a good user group relationship. It seems that media really connects people, since 54% of respondents want to belong to user groups and 48% feel that media connects people in the area; and 45% even feel that this media is a symbol for belonging to certain group. Newspaper readership seems to be a pretty strong identity claim, at least when it is measured by agreement with the descriptions “part of myself “and “signals my values”. Media products are extremely important for the respondents, since 53% were “totally dependent” on the chosen media. Social aspects were more important than individual, although those are also significant, since over one-third of respondents thought that the chosen media was part of themselves (identity) and 32% felt that the media usage signals their values. Newspaper readership seems to be a pretty strong identity claim, at least

when it is measured by the descriptions “part of my self “and “signals my values” (see Table 9). Although more people feel totally dependent on Facebook than newspapers, the two share a similar role of reminding users of nice things. There were clear differences in attractiveness of user groups in the study. Whereas 71% of newspaper readers wanted to belong to reader groups, only 45% of netpaper readers and 35% of Facebook users felt the same. Netpapers did not have as strong relationships as paper newspapers and Facebook.

	All	Newspaper	Netpaper	Facebook
Brand as identity claim				
Totally dependent	53 %	50 %	48 %	62 %
Part of myself	32 %	47 %	19 %	23 %
Signals about my values	36 %	52 %	27 %	23 %
Brand as feeling regulator				
Got me into better mood	17 %	15 %	21 %	15 %
Reminds me of nice things	39 %	47 %	25 %	46 %
Symbol for my future aims	17 %	17 %	14 %	19 %
Brand as social currency				
Want to belong to user group	54 %	71 %	45 %	35 %
Symbol for belonging to certain group	45 %	56 %	31 %	46 %
Connects with other people in the area	48 %	60 %	27 %	69 %

Table 9. Media-brand relationships with newspapers, netpapers, and Facebook (n=202)

Some motives correlated more strongly with satisfaction than others, which indicates that media is able to gratify some motives better than others. Table 10 shows the correlations between motives and satisfaction. The correlations reveal, for example, that the more important avoiding loneliness as a media usage motive was for respondents, the more satisfied they were with their choice. In other words, the chosen media helped people avoid feeling lonely very well. All other correlations but the four bottom ones are statistically significant. It is curious that all the motives that did not correlate with satisfaction had something to do with spending time or distracting thoughts. The brand relationships clearly correlated with satisfaction. It was stated in **hypothesis 4** that the stronger the brand relationship as identity claim, feeling regulator, or social currency, the more satisfied people are with their media choices. Hypothesis 4 is confirmed for all tested brand relationships. It turned out that all 9 statements were statistically significantly correlated with satisfaction (see Table 10). The more media can be used in connection to other people, the more satisfied people are with their media choice. And the more media symbolizes

belonging to a certain group or future aims, the happier people are with their chosen media. Some people were totally dependent on media products—the more so, the more satisfied they were with their chosen media. When media becomes a part of self and signals their values, the more satisfied people are. The effect of these findings on media marketing is revolutionary. The media products are mainly marketed as keeping up-to-date, enjoyment, etc. Those elements correlated with satisfaction only slightly. Instead, the effect of brand relationships is big.

	Correlation with satisfaction
Media motives	
Latest news	0.19**
Get information on something	0.15**
Spend time pleasantly	-0.03
Get something to do	-0.10
Avoid doing anything	0.01
Get something else to think about	0.00
Avoid feeling lonely	0.18**
Gain better mood	0.12
Reward myself	0.17**
Comfort myself	0.13**
Give a better image of myself	0.20**
Gain social knowledge	0.13**
Use same media as my peers	0.13**
Know the topics of discussions	0.16**
Brand relationships	
Totally dependent	0.20**
Part of myself	0.21**
Signals about my values	0.23**
Got me into better mood	
Reminds me of nice things	0.14**
Symbol for my future aims	0.21**
Wants to belong to user group	0.29**
Symbol for belonging to certain group	0.27**
Connects with other people in the area	0.32**

Table 10. Correlations of respondents' media motives and satisfaction (n=316) and respondents' media-brand relationship and satisfaction (n=202)

Newspaper reading was a much more habitual event than usage of other media products (41%). All media products had habitual users. It is somewhat surprising

that surfing the net was done habitually by 29% of the surfers. (Surfing is a random act of choosing content, not connected to time or place.) Facebook users were quite habitual (27%). The most random act was television program watching at 18%. People were mainly satisfied with their media habits, with 73% satisfied (39% very satisfied and 34% rather satisfied). Only 13% were unsatisfied (9% rather unsatisfied and 4% very unsatisfied). **Hypothesis 5** is confirmed, since satisfaction with media usage was correlated with the strength of existing habits people were satisfied with (0.24**). Therefore, it has been shown that habits are benefits of media usage.

6.4 Costs of media usage

Respondents have experienced quite a lot of different costs when using their chosen media (Table 11). Monetary acquisition costs were experienced by 51%. It is suspected that people did not estimate monetary costs correctly (people might have confused the acquisition costs and usage costs). That is why the monetary costs are not emphasized when examining results later on. From other costs, the time costs were the most significant (50% experienced). Required attention (33%) and effort (32%) were somewhat problematic for a third of respondents. Even though psychological (23%) and social costs (14%) are lowest, they are not insignificant.

The experienced costs of each used media type in the study are displayed in Table 11. Some products, for example, programs, have a fixed length (if watched from the beginning to the end). Interestingly, the experienced time costs were highest for products whose duration could be most easily controlled: surfing the net for fun, reading afternoon papers, and using Facebook. Time costs for recordings—which are of fixed durations—are the lowest. It is remarkable that surfing, which seems rather effortless, has the highest effort and attention costs. However, this makes sense since online surfing is more “pull” than “push,” and requires more engagement and effort than other, more passively just receiving media consumption. Different media products require different amounts of attention. For example, reading requires generally more attention than watching or listening. Some media products can be used simultaneously with other actions. If people do something while using media, it affects their media choices, because different media products require different levels of attention and the other actions take a part of attentional capacity. Intuitively it seems that Facebook usage does not require much effort, but its users experiences rather big effort costs. Newspaper reading requires more effort than television

watching, as anticipated. It was anticipated that afternoon papers would require less effort than newspapers, since the headlines and pictures are bigger and stories shorter, but there is no real difference in effort costs in the study. Psychological costs were highest for afternoon papers, surfing in the net for fun, and Facebook usage. Reading afternoon papers, using Facebook, or surfing the net were considered most socially embarrassing. As stated in section 3.2.3, social costs may arise if the media content is socially unacceptable or if media is used for the wrong reasons, too much, or at a wrong place or time. **Hypothesis 6** stated that all dimensions are relevant costs of media usage and that the costs are different for each media type. The results in Table 11 confirm hypothesis 6.

	Acquisition costs	Time costs	Effort costs	Attention costs	Psychological costs	Social costs
All	51%	50%	32%	335	23%	14%
Newspaper	74%	49%	31%	34%	18%	12%
Netpaper	45%	41%	28%	31%	22%	6%
Afternoon paper	83%	67%	33%	34%	50%	50%
Facebook	32%	58%	39%	25%	25%	25%
Surfing the net for fun	59%	83%	59%	65%	47%	24%
Program from tv	43%	52%	23%	32%	18%	11%
Program from net	42%	51%	27%	36%	17%	12%
Recording/rental	17%	34%	28%	28%	11%	0%

Table 11. Experienced costs of using different media products (n=309)

Hypothesis 7 stated that the level of experienced costs depends on the level of resources. The results in Table 12 confirm hypothesis 7 for available time and attention (ability to concentrate), but not for energy. The less time or ability to concentrate one has, the more costs of all kinds one feels.

	Level of time resource	Level of energy resource	Level of attention resource
Acquisition costs	-0.22**	0.07	-0.05
Time costs	-0.16**	-0.03	-0.16**
Effort costs	-0.15**	0.05	-0.10*
Attention costs	-0.11**	0.06	-0.16**
Psychological costs	-0.15**	-0.04	-0.16**
Social costs	-0.10*	0.05	-0.06
Total costs	-0.17**	0.05	-0.13**

Table 12. Correlation of costs and level of resources (n=319)

6.5 Decision context and the used decision goals and strategies

The choice of media was not a very difficult decision in general, since 87% of respondents said it was easy. Nor was there much time pressure (11% felt time pressure). The decision makers also had quite a bit of energy on average (44% felt energetic). The choice seemed to be rather important for 49% of people.

The most used decision goals in consumers' media choices were MAX accuracy (65%) and MIN effort (41%). Some people also wanted to decide fast (MAX speed 31%) and feel less agony over decision-making (MIN emotion 16%). The goals of maximizing justification (MAX justification 14%) and minimizing regret (MIN regret 11%) were not very relevant in respondents' media choices. In **hypothesis 8** it was stated that the elements of the decision task and the decision maker's energy level affects the choice of decision goal. Table 13 presents the correlation results about decision goals and the relevant variables of decision task (decision task difficulty, importance of choice, and time pressure) and the level of energy resources.

People used MAX accuracy when the task was important (0.13**), when they had a lot of energy (0.16**), or when there was no time pressure (-0.32**). MIN effort was chosen when the choice was unimportant (-0.12**) or when the energy level was low (-0.16**). MIN emotions or MIN regret did not correlate (statistically significantly) with chosen variables. This could mean that they are not relevant decision goals regarding media choices, or they were measured poorly in this study. MAX speed was confirmed, since time pressure (0.14**), level of energy (-0.19**), and importance of choice (-0.14**) correlated clearly. The correlations of decision task variables and the choice of decision goals mainly correlated and therefore

hypothesis 8 is confirmed. The two elements of the decision task, namely importance and time pressure, as well as consumer energy level indeed affect the choice of decision goals.

	MAX accuracy	MIN effort	MIN regret	MIN emotion	MAX speed	MAX justification
DECISION TASK						
Importance	Confirmed (0.13**)	Confirmed (-0.12**)	Not confirmed (-0.01)		Confirmed (-0.18**)	Confirmed (0.14**)
Time pressure	Confirmed (-0.32**)			Not confirmed (0.07)	Confirmed (0.14**)	
Difficulty				Not confirmed (0.01)		
CONSUMER RESOURCES						
Level of energy	Confirmed (0.16**)	Confirmed (-0.16)			Confirmed (-0.19)	

Table 13. Correlation of decision task and level of energy with decision-making goal (n=196)

Several decision-making strategies have been examined. HAB (28%), SAT (18%), and INT (15%) were the most used strategies. Some people also used LEX (11%), RAT (8%), and EBA (5%), but the rest are rather unused strategies in respondents' media choices. This means that the number of respondents who have used them is too low for further analysis (fewer than 10). It was stated in **hypothesis 9** that importance, time pressure, difficulty, mood, and energy level affect the choice of decision strategies. Furthermore, in Table 4 it was suggested how they affect the choice. Table 14 shows that it is true that importance, time pressure, and decision difficulty affect the choice. Furthermore, the level of energy and mood affected the choice of decision strategy. Even though the correlations in Table 14 are not always statistically significant, they all have the expected direction (+ or -). This means that hypothesis 9 is confirmed; it has been shown that importance, difficulty, time pressure, energy level, and mood affect the choice of decision strategy.

	RAT	SAT	LEX	EBA	INT
Importance	Confirmed (0.17**)	Confirmed (-0.10*)		Not confirmed (-0.09)	
Time pressure	Not confirmed (-0.07)	Confirmed (0.10*)	Not confirmed (0.03)	Not confirmed (-0.01)	Not confirmed (-0.06)
Difficulty		Not confirmed (0.02)		Confirmed (-0.19**)	Not confirmed (0.03)
Energy level	Confirmed (0.15**)	Not confirmed (-0.08)	Not confirmed (-0.02)	Not confirmed (0.02)	
Mood	Confirmed (0.13**)		Not confirmed (-0.07)		Not confirmed (0.08)

Table 14. Correlation of decision-making task, energy level, and mood with the choice of decision strategy (n=303)

In hypothesis 10 it was stated that the chosen decision goal affects the choice of decision strategy. Furthermore, it was suggested which goals lead to which strategies. Hypothesis 10 was confirmed (see Table 15): the decision goals indeed affected the choice of decision strategy.

	RAT	SAT	LEX	EBA	INT
MAX ACCURACY	Confirmed (0.13**)	Confirmed (-0.13**)	Confirmed (0.20**)	Not confirmed (-0.07)	
MIN EFFORT	Confirmed (-0.12**)	Not confirmed (0.08)			
MIN EMOTION			Not confirmed (-0.04)	Not confirmed (-0.03)	
MAX JUSTIFICATION	Not confirmed (0.07)		Not confirmed (0.04)		
MIN REGRET	Not confirmed (0.09)	Confirmed (-0.14**)	Confirmed (0.17**)		
MAX SPEED	Not confirmed (-0.07)	Not confirmed (0.05)	Not confirmed (0.0)	Not confirmed (0.01)	Not confirmed (0.07)

Table 15. Correlation of decision goals and decision strategies (n=276)

The preference for certain decision strategy (used typically) was also significant. The personal preference for a decision strategy correlated strongly with the choice of decision strategy this time (average correlation was 0.24**). Based on findings in the tables 14 and 15, it was concluded that the decision task elements and decision goals affect the choice of decision strategy.

6.6 The effect of chosen strategy on media choice

Hypothesis 11 stated that different decision strategies lead to different media choices. This is confirmed by the results in Table 16, which displays different decision strategies used when choosing to read a newspaper or netpaper or choosing to watch a program from the net or television. It was shown that reading a newspaper is very habitual, more habitual than netpaper, and netpaper choices are clearly more intuitive. When the choices are non-habitual, however, newspapers are more deliberated (use of RAT). Choosing a program from television or the net is somewhat different. Television programs are more carefully chosen (usage of RAT, EQW, MCD, or FRO is considerably bigger) and when choosing to watch programs from the Internet, people quite often settle for good enough.

	Netpaper	Newspaper	Program from net	Program from television
RAT	14%	22%	5%	19%
EBA	4%	5%	5%	15%
EQW/MDC/FRO	7%	8%	0%	16%
LEX	7%	19%	9%	7%
SAT	32%	35%	48%	22%
INT	36%	11%	16%	19%

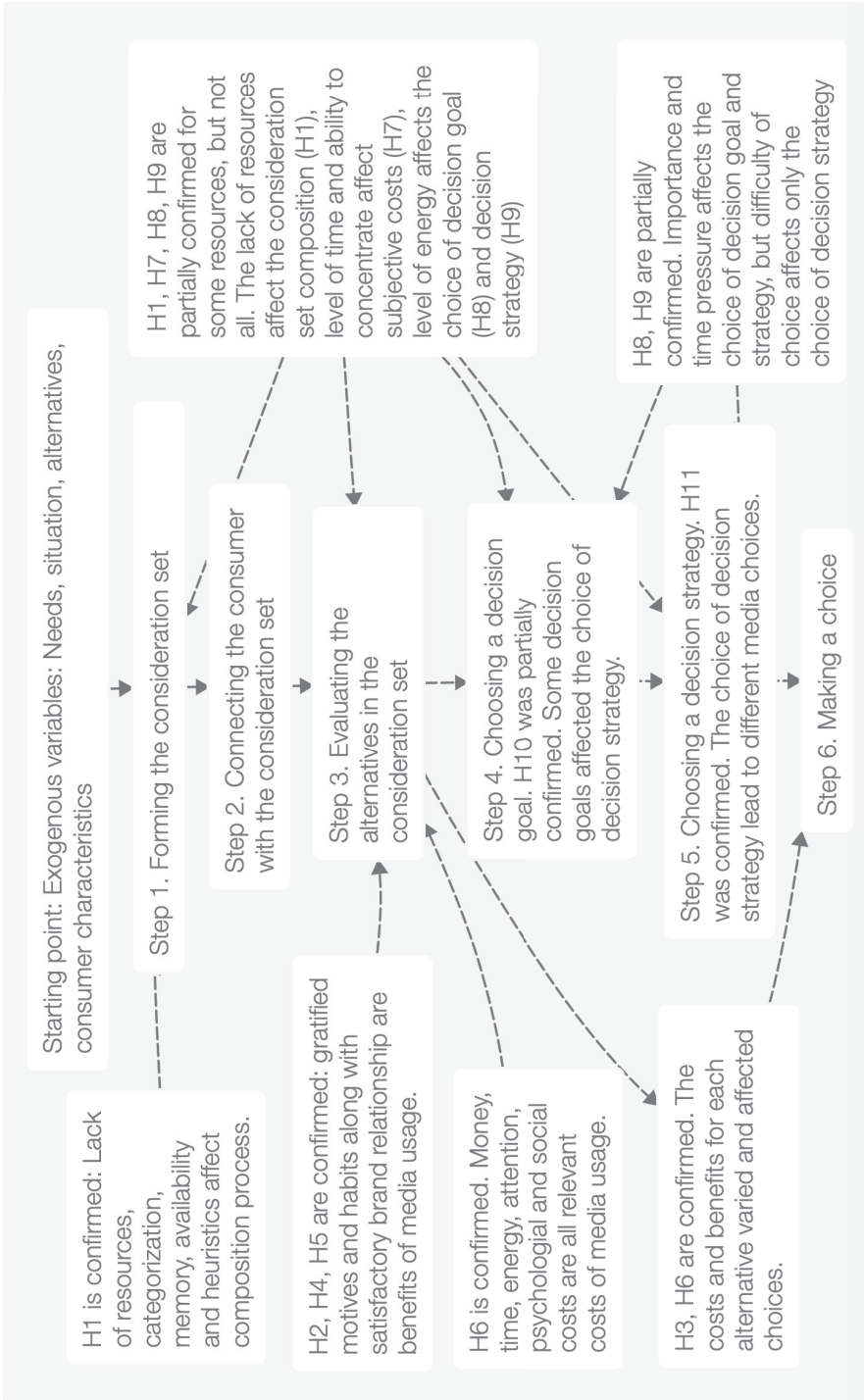
Table 16. Decision-making strategies used in media choices when netpaper, newspaper, program from net or program from television was chosen

6.7 Summarizing the empirical results

The empirical results presented in this chapter have shed light on some of the aspects of the consumers' choice process. All the findings from the empirical results presented in this chapter have been summarized in Figure 13. All the proposed methods of composing a consideration set were supported empirically (H1 is confirmed), and thus suggested method of composing a consideration set is confirmed. It has been shown that gratified motives, habits, and satisfying brand relationships are all benefits of media usage (H2, H4, and H5 are confirmed). Furthermore, results showed that money, time, energy, attention, psychological, and social costs are all relevant costs of media usage (H6 is confirmed). Since all the costs for each media group varied, all the media products had their own sets of related benefits and costs and thus affected choices (H3 and H6 are confirmed). This

confirms the suggested types of benefits and costs affecting the evaluation phase. The resources the consumers have (time, energy, and attention capacity) have been shown to affect some elements in the choice process. To be more precise, the lack of any of those resources affects the consideration set composition (H1 is confirmed). The levels of time and ability to concentrate affects subjective costs, but energy level did not affect subjective costs (H7 partially confirmed). Therefore, it can be concluded that the level of some resources affects the level of subjective costs. Even though the energy level did not significantly affect the costs, it was found to be relevant when choosing a decision goal and decision strategy (H8 and H9 confirmed). Hypotheses H8 and H9 about decision task elements affecting the choice of decision goal and strategy are partially confirmed since the importance of the choice and time pressure affects the choice of decision goal and decision strategy. However, decision difficulty affected only the choice of decision strategy. Choosing a decision goal affects the choice of decision strategy (hypothesis 10 about different decision goals leading to different decision strategies was partially confirmed since only some goals had the effect). Hypothesis 11 was confirmed: the choice of decision strategy led to different media choices. The following chapter develops the model further based on these empirical findings and theoretical reasoning.

Figure 13. How the empirical results are related to the suggested comprehensive media choice model



7 PROPOSING A COMPREHENSIVE MODEL OF CONSUMER'S MEDIA CHOICE PROCESS

This chapter combines the theoretical and empirical results presented in previous chapters. The combination is presented in a form of choice process and a model of media choice is suggested.

7.1 Consumers' media choice process

This chapter introduces the proposed comprehensive model about consumers' media choice process based on theoretical reasoning and empirical findings. Even though the main focus has been conceptual and theoretical development, parts of the model have been empirically examined. Figure 13 summarized how the empirical findings were related to the media choice process. The model can be applied to intermedia choices and intramedia choices as well. When one is making an intermedia choice (namely choosing the technology), situational factors might have a more substantial role (for example, availability, others present, etc.). When one is choosing the content, the motives, benefits, and non-monetary costs might be more relevant. Even though the empirical test is done in this study is about intermedia choices, the same logic applies to intramedia choices. The model is based on the idea that there are four main groups of variables that are considered exogenous (not dependent on other variables in the model): motives, situations, consumer characteristics, and alternatives. These variables might be slightly related to each other—for example, motives can depend on situations and consumer characteristics—but these interrelationships are irrelevant for the model since the exogenous variables are jointly considered as a frame for the choice. It is argued that the consumers' choice process has six larger steps. In the first step, consumers form the consideration set. In the second step, consumers connect with the consideration set by forming expectations about the alternatives based on their experiences and information. The third step is about evaluating the benefits and costs of each alternative. In the fourth step, consumers choose a decision goal. The fifth step is

about choosing a decision strategy, and the choice itself (step six) comes automatically in consequence of previous steps.

The exception to this six-step model is habitual choice. When making habitual choices, the first choice is made between continuing the habitual behavior or breaking the habit. The preferences are typically rather biased towards maintaining the status quo (acting habitually) as was discussed in section 2.4.2. However, people are not always satisfied with their habits. A strong urge to break a habit occurs if the benefits of changing the habit are bigger than the costs. If one chooses to act habitually, the choice is thus done, but if one chooses to break the habit, the choice follows the steps described above.

7.2 Step 1: Composing the consideration set

The opportunity set is formed with the available alternatives. Not all the alternatives (for example, all the media products in the world) are available or possible to use. Furthermore, only those alternatives that can possibly gratify the motives are entered in the set. Situations define what is possible and convenient. Some alternatives are not appropriate for certain situations or cannot be comfortably used. **In short, it is defined in this study that the opportunity set is formed with available alternatives, which can be expected to gratify the motives in given situations.**

Some situations can automatically limit the opportunity set. For example, we cannot use a media product if we do not have enough time or energy to use it. In this study these automatic limits are called strict limits. It is argued that the strict limits are non-negotiable restrictions that limit media choices. Some media products are simply not available, or we are not aware of them, so we cannot choose them. Even though the availability of media products is much better nowadays than it used to be in general, the availability of traditional products has not changed much. Therefore, availability is still a relevant question. Some products must be bought beforehand, and some have restricted access. Obviously, if we do not have money to buy a product, we cannot use it. Technical problems might stop us using the electronic or digital products we have already bought. Some media products may require special skills or abilities, which we might not have. For example, reading a paper in a foreign language or technical skills needed to use digital devices can be

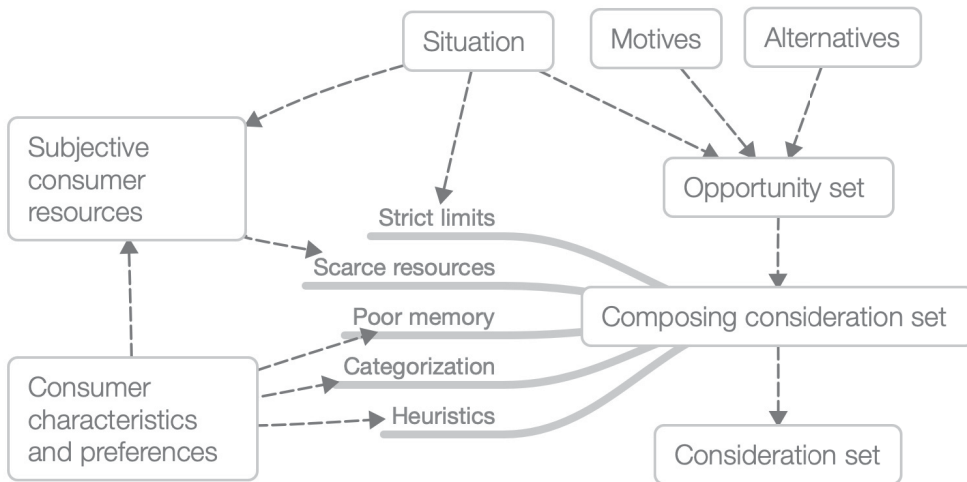
such hindrances. In other words, the consumer must have the ability to use the product. Due to scarcity of resources people have a limited amount of time, attention, money, and energy overall. The strict limits here refer to what would be possible, if one would really want to. In the long run, we are able to make arrangements and prioritize and thus have more options. We can acquire more skills, borrow money, etc. In the short run, we have less options; we need to work, sleep, eat, buy food and gas, etc. One could argue that these are subjective choices: we could survive without sleeping or eating for a while. Let's just say that the strict limits apply when we cannot reasonably allocate enough resources to media usage situations. These limitations are dichotomist; we either can or cannot use the media. **Based on the reasoning above, it is argued that there are strict limits that automatically limit the size of the opportunity set. Examples of these limits would be lack of time, energy, money, or abilities or the product being unavailable.**

In section 3.1.1 it was shown that large opportunity sets cause problems and that the opportunity set is usually reduced down to a couple of alternatives by some elimination method. This process of reducing options from the opportunity set is called consideration set composition. Based on the empirical results, it seems that half of the people composed a consideration set and half skipped this phase, that is, they considered only chosen media. Some phenomena that diminish the size of the opportunity set were discussed in section 3.1.2, namely, poor memory, categorization, and usage of heuristic rules. Some of the alternatives are deleted "automatically" from the set by strict limits. In addition, these empirical results showed that scarcity of consumer resources limits their opportunity sets significantly. **Based on the reasoning above and empirical results confirming H1, it is argued that people use these methods 1) strict limits 2) scarce resources, 3) poor memory, 4) categorization and 5) heuristic reasoning to delete options from the opportunity set, thus forming the consideration set.**

The proposed consideration set composition process and variables affecting it are illustrated in Figure 14. As was argued earlier in this chapter, situations, motives, and alternatives define the opportunity set. The opportunity set is further developed into a consideration set by a process of composing the consideration set. Situations also affect the subjective amount and objective amount (lack of resources = strict limits) of consumer resources. The subjective amount of consumer resources refers to how scarce the resources feel and how much one is willing to use them. A low

level of resources can lead to deleting an option from the opportunity set. The list in the middle of Figure 14 (strict limits and below) describes different methods of composing the consideration set as was empirically tested and discussed earlier. Consumer characteristics and preferences influence how scarce the resources feel, what is remembered, how the alternatives are categorized, and what kind of heuristics is used.

Figure 14. The suggested modelling of composing the consideration set



The underlying idea is that any outsider could form the opportunity set for the objective given the description of motives, situation, and alternatives. For example, “Want to find out the news, now and at home”. By contrast, the consideration set composition is highly subjective; it depends on the consumer’s characteristics (memory, categorization habits, usage of heuristics) and resources.

7.3 Step 2: Connecting the consumer with the consideration set

7.3.1 The role of expectations and preferences in choices

Next, the alternatives in the consideration set need to be evaluated. Step 2 in the proposed model is based entirely on theoretical reasoning. None of the elements have been empirically examined in this study. The alternatives in the consideration

set have different features: Some of these features are familiar to us based on our previous experiences; some features are unknown to us. Due to imperfect information (see section 2.3), we do not know these features for sure. Before we can choose an option from the consideration set, we must form expectations as to what kind of features the alternatives have and how well these alternatives will be able to gratify the motives. It is equally important to figure out which products or features we prefer (section 3.2.2). **Based on the reasoning in this study, it is argued that preferences and expectations form the links between the consumer and the alternatives. While expectations are more or less technical evaluations the consumer makes about products' abilities to gratify the motives, the preferences add emotions and values to the relationships with products and features.** Expectations link the products with the chooser's experience and knowledge. When expectations about the products are formed, one has an idea of what kind of features the products have and how likely it is that these expectations will be met. After attaching the features and probabilities to the products, one needs to decide which features one prefers, and which are the most important ones. It would also be essential to know which features are benefits and which downsides. In short, expectations are about what kind of features the product will most likely have and preferences are about what kind of features we would like it to have. To be more specific: expectations tell us what kind of features we expect the alternatives to have and to what extent the products will be able to gratify the motives. Preferences tell us what features of the alternatives we like and which gratifications of motives we value (prefer) more than other ones. In chapter 6.1 it was shown that in the case of media usage, the expectations were mainly met, since 85% of respondents were satisfied with their choice. The preferences were not measured since people obviously chose the product they preferred after considering the benefits and costs.

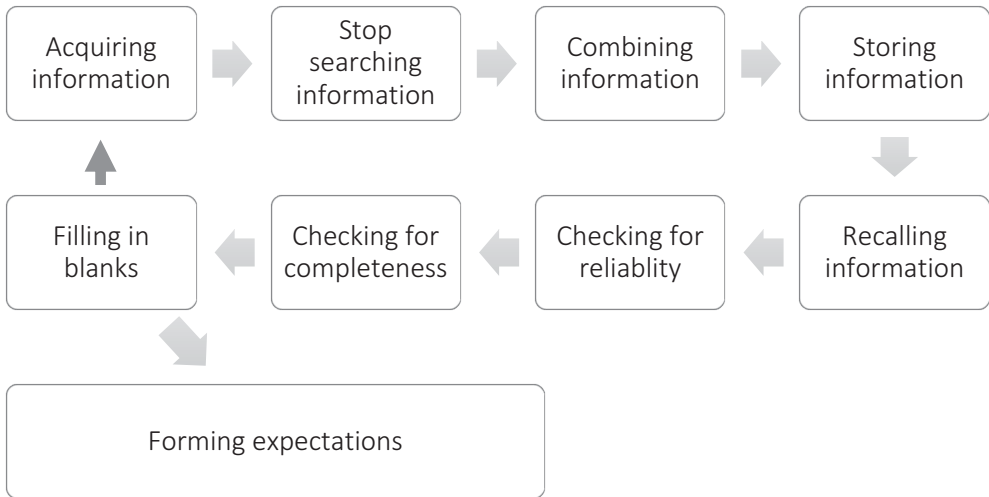
7.3.2 Forming expectations based on information

Based on the theoretical results on information search, consumer learning, and importance of initial experiences presented in section 3.2.1, two models of the process of forming expectations are proposed. The first model (Figure 15) is about forming expectations based on information only and the other model (Figure 16) is about forming expectations based on information and experiences. The formation of expectations based on information begins with information search. Consumers

need to acquire information about the alternatives, their availability, prices, and attributes. In order to make a decision, one needs to stop searching for and gathering of information at some point. Theoretically, it is clear that we stop the search when we have enough information or when the costs of information gathering exceed expected benefits from the extra information gained. In practice, it is not clear when to stop searching. The problems of oversearch and stopping rules were discussed in section 3.2.1. When we get new information, we need to combine the information with previously existing information. Furthermore, we need to store the information in our memory and be able to recall it. There are some obstacles due to poor memory as discussed in section 3.2.1.

Sometimes we can get all information at once and we are able to compare the alternatives and attributes. However, normally consumers' information is acquired piece by piece and it is usually awfully imperfect. Firstly, the information might be incorrect due to misunderstandings or deliberate misleading. Secondly, even if the information is correct, it might be biased (revealing only certain aspects of the matter) or thirdly, it can be incomplete. Knowing these problems with information, people do more or less conscious estimation of the reliability and completeness of information. When the information we have is incomplete, and we still want to make the choice, we need to fill in the blank spots by more or less sophisticated guesses (see section 3.2.1). At this point we may also decide to search for more information and start the process all over again (the dark arrow). In practice this process is nearly automatic and rarely deliberated consciously. Figure 15 illustrates the proposed process. **Based on the reasoning above, it is argued that in the case of novel choice, expectations are formed in a process presented in Figure 15.**

Figure 15. The suggested model of forming expectations based on information



The process described in Figure 15 might take place in a novel situation or when we already have some experiences and gain extra information. It is proposed that in a novel situation, the expectations are formed based on information as described in Figure 15. Let's take a look at the experiences next.

7.3.3 Forming expectations based on experiences

The initial experiences were shown to be very important for choices in section 3.2.2. But even before this very first experience, we had some pre-expectations based on information (Figure 15). Figure 16 displays the proposed model of expectations formation based on experiences. In the beginning, we start by having some pre-expectations, due to word of mouth, marketing, and other information. These pre-expectations lead to the very first exposure to a certain product or product group, which leads to some personal evaluation of the usage experience. This evaluation depends on many different variables—for instance, how well we remember what gratifications we sought (accuracy of remembered expectations) and if these precise gratifications were gained (accuracy of remembered experience). Memory was discussed in section 3.2.1. It is not self-evident that we remember these, because we

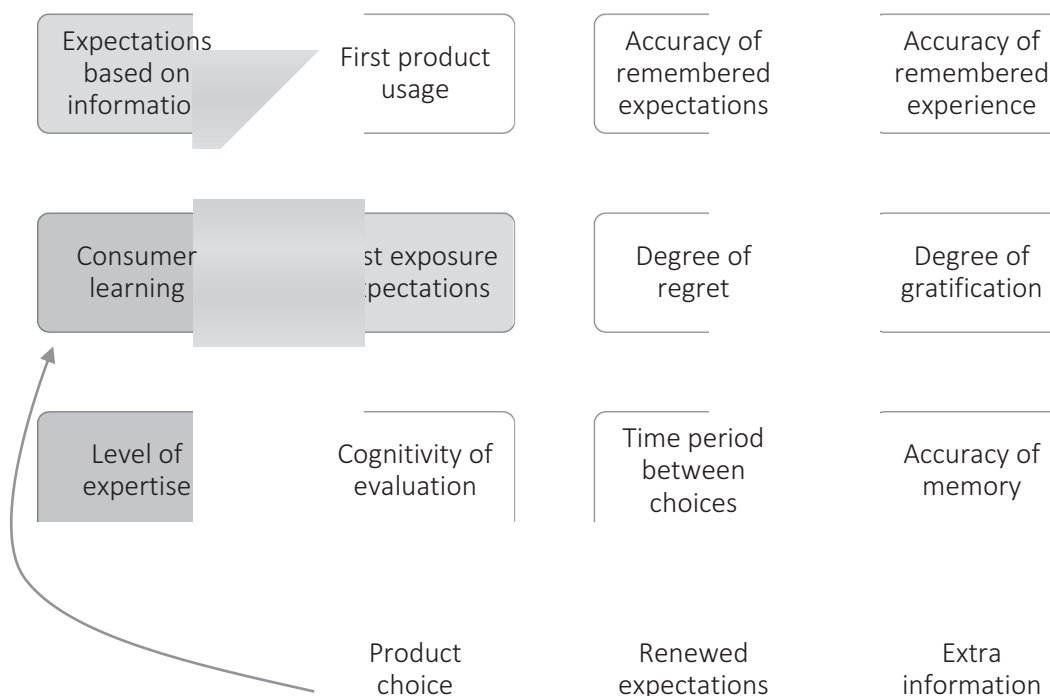
might have gained other than intended gratifications, or something totally irrelevant may disturb the usage experience and memory of it.

Sometimes it is not easy to evaluate dichotomously if we have been satisfied with a particular experience. In many cases we could say that we have been partly satisfied (degree of gratification). There might be some regret, for example, we could regret the loss of the other alternatives when making a particular choice (see opportunity costs in section 3.2.3). Should we have chosen the other film, book, or site instead? There is a degree of regret in nearly every choice. After these evaluations, we form post exposure expectations. This is in accordance to the studies in Uses and Gratifications and the circular expectations explained in section 2.4.1. This process is also called consumer learning (see section 3.2.1). All of this learning takes time and can also be described as learning costs (see section 3.2.3). There might be some disturbances to consumer learning (poor cognitive ability, memory capacity, or motivation to evaluate). However, if the choice and consuming experience is very important for us, we are more likely to remember and to be quite keen to evaluate.

Up to this point, we have discussed the consumer learning process based on an initial experience, in other words, a consumer learning process making such choices where we are nearly novices. However, especially with media products, we quite rarely are novices and often have quite a lot of experience, at least with similar products. When we use products and thus repeat the process described in the model many times, our level of expertise rises. The level of expertise has a great effect on expectations. Experts tend to make better choices than novices because they have had many more opportunities to learn from their past choices. But the process from this point on is similar for novices and experts. The post exposure expectations based on consumer learning will be highly useful, if were faced with exactly the same choice again in the near future. In reality, most likely there will not be exactly the same situation, and even if we would choose to watch the same film again or read the same book, the experience would be different, since we have already done that once. We need to improvise and generalize about the learned experiences and make a forecast about totally new, but somewhat similar, products and situations. This idea is based on the RDP model about intuitive decision-making explained in section 3.3.3. In other words, we need to apply what we have learned from past experiences to the current situation. This phase depends on the level of cognitive ability (cognitivity of evaluation).

If there is a lot of time between the choices, we could have forgotten some of the things we learned. The time period between choices matters because we form renewed expectations based on what we remember of post-exposure-expectations (accuracy of memory) and based on extra information we have gained since the last choice. For example, we might have seen advertisements, heard friends' recommendations etc. This leads to renewed expectations. When we use a product and evaluate the experience, we learn and then jump back to the consumer learning phase. **Based on the reasoning above, it is argued that in the case of non-novel choice, expectations are formed in a process presented in Figure 16.**

Figure 16. The suggested model of forming expectations based on experiences

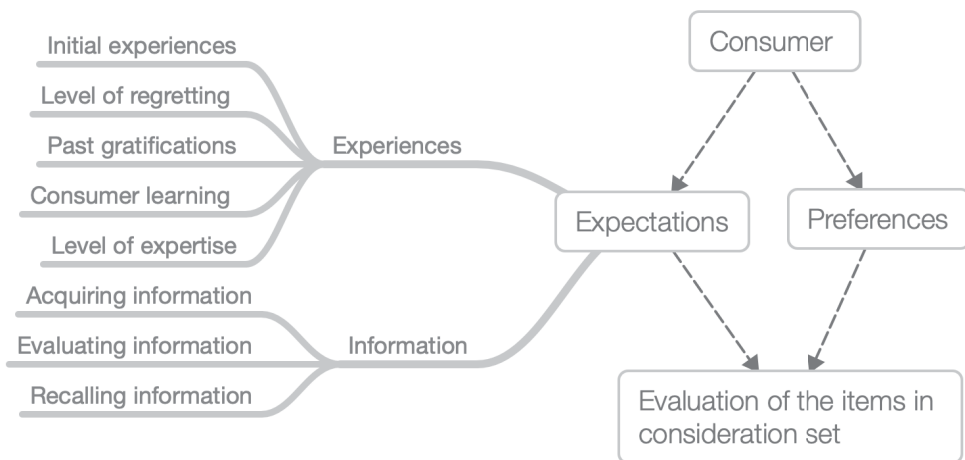


Expectations based on information (Figure 15) take place before the very first usage decision of any product. The forming of expectations based in information can be seen as the very first box in the process of forming expectations based on experiences (Figure 16). If, however, we already have experiences, the process of

forming expectations based on extra information starts with the phase “Extra information” near the end of the expectations process (Figure 16).

Figure 17 summarizes the role of expectations and preferences as a link between the consumer and the products in the consideration set. It is vital to be able to link the decision maker with the alternatives in the consideration set. The alternatives cannot evaluate themselves. The expectations-forming phases are simplified in order to provide a more concise figure. Neither expectations nor preferences were empirically tested. It is argued that preferences also play a role when composing the consideration set and choosing a decision goal.

Figure 17. The suggested modelling of consumers' link to the consideration set by expectations and preferences



7.4 Step 3: Evaluating the alternatives

7.4.1 Proposed model of benefits

So far, we have formed a consideration set and linked the consumer to the set by expectations and preferences. Now, we can start to evaluate the benefits and costs of each alternative in the consideration set. The gratification of motives is supposedly the prime reason why consumers use media. By definition all the alternatives in the consideration set could gratify the motives at least to some extent (if they wouldn't,

they would not be in the set). It has been shown by empirical results (H2) that the benefits of having multiple motives dominate the possible downsides due to conflicting interests of having multiple motives; therefore, the more motives one has, the more satisfied one will be with the choices. This fact is significant for marketing implications.

The consumer benefits from media usage by gratification of different needs, for example, need for information, need for entertainment, need to manage time and tasks, escapism, mood management, identity building and signaling, social knowledge, and social currency. The empirical results showed that all motives tested had at least some effect on media choices (H3). Therefore, it can be concluded that gratifying motives in general is a benefit of media usage.

Brands can offer several possible benefits for consumers. Brands can, for example, be used in identity building, communication, self-branding, social currency, identity signaling, attaching qualities to oneself, and regulating feelings. People connect emotionally with brands due to those symbolic features and might start to see brands as parts of themselves. It is argued that brand benefits do not apply only to certain trademarks, but also to wider groups of products, such as media, for example, newspapers, afternoon papers, television, etc. Empirical results show that brand relationships are of extreme importance for consumers. Furthermore, empirical results showed (H4) that the stronger the brand relationship is as identity claim, feeling regulator, or social currency, the more satisfied people are with their media choices. Therefore, it is evident that the audience benefits from brand relationships in addition to gratifications of motives.

Habits are an important part of media usage. People have morning routines, coffee break routines, etc. Typically, people enjoy their habits. In the empirics (H5) it was shown that the more people are more satisfied with their media habits, the more satisfied people are with their media choices. Therefore, it can be stated that habits can be a benefit of media usage in general.

Based on empirical results it is argued that the benefits of each alternative in the consideration set are a combination of three factors: the gratification of motives, benefits of the relationship the consumer has with the products, and the benefits of using one's habits.

7.4.2 Proposed model of costs

Gratification of motives, enjoyment of habits, and brand relationship are potential benefits related to each alternative in the consideration set. The alternatives have costs as well as benefits. In order to consume, people must use at least some of their scarce resources: money, time, effort, or attention. When thinking about choices, one notices that even though one might have some money, time, and energy one could use on media products, one might not want to use it. Willingness to pay depends on the level of resources. Willingness to use scarce resources varies a lot from person to person. It is a subjective decision. **Based on reasoning in this study, it is argued that the strict limits are objective limits of resources, but the amounts of resources are important limits also, since they affect how much one is willing to pay (subjective limit).** The usage of resources is the “price” one pays for the use of a media product in addition to possible social and psychological costs. It is argued that resources, limits, and willingness to use them are linked in four separate ways: 1) If there are no resources or the level of resources is too low, one cannot consume (limit) 2) If the level of resources is low, one is unwilling to use his/her resources (subjectively high cost - unwilling to pay) 3) Moderate level of resources provide ability to use them (subjectively low cost – willing to pay). 4) High level provides a desire to use them (motive for consumption). Think, for example about time; if one has a lot of time, one might feel bored and want to use time (spend it). In addition to these, there might be some psychological or social unwanted consequences, which are called psychological and social costs in this study. Based on the empirical results (H6), it can be stated that the costs of each alternative in the consideration set are a combination of monetary, time, effort, attention, psychological and social costs.

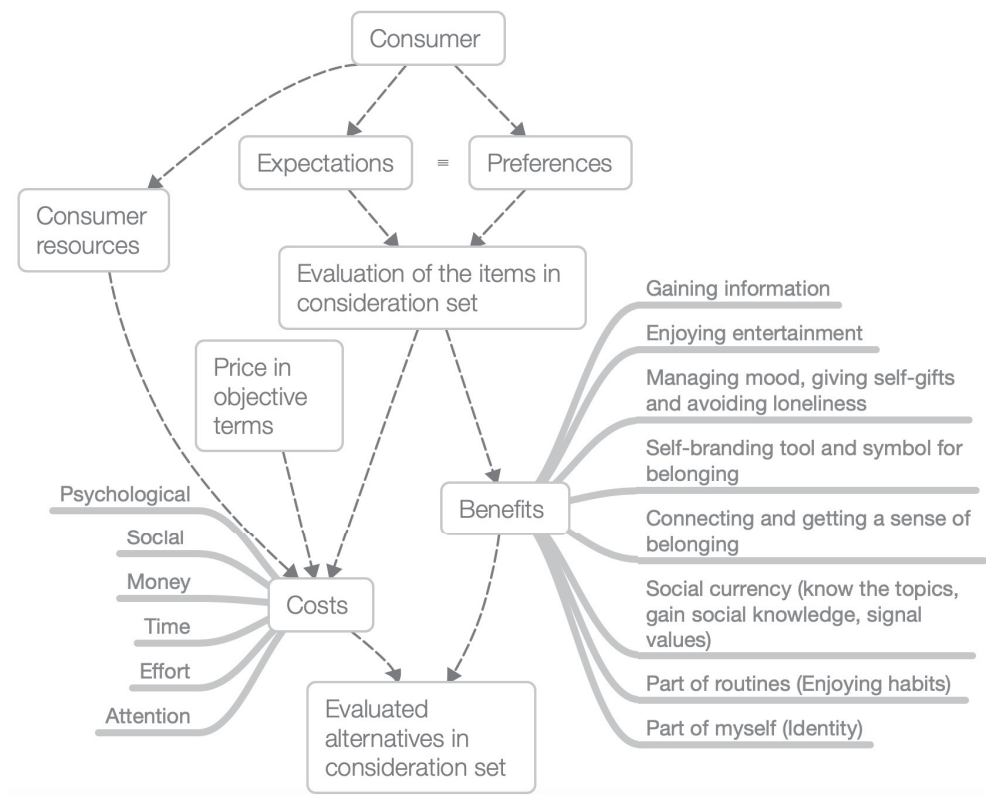
Only some of the costs could be measured in objective terms, namely money and time (duration). Objective prices are typically expressed in quantifiable terms, such as 5 euros or 2 hours. Objective prices could also be thought broadly to be such as “needs a lot of energy or attention” or “has a high potential of causing psychological or social costs”. Objective prices are prices that people can generally agree on. The companies can try to control the objective prices of their products by product development and pricing. They can set monetary price and duration and try to influence other objective costs. For example, some newspapers have tried to lower the effort needed to read by making the headlines and pictures bigger and stories shorter. Even though objective prices are the same for everyone, they feel different

to each of us. And they may even feel different in different situations and contexts. Consider, for example, renting a film for 5 euros. When one does not have 5 euros in the wallet at the moment (resources are low), the price is too high. It is also too high if the 5 euros in the wallet is meant for something else (availability of the resource). Therefore, objective costs do not explain the consumer's ability nor willingness to pay the demanded price. Willingness to pay depends on how much the subjective benefits exceed the subjective costs. The empirical results showed that the level of resources affects the costs (H7). **Based on this reasoning, it is further argued that the subjective cost of each cost type depends on the objective price (in terms of money, time, effort, attention, social and psychological discomfort), level of resources, and the subjective availability of that resource.** Due to the limited length of the questionnaire, the objective prices or subjective availability of resources was not tested. The subjective availability of resources is assumed to be embedded in the level of resource. That is, if the resource is not available for this particular consumption event, it is not included in the subjective resources. Therefore, the level of experienced costs is affected by the level of resources, as was discussed above, and price in objective terms. The data shows that costs are (at least partly) subjective, since they depend on the level of subjective resources of the decision maker.

Based on reasoning above, it is suggested that: The proposed model of consumers' media costs is that 1) costs are a combination of many cost types 2) they are subjective, since they depend on the decision maker and 3) expected, since there are many costs, one cannot really be sure before one has bought and used the product. Furthermore, costs are affected by 4) level of resources and price in objective terms (duration, euros, etc.).

Figure 18 summarizes the discussion. Costs depend on objective prices and subjective levels of consumer resources and, naturally, the alternative which has been examined. The costs consist of money, time, effort, attention, psychological and social costs. Costs and benefits are attached to each alternative in the consideration set. That is, after this phase a consumer has a set of alternatives, which all have some costs and benefits. If these were monetary or measured in any other quantifiable currency, the next steps would be unnecessary, if the optimal choice could be calculated with mathematics. However, typically decision-making is not that easy and the next steps are needed.

Figure 18. The suggested model of how costs and benefits are linked to the media choice process



7.5 Steps 4 and 5: Choosing a decision goal and decision strategy

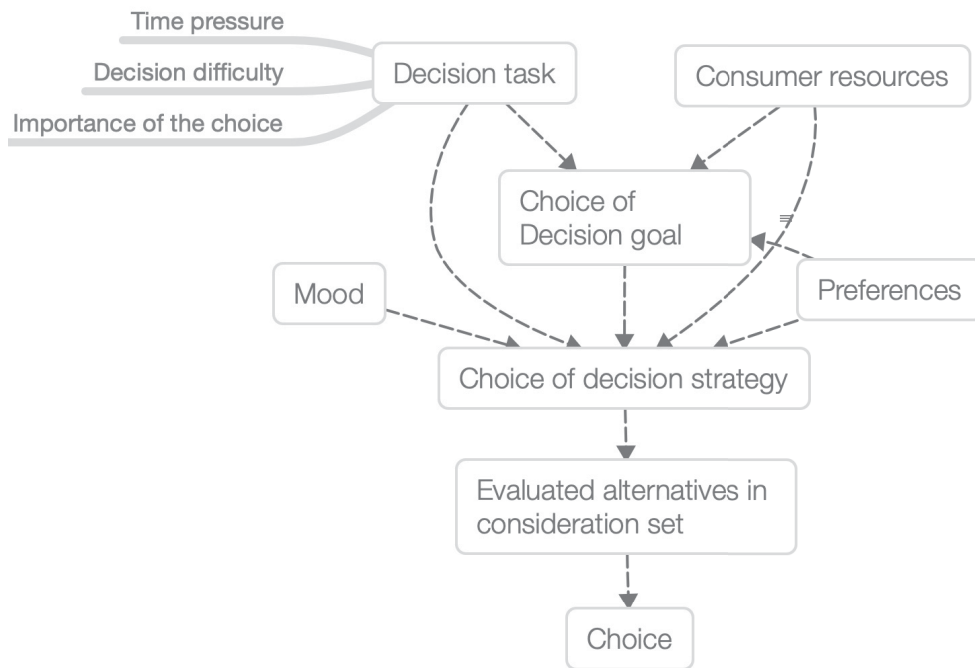
Now that we have evaluated the benefits and costs of alternatives and the composed consideration set, we have reached the stage of decision-making. In the decision phase consumers make two main choices: they choose their decision goal (what is important in decision-making) and decision strategy (how the decision will be made). The decision task (time pressure, importance of the choice, and decision difficulty) is one of the key elements in decision-making. In addition to the decision task, it has been shown with empirical results that the consumer’s energy level and mood affect the choice of decision goals and strategies. **Therefore, based on empirical findings, it is defined that the combination of the decision task and**

the energy level and mood of the decision maker define the decision context for the choice.

As the empirical results showed, the choice of decision goal depends on time pressure, importance of the choice, and consumer energy level (H8). To be more precise: it has been shown that when in a hurry people want to MAX Speed, and when the choice is important, they want to MAX Accuracy and MAX Justification. These examples show that importance of the choice, time pressure, and consumer energy level affect the choice of decision goal. **Based on empirical results (H9), it is argued that the choice of decision strategy is affected by importance and difficulty of the choice, if there is time pressure, and the mood and energy level of the decision maker.** When the decision task is very important for us, we want to make as accurate choices as we can and choose RAT. When we are in a hurry, we want to simplify our decision-making process and we may choose the first acceptable option (SAT). When the decision task is really difficult, it might be reasonable to simplify decision-making. This implies that, for example, EBA can be used. When people have a lot of energy or they are in a good mood they can use RAT, since it requires a lot of effort and it has been noticed that when people are in a good mood, they deliberated longer. **Based on empirical results, it is argued that some decision goals are connected to certain types of decision-making strategies (H10).** For example, if the decision goal is to maximize accuracy, it is more likely that the chosen decision-making method is rational choice than satisficing. What is more, the empirical results (H11) showed that the media choice was affected by the chosen decision strategy.

Figure 19 summarizes the interrelations in the decision-making phase. Empirical results showed that decision task variables and the consumer's energy level affect the choice of decision strategy and decision goal. Furthermore, mood had an effect on the choice of decision strategy. Decision goals affect the choice of decision strategy. In addition to these, it is assumed that consumers have preferences for certain decision-making goals and strategies.

Figure 19. The suggested modeling of the choice of decision goal and strategy



7.6 Step 6: Making the choice

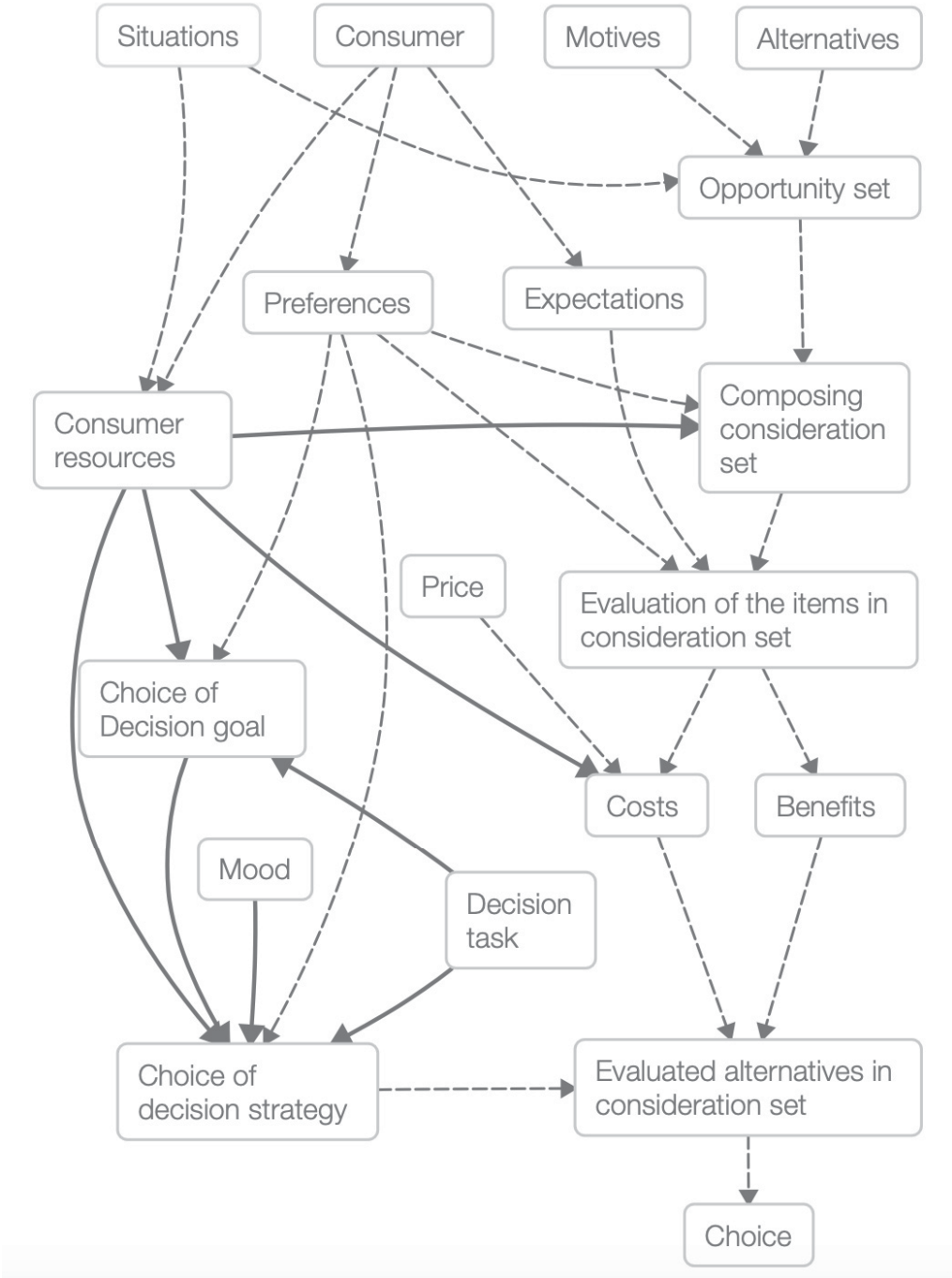
When all the alternatives in the consideration set have been evaluated and decision strategy has been chosen, the consumer’s choice is determined by that chosen strategy. For example, if one were to select a classic Russian novel to read, one forms the consideration set as described in this chapter. Let’s say there are Tolstoy, Gogol, Chekhov, and Dostoevsky in her consideration set. Then the consumer thinks how well those books will please her and if they could gratify all her needs. She evaluates which are the most important aspects she wants to gratify (captivating, rather easy to read, plot relates to own problems, etc.). The downsides are considered also: some writers had strange political opinions, another one was tyrant to his family, some books are extremely long, et cetera. After all this evaluation process one needs to decide decision making goal and strategy, which in turn will determine the choice. For example, valuing the plot’s relation to one’s own life and using LEX could make the choice easily, if only one novel fits this description. If there are many, one just needs to decide which relates most. Using SAT means

browsing the books in random order and choosing the first one to fit the task description explained above. Using INT means that the choice relies on feelings based on former experiences and information: *"I just feel like reading Dostoevsky tonight"*. The motives and costs are subjective and depend on the situation; therefore, these were just an example of possible motivations, costs, and decision strategies. The implications of different decision strategies for marketing are discussed in section 8.2.

Figure 20 combines all the main elements of the proposed comprehensive media choice model. The figure is a combination and simplification of Figure 14 composing a consideration set, Figure 17 linking the consumer to the set by expectations and preferences, Figure 18 evaluating costs and benefits of the alternatives in the consideration set, and Figure 19, the decision-making phase. The solid lines have been empirically examined and supported and the dotted ones are based on theoretical reasoning.

This model widens the traditional way to think about consumer choices (for example, with cost-benefit analysis) by adding and empirically examining the elements of consumer resources and other subconsciously influencing elements such as of brand relationship, subjective costs, decision task variables, decision goals, and decision strategies. Furthermore, it is proposed how the expectations consumers have can function as a missing link between consumer and opportunity set. Many practical implications will be proposed in section 8.2, but the main message is: how important it is to pay attention to the decision goals and decision strategies, since they ultimately dictate what will be chosen.

Figure 20. The suggested comprehensive media choice model



8 DISCUSSION

8.1 Theoretical implications and suggestions for further research

Understanding decision-making is very important in our times, since modern technology gives us more power to control the events on and development of our earth and thus more means to destroy it (Rees 2018). The decisions we make (and perhaps should have made a while ago) affect, for example, climate change, well-being of bees, migration, malnutrition, effects of antibiotics, etc. The decisions we make as consumers or citizens (especially voting choices) have a huge impact on our future. There is a need to pollute less and consume less and choose greener products. Understanding that, consumption is not only filling physical needs, but also self-branding and identity forming is the key to boosting the change. It is important to understand how decisions are made in order to guide the change. As Schwab and Nicholas (2018) points out, we are on the edge of fourth industrial revolution, and we need to plan our actions carefully in order to distribute the benefits fairly and control the revolution, inevitable externalities, and risks. As he says, technology should empower us, not determine our futures. The media has an important role in all of this. The media products we use shape our understanding of the world and how we behave, while providing us the information to make wise decisions. In addition to information-spreading, media itself transforms our behavior. For example, social media reforms the social relationships (see Garrison-Bertelsen 2014), the way organizations function (see De Benedictis et al. 2019), and how people follow news (see Antunovic et al. 2018). It is important to understand how people choose the media they use.

This study has presented a tool for understanding the psychological elements of media choices, and it is hoped that the model is further developed on more specific topics related to media choices. The model is very theoretical, but since it is potentially highly useful for media companies, I intend to develop it from a more practical perspective. The practical implications of the comprehensive media use model for companies is a subject for a business book to be written later on. The

study widened the understanding of media choices and all the variables affecting the choices since the former media research has not described the media choice process this comprehensively. Therefore, the proposed comprehensive model of the consumer choice process is adding to the former academic discussion. Building a model about consumer behavior that adopts and combines the concepts and elements of four disciplines (economics, communication, decision studies, consumer studies) is quite unique and could bring about a lot of new information. Consumer choice has not been modeled this comprehensively with media or any other products. In the economics field, there is an ongoing discussion about economics being too theoretical and lacking the real-world connection (Halko 2007, Luukko 2001, Vartiainen 2008, Vihanto 2012). The suggested comprehensive media choice model is an attempt to bridge = theory and practice. The proposed model challenges the traditional economic view of consumer choice, following more in behavioral economics footsteps in acknowledging, for example, limited resources for decision-making. However, a distance is taken from behavioral economics too, since the assumptions in behavioral economics are not paying attention to the deep psychological elements of needs, motivations, identity building, brands and social and psychological costs. In spite of these differences, it is still hoped that the **researchers in economics** might find the model interesting, as an alternative, more comprehensive, view of consumer choice. The research provides an understanding of audience behavior for **researchers in communication and media**, hopefully helping them to better understand the audience's decisions leading to certain media choices. Additionally, the writer hopes that the discussion of the similarities between consumer theory (economics) and uses and gratifications theory (in communication studies) critically examines the conceptual boundaries between these disciplines. A contribution to the **researchers in the field of decision-making** has been made, by combining many psychological elements from the different sciences and hypothesizing and testing empirically the relationships of variables (for example, decision task variables, consumer resources, decision goals, and decision strategies.

It is hoped that the model presented here will be useful for **neuroscientists** who examine what happens in our brains when we make decisions. So far neuroscience has been examining rather limited topics in decision-making, such as rewards, short-term versus long-term cognition, predictability of certain emotions and responses, and responses to risks and negative outcomes (Purves et al. 2008; Sanfey 2007). Regarding this study, very interesting topics in neuroscience are how dopamine affects behavior, causing good feelings (Willman-Iivarinen 2014; Yoon et al. 2012)

and the mirror neurons that make us imitate others (Csibra 2008; Keysers and Fadiga 2008). Biochemical responses caused by dopamine are probably quite close to a feeling of gratification, which has been the supposed aim of media choices in this study. Mirror neurons explain our tendency to imitate others' behavior and thus many social needs and brand benefits examined in this study. Therefore, further neurological research on consumer behavior is suggested to examine and develop further the topics discussed in this study.

This study also suggests a model to describe consumers' consideration set composition process. Furthermore, a possible method to explore it has been suggested. The method is empirically tested and validated. The model of forming expectations is not empirically tested, but it is based on a vast amount of former research. It is hoped that these conceptualizations will inspire more research and empirical testing, develop the model, and thus add to the scientific discussion. In this study it has been shown that different costs affect consumer behavior. The costs have not been analyzed this systemically and comprehensively before. Since the results revealed that non-monetary costs were an important part of consumer decision-making, it needs more research. A wider understanding of consumer behavior could be gained with a more thorough look at the costs. The models presented in former research are insufficient, since they do not explain how scarcity of resources is related to consumer choices. Using media requires the usage of scarce personal resources like time and energy. The availability of those and the required amount of them set limits and costs for the choices. Yet there has not been any conceptualization of how the scarcity of consumer resources affects their media choices. The proposed comprehensive model of media choice includes a conceptualization of consumer resources' effect on media choices. This study has explored several variables leading to choices of certain decision-making goals and how those in turn affect the way a decision is made (decision-making strategy). Only a few variables were tested in this study, and it is suggested that this needs more research in future. It would be interesting to know what contexts and features of the decision maker lead to certain decision-making strategies.

This study has provided information on how people decide on average. With a larger data set, the consumers could be divided into groups and analyzed separately. It is suggested that further research is needed in order to find out how women, men, young people, etc. decide. Are there differences? Are there certain characteristics of the decision maker that lead to certain decision-making ways and thus certain

outcomes? One very interesting branch of research has also been left out of this study, namely, group decision-making (e.g., Corfman and Lehmann 1987). The decision-making in families is different than individual decision-making. Many media choices (especially movie choices) are made with others. The small data set in this study did not allow us to examine this topic further, since the media was mainly used alone (in this study). Consumer behavior is dependent on the roles they take. The society sets up norms on how one should behave in each role. It would be interesting to research further how different roles (mother, lover, friend, daughter-in-law, worker, boss) influence the decision-making processes.

The proposed comprehensive media choice model can also be applied to examine many other phenomena in addition to traditional media choices. Only the motives, situations, and opportunity sets are different, as they were considered exogenous in this study as well. The model can be applied to study the usage of social media, choosing to participate in the discussion, update profiles, vlog, share, or link. It can also be applied to other fields. For example, voter decision-making is somewhat similar to consumer decision-making (see similarities and differences in Willman-Iivarinen 2015a). The proposed comprehensive media choice model is useful also when determining how voters make their decisions, in other words, about the decision-making process (Willman-Iivarinen 2015b), composing the consideration set (Willman-Iivarinen 2015c), analyzing the effects of non-monetary costs of voting (Willman-Iivarinen 2015d) and the effect of non-monetary costs on party choice (Willman-Iivarinen 2018a). In addition to studying voting behavior, the model has also been used when examining why people follow sports (Willman-Iivarinen 2015e) or drink beer (Willman-Iivarinen 2015f). This model has been built in Europe, and used references are limited to Western references. However, since none of the variables are fixed (motives, situations, decision goals, preferences are subjective and different each time), it is believed that the model can be applied to other cultures as well. Media is global, and variables presented in this research affecting media selection are also global (Flew 2018).

8.2 Practical implications

It is hoped that the comprehensive media choice model and concepts presented in this study will help the media companies better understand audience behavior and

the decision-making process of their customers. It is hoped that this study helps companies in **finding new media markets based on needs analysis**. There are marketing opportunities, if there are unsatisfied needs. Examining what motives people have for their media usage (Table 8) and about how well these motives are gratified by media usage (Table 10), we can conclude that there are interesting ungratified markets. These markets are rather large, too. For example, “*Get something to do*” (67% of media users), “*Spend time pleasantly*” (89% of media users), “*Get something else to think about*” (59% of media users) and “*Avoid doing anything*” (39% of media users). There are other markets that are gratified to some extent but could be better. Such markets are mood management market, self-comforting and self-rewarding market, avoiding loneliness market, and self-branding market. The problem with marketing is that the products must be made to seem superb; otherwise no one would be interested in them. The marketer should aim to create high enough expectations that consumers want to choose the products but be careful to not exaggerate the benefits in order to avoid disappointments. The model of forming expectations reveals many possible interventions spots a marketer can use and provides help in **managing the formation of consumer expectations**.

It is important to know how people categorize products and form the consideration sets. If the product is in a “wrong” category, it cannot be chosen, since it is missing from the consideration set (from which the person makes his/her choice). Marketers could benefit a great deal from investigating closely how their customers and potential customers compose their consideration sets. There is a booming market in measuring top-of-mind brands and the brands remembered with and without aid. But these measures only provide information on the amount of marketing and remembering, which is only a small part of consideration set composition. It is possible to **manage consumers’ consideration set composition process**. First one needs to find out how customers compose their consideration sets at the moment. The results of this study showed that categorization is the most used method when composing the consideration set. The companies can influence the categories and consideration sets by marketing, branding, and positioning their products. Positioning is quite similar to categorizing, except companies do positioning and consumers do categorizing. Positioning is purposeful guidance in categorizing. In order to position successfully, one needs to know where the customers place the company’s product and how they define the categories.

It has been shown that consumers experience many kinds of costs. The results of this study showed that nonmonetary costs are relevant in consumers' media choices and affect their usage. The companies can sell only a certain amount with an altered monetary price. Even though lowering the price typically adds sales, it also lowers the profit margin. The companies are usually very aware of how (monetary) pricing affects their demand and income. Money is the only cost that affects the income directly (it is the income). The audience's time and attention represent potential for selling and are thus a form of indirect income. The results showed that consumers experience psychological and social costs. They also need to use their energy in order to use media. The media companies do not benefit from these costs, and it would be wise to lower them as much as possible. **Managing consumers' (non-monetary) costs** might be quite easy and very profitable.

The usage of different decision-making strategies yields different choices. For marketers it would be essential to know how their customers decide, because it not only determines the possible outcome of the decision, but also the optimal marketing strategy. Therefore, it would be advisable to **optimize the marketing policy based on the knowledge of customers' decision strategies**. Some decision strategies are based on considering brands and some deal more with the attributes. The companies can benefit from the knowledge of how their customers decide, by adjusting their marketing strategy accordingly. For example, if the customers generally use satisficing (SAT) in decision-making, it is important to be one of the top-of-mind brands (and the product has to be good enough). If customers use lexicographic (LEX) decision-making, it would be important to find out what is the key feature and make sure the product is the best in that feature (and that customers know that). If customers use elimination by aspects (EBA), the marketer should find out what the most important features are and what the minimum requirements are. Then they need to make sure that the most important features of the product are good and at least above the cut-off level (and that customers know it). The empirical results showed that the decision task and the level of resources affect the choice of decision goal and decision strategy. People decide differently if there is time pressure or if the choice is difficult. This is interesting, because these features can be manipulated. The marketers can rather easily **affect consumer decision-making by manipulating time pressure and decision difficulty**. Time pressure can be created by using deadlines in offers ("only today"), creating shortage ("limited edition"), and giving small discounts if the deal is closed right away. Time pressure can encourage customers to close the deal – or abandon it, but it also changes what

is chosen. The results showed that, when having time pressure people tend to use LEX or SAT in decision-making. Therefore, marketers should create a time limit if their brand has significant negative features and remove the time limit if they want to be able to compensate for the poorer features with good ones. The difficulty customers experience when making decisions can also be manipulated. Decisions are more difficult if there are a lot of alternatives and attributes. The number of alternatives can be influenced by positioning, and the number of attributes are easy to add. The results showed that people use more SAT or INT when decisions are difficult. Therefore, marketers should add complexity if they do not want their customers to deliberate their choices (the product is not superior) and simplify the choices when their product is good, and they want the customers to be able to deliberate their choices.

If the consumer concept is understood widely, the model might also be highly useful for social decision makers trying to influence citizens' behavior. For example, citizens have been advised to consume domestic products, eat healthy food, quit smoking, drink less alcohol, etc. The authorities try to intervene with citizens' decisions by giving information, providing incentives to act properly, and manipulating the cost of bad behavior (change the tax on different goods and services). However, these methods are not working very well (e.g., Verplanken and Wood 2006). It is hoped that the model presented in this study will inspire the authorities to find better ways to guide citizens and thus build a better society. The models are hoped to be useful for consumer themselves, as individual decision makers. If we as consumers understand better how we make decisions (the needs, the underlying psychological mechanisms, and all the little things that influence our decisions), we are able to make better decisions in future.

8.3 The Future of Consumers' media choices

Even though the process of how consumers make media choices is expected to remain quite stable; situations, motives, and preferences will probably change over time. Media technologies surround us and saturate our daily lives. It has been said that **we live in a mediatised society** (Hepp 2010; Livingstone 2009; Strömbäck 2008). The concept of media itself is evolving, and new media products and audiences are created. Media has become an essential part of social connections and knowledge formation (Wilska and Kuoppamäki 2017). For example, Hiniker et al.

(2016) discuss using smartphones as using a media product, and Alnawas and Aburub (2016) examine the uses and gratifications of mobile phone applications. Sihvonen (2015) argues that even digital games are resembling media products due to fan culture and connections to social media. By mobile phones and social media, it is possible to stay connected to our friends all the time. Turkle (2017) argues that this is only an illusion of companionship. We may have a thousand Facebook friends but feel lonely. The technology makes us feel isolated and has turned the human relationships shallow, marked with a lack of concentration and presence. Even though people are physically present, they can be mentally elsewhere via mobile devices. Mobile media can also be problematic since we cannot take a break from the different roles we have. According to Swingle (2016), this leads to a higher state of arousal, concentration problems, and inability to self-entertainment, self-quieting, and problems with creativity. We have a need for instant arousal and gratification. Swingle argues that the problem is too much of everything. Too much access and availability, too many options, too much information. Too much of everything, and we are overloaded. Hayles (2017) goes much further and says that the digital age is transforming humanity. That is, humans do not really transform as such, but the idea of humanity changes. We are so intertwined with digital technology and digital media that it has become a part of ourselves as extended memory, smart devices, and personal monitoring and measurement systems. Hayles argues that humans and technological devices form distributed cognitive systems. Hayles writes, "*Human subjects are no longer contained – or even defined – by the boundaries of their skins*" (p.1-5). These combined systems function well when there are well planned, and they have well-defined roles.

Since media connects people in a new way, people form a vast social network. **The world is socially constructed** (Gorbis, 2013). When people are nodes in a social network, it emphasizes the value of social connections. There are already interesting signs of how valuable one's social network can be. Facebook has a patent for software that scans people's trustworthiness (e.g., ability to pay back their loans) by scanning the social network they have (Fitzgerald 2015; Hutchinson 2015). The algorithm used is based on social media presence and the status of people one is connected to. In 2016, UK insurance firm Admiral intended to launch an application offering a discount on car insurance based on an analysis of customers' Facebook posts, but this idea was turned down by Facebook (Lomas 2016). These examples show how social networks are more important than ever and that people need tools to connect and make themselves appear in a better light. This also raises concerns

about digital footprints and how our privacy is protected. It seems that young people use ephemeral Snapchat rather than digital archive-like Facebook. The main difference is that no messages are stored in Snapchat (rather unlike in Facebook); instead, they self-destruct a few seconds after watching. This allows a higher level of privacy and a lower level of presentation concerns before publishing. Furthermore, choosing the recipients each time allows sharing content with only one's closest friends or those who are most suitable for that particular content. According to Bayer et al. (2016), study users of Snapchat felt that Snapchat was more enjoyable than other social media platforms. Users felt that Snapchat was somewhat similar to face-to-face interaction. This is just one example of how media evolves. According to Webster (2014), researchers do not agree on how audiences will take shape in the future. Some think we are entering into a participatory society, that digital media liberates us to our fullest potential. Everybody creates, shares, and contributes. Some people think that people guided by their prejudices and filtering technologies, which separate people into niche audiences or echo-chambers. Some people think media will enrich society and others worry it will tear us apart.

Mediatization of the world and the increasing power of social networks means that consumers' choices are based more and more on identity play, gaining social currency, and self-branding (Willman-Iivarinen 2017). With the power to share, contribute, produce, and participate in a mediatized world, and being a member in the socially structured world where one needs to have social currency, signal values, and have tools for self-branding, it seems that **the symbolic meaning of consumption and brands will become more important**. Consumers' choices will be based more and more on reasoning about how the product will help them to see themselves in a better light or provide a better picture of themselves to others. People update Facebook and Instagram, contribute to discussion groups, share content in other platforms, snap, and tweet. Media has become a tool for ordinary people to promote their cause and specially to promote themselves. One can use social media in order to brand oneself (e.g., Deckers and Lacy 2017). We can influence how other people see us. We can choose which sides of ourselves to reveal, which qualities we attach to ourselves, and how we present our thoughts and to whom. Johnson and Ranzini (2018) have studied this phenomenon, namely, sharing music or films on social media in order to appear in a better light. The need to brand oneself and connect with others **has led to identity exploration and selfie-culture**. Albeit taking selfies is a rather new phenomenon, it has triggered academic research papers. According to Eagar and Dann (2016), taking selfies is a form of self-

branding. The idea is to show others glimpses of the subject's life, not really telling about it. The researchers explain that people deliberate carefully what kind of selfies they want to take and how to present them. According to Agger (2015), people generally tend to overshare their personal thought and events via social media. This means that they tend to reveal much more than they would in face-to-face conversations.

Choices themselves have become more and more complicated because we have so many alternatives, motives, features, and more information about them. For example, it is rather difficult to make ethical consumption choices in this environment. According to Willman-Iivarinen (2012), there might be simultaneously many ethical aims that are contradicting each other. For example, when making ethical consumption choices, one could emphasize environmental benefits, ethics of workers, the well-being of animals, reducing the amount of waste, consuming local products or products without unhealthy chemicals, consuming less or more of certain types of products, promoting or boycotting some products. Using lucrative new media products, upholding the social status, and making these choices takes time. Time scarcity is highly problematic, and **one way of coping with it is multitasking**. Quite often, people use media products at the same time they do something else (Kaufman & Lane 1997; Pilotta & Shultch 2005; Pilotta et al. 2004). It has been noticed that while people watch television, they also tweet about the programs and update other social media channels (Buschow et al. 2014; Wilson 2016; Pond 2016). When people watch television and tweet or use other forms of social media at the same time and connect with their friends, they also connect with the broader audience. This way, the sense of participation in audiencehood is rediscovered (Webster 2014). One obvious consequence of increasing multitasking is **attention deficit**. According to Willman-Iivarinen (2017), these prementioned changes (attention deficit, more complicated choices, time scarcity, consumption symbolism) lead to using more heuristics, satisficing, and habitual decision-making in the future, except when self-branding, or when careful deliberation is in order. Due to a complicated world and more specific social needs, the interplay between easy decision-making and accurate decision-making will likely be more important. Some decisions demand more deliberating, and some can be settled with good enough. As the consumer world becomes more complicated than before, it is no wonder that **consumers seek convenience**. For example, according to Heneghan (2016), convenience is a driving force behind food consumption nowadays. Longing for convenience explains the appeal of effortless and intuitive decision-making, too.

More generally, consumers will struggle between wanting to make accurate decisions and effortless decisions. Since one cannot have both, the important decisions will be deliberate, and the non-important ones can be intuitive or even outsourced. Shopping suggestions applications (like Amazon or Netflix recommendations) will become more popular. A similar phenomenon is the interest people show for all kinds of “our most popular items” lists. People think that if others have bought it, it must be good, and I should buy it, too. **The appeal of outsourcing decision-making** is also apparent when making voting decisions: People rely more and more on voting advice applications (Willman-Iivarinen 2015b).

We rely more and more on algorithms when we make decisions (Napoli 2014). Sometimes we notice it; sometimes, the algorithms are hidden. When I go to Amazon, they kindly suggest books for me based on my previous orders, shopping list, or browsing history. The algorithm used is rather easy to understand and can be pretty useful as they just make suggestions (and people still make the decisions). When I Google something or browse my Facebook page, I am also affected by algorithms, but this time I am not fully aware of how they function (Sumpter 2018). It is somewhat problematic that I do not even know how Google or Facebook changes my research results or news feed based on what they think is most interesting to me. They get these ideas from my history, connections, groups, and other information, which they do not publicly share. It could happen that we live in an information bubble, which is very different from the bubbles of other people (Lezard et al. 2017; Pariser 2011). These uses of algorithms are meant to be useful, providing you and me such information that is thought to interest us most, but it has also taken control. We cannot decide ourselves, and we do not even notice what is happening. Social media has a massive impact on the information people receive. Napoli (2019) states that since social media creates, publishes, and spreads the news, it is *“the algorithmic marketplace of ideas”*. Traditionally journalists have functioned as gatekeepers, deciding which news is worthy of our attention and which is most important. As Napoli states, it is rather problematic when this power is transferred to algorithms and codes. While the editor-in-chief in traditional media is responsible for the content of the media, there is no such system in social media. Halavais (2017) examines how the search engine algorithms are affecting society and the biases it causes to our knowledge. The search engine algorithms have an enormous impact on how we see the world and how the world learns about us. The influence of algorithms for our information gathering is more significant than just Google searches and Facebook feeds, since according to Wölker and Powell (2018)

algorithms even guide the news selection in the newsrooms. Knight (2017) writes in MIT Technology review that algorithms are also used when deciding if someone makes parole or gets a loan or a job. Furthermore, according to Willman-Iivarinen (2018b), algorithms are also used by armies when drones decide who the enemy is, and what to do with them. Willman-Iivarinen (2018b) writes about potential problems with automated self-learning weapons, killer robots, drones, and other automated defense systems, which outsource the decision-making to machines and codes, which are vulnerable to biases in algorithms or coding. When the algorithms are self-learning systems, understanding them gets even more complicated. Neural networks have many layers, which have different functions. When machines learn themselves, not even their designers understand how they function (Knight 2017, Rees 2018, Schwab 2018).

This environment enables **the spreading of fake news** (Lazer et al. 2018). In the presence of the fake news phenomenon, we need more education for media literacy (Mason et al. 2018; Mihailidis and Viotty 2017). Along the same line, McGrew et al. (2017) argue that we have even a bigger problem than the fake news since the public's media literacy skills are not up to date. It is not enough to separate fake (=false) facts from true facts since one can do much damage even with true facts presented maliciously or misleadingly. For example, revealing the truth only partially is not really fake. We should be able to determine who is providing the information for us, what their motives are, and whether we should trust them. It is problematic that part of the fake news is skilfully managed propaganda, trolling, done by influential organizations or even foreign states (Berghel 2018; Aro 2016). The countries need to pay attention to citizens' cybersecurity and how they communicate about it (Jansson and Sihvonen 2018). Part of fake news is also paid comments when organizations pay for ordinary people to present the organization's cause in social media as if it was their own (Sihvonen and Lehti 2018).

In the European Union, the internet is open to all content and access; this is not the case in the US anymore. In 2017 the FCC canceled the idea of net neutrality, which has been the leading idea of the internet. **Net neutrality** refers to whether the internet service providers (ISPs) have the freedom to choose the content they provide, the speed of their service, and the price they charge their customers. Internet service providers have naturally been delighted about the decision to repeal net neutrality. Now they can do business with internet access much better than they used to. However, as Willman-Iivarinen (2020) explains, even the economic impact

is not clear, and there are significant harmful impacts on democracy, justice, safety, and general information gathering. It is highly problematic if (in the worst-case scenario) people who already live in their social bubbles are also forced into ISP bubbles, each providing their separate content.

It is not a trivial question; which media products people use and how they use them because our brains develop based on what we do. This process is called **brain plasticity**. Neuroscientists have quite recently found out about brain plasticity—the ongoing development of our brains based on what we do (Kolb 2013). For example, it has been discovered that taxi drivers' brains have advanced in the area of navigation ability (Maguire et al. 2000) and playing a musical instrument has been shown to transform brains (Schlaug 2015; Wan and Schlaug 2010). Playing a musical instrument requires concentration and multisensory skills. The media products we use are transforming our brains as well. It has been researched whether media multitasking is affecting the short term and long-term memory capacity (Uncapher et al. 2016) and the ability to concentrate and pay attention to specific things (Moisala et al. 2016). According to Wilmer et al. (2017), smartphones and their usage affect cognition in brains (especially memory, attention, and delay of gratification). It has been noticed that playing games change the players' brains as well (Green and Seitz 2015; Kühn et al. 2014; Soulhard 2017). Several studies have shown benefits from video games for cognitive functions such as visual attention (Green and Bavelier 2007), reaction time (Castel et al. 2005), and many other features (Latham et al. 2013). It has been suggested that gaming or gamers (due to the differences in their brains) could be used to solve problems in the modern world. The Finnish army believes in gamers, too, since, according to Huhtanen's (2017) article, they plan on recruiting gamers as a separate group to offer a good challenge in war simulations.

9 EVALUATING THE RESEARCH

9.1 Scientific approach

As in economics and also in this study, consumers are expected to maximize their utility. Utility is something that makes one happy or satisfied. Utility can be described as “overall satisfaction”. Maximizing utility means that a person tries to gain as much utility (satisfaction) as possible. We talk about maximizing one’s own utility, because it is not possible to maximize anyone else’s true utility, since we do not know their preferences. Maximizing one’s own utility does not mean that consumers are selfish, since normally people’s happiness is affected by another people’s well-being (Gravelle and Rees 1992; Hirshleifer 1984; Vihanto 2004). The utility-maximizing principle is related to the idea of rationality. Rationality as a concept is rather problematic, since it can be understood in many ways. When people argue about the ontology of rationality they are usually talking about different concepts. It has been said that people cannot be rational, since they behave stupidly, selfishly, or do things that contradict their long-term aims (for example, Sen 1987; Uusitalo 1997). But as Hogarth and Reder (1985) point out, it is important to distinguish the rationality of means and aims. Judging the rationality of aims is a normative question (Vihanto 2001). Whether people’s aims are rational or not has nothing to do with the logic or process of decision-making. In accordance with Gravelle and Rees (1992), in this study rationality is seen as inner consistency (means), which means that the behavior and the aims (preferences) are consistent. Rationality is an example of circular reasoning: when we make a choice, it is consistent with our preferences, because if it weren’t, we would have chosen differently. Thus, all the decisions we make are rational by definition, otherwise they would not have been done. It is important to make a distinction between inner consistent rationality and normative rationality. Rationality does not claim that people’s decisions are rational in the sense that they are good for them or ethical or consistent with long-term goals. How the real observed behavior deviates from the ideal behavior is a normative question. These deviations are due to preferences, which are subjective and not always very clever or sensible (in a normative sense). Utility maximizing and rationality are kind of philosophical principles. If consumers were not rational or would not try to

maximize their utility, it would be quite pointless to model any kind of behavior. The methods used in this study have been eclectic: concepts have been collected from several disciplines which all share a similar understanding of human nature—that is, the rationality of actions.

How objective is the information received from this study? It is believed that reality has many layers and is very complex. We can obtain approximate information by forming hypothesis based on theory and testing them empirically. This kind of thinking is sometimes called **post-positivism** (Raunio 1999). This is very different from the subjectivists' view that there is no other reality than subjective reality. As hinted above, this study has elements from objective world views and subjective world views. It is believed that each person's decision-making is influenced by subjective resources, needs, preferences, and costs. For example, while one person can consider watching television news boring and not fitting to one's own self-image or brand, another person might consider watching news highly interesting and want to brand himself as a person who watches the news. This view is in accordance with inner rationality; the choices and evaluations are rational for the decision maker's point of view, considering his/her resources, experiences, and personality. However, while each person lives in their own subjective bubble, in which they have their own subjective preferences, the people still exist in objective observable reality where their behavior can be monitored and researched. This study has attempted to describe the common subconscious processes consumers experience when they make their decisions, despite different motives, preferences, and choices.

While people live in their subjective bubbles, they are still connected to each other. The social surroundings and events construct the needs and perceptions. The study is **constructivist** in the sense that the needs, preferences, benefits, costs, and expectations are constructed all the time. Even though the model is believed to be rather stable over time, the variables evolve as discussed in section 8.2. Naturally, it is hoped that other scientists examine and develop the model further. Karl Popper (1963) says that no scientific finding can be proven to be right or even probably right. Popper believes that scientific knowledge grows by trial and error and that all theories should be formulated in such a fashion that they can be falsified. Falsification is a way for scientific progress. Keeping that in mind, the writer participates in scientific discussion with the model and hopes it will be redeveloped by other scientists. As Thomas Kuhn (1962) says that nothing in the science is ready, it might be the fact for a while, until someone shows otherwise.

This study has combined many different disciplines into a smooth story about consumer's media choice. It seems only appropriate that the human perception adopted in this study is also a mixture of different human perceptions (such as presented in Willman-Iivarinen 2019). In this study, people are seen from the **existentialistic perspective**: it is assumed that people's inner reality is the only thing that matters when they make choices. People can decide what they want. Their preferences are personal and revealed only by action. People are also seen from a closely related **postmodern perspective** meaning that the inner reality is constructed by a person's history, culture, and understanding of language. In other words, reality is constructed from past experiences and perceptions. In this study, this view is especially observable when forming expectations were discussed. There are **traces of behaviorism and Freudian thinking** since it is believed that people use media for rewarding themselves (part of media usage motives) and that the subconscious desires and needs guide many decisions.

Niiniluoto states (1983, 227) that the purpose of a scientific study is to provide new information about the world. This can be achieved by forming and testing the hypothesis and trying to provide general explanations and to put the phenomenon in a wide system with causal rules. This is important because Niiniluoto (1998) writes that it is self-evident that good science influences the future. In order to influence the future, one has to believe that the world is causally constructed. Science has future relevance, only if it affects people's behavior. Practice is the criteria for science (Niiniluoto 1983). Cartwright (2009) goes further and claims that it is not enough that a scientific finding is true; it has to be relevant also. The purpose of this study has been to describe how consumers make their media choices and suggest a model for it, in order to make it more understandable and predictable. The practical implications were discussed in section 8.3.

9.2 Cross-disciplinary approach to media choice

This study has been cross-disciplinary; therefore, it has been able to fruitfully widen the perspectives, but there have also been some problems with concepts and terminology. Disciplines have their own topics, shared sets of norms and values, typical terminology and assumptions, a coherent set of theories, and a world view. Disciplines have also been institutionalized; they have university departments, academic associations, teaching and research programs, journals and books (Long

2009). There are quite a large variety of terms and definitions describing interaction between disciplines. The crossing of disciplinary lines and combining disciplines can be done at least in three different ways: multidiscipline, interdiscipline, and cross-discipline approaches (Long 2009; Mikkeli and Pakkasvirta 2007; Miller 2009). **Multidisciplinary** approach means that a problem is viewed from several different disciplines (frames) with no intention to combine these frames. This can occur, for instance, if a work group consists of people from different disciplines. This approach will not change any existing theories but just adds more information about a specific phenomenon. **Transdisciplinarity** means applying methods and theories from another discipline to areas of research or teaching traditionally associated with certain discipline. Transdisciplinarity can be readily identified in the combination of the names of more than one discipline, such as social psychology, political economy, and historical sociology (Long 2009). **Crossdisciplinarity** means that even though the disciplines are divided in the beginning, by the end of the process they are inseparable: the disciplinary lines are completely demolished, and the theories and methods are combined. The term interdisciplinarity refers to the same idea as cross-disciplinary. This dissertation has used the cross-disciplinary approach.

When combining several scientific theories, it is possible to find something really new and stimulating. The disciplinary borders have mainly been ignored in this study. A tremendous number of consumer-behavior-related books and articles have been reviewed, totally neglecting disciplinary lines. For many of the articles it is even hard to say which frame or discipline has been dominant, nor did that feel very important. The interest in this study has been to map the wider picture of consumer behavior for practical purposes, to profoundly capture and model what it is all about. Just looking at the phenomenon through only a certain disciplinary frame did not seem enough.

The problem with combining disciplines is the trouble to make a smooth story of many very different pieces. This required a lot of reading in order to gain an overall understanding on the theories and methods used in several disciplines. It would have been much easier to just follow one discipline, read the journals, and rely on the gurus within that discipline. The slight discomfort has also been the problem of not belonging to any discipline really. Participation in several seminars (economics, communication, politics, future studies) has sometimes been awkward; people can be prejudiced and rather protective of their established ways to think and use methods. This study is based on the belief that human intelligence is equally divided

among disciplines, which means that no discipline is superior to others. Furthermore, it is believed that it is good to be scientifically curious about other branches of science and get past the ideological differences. The theories or methods used are not so different, as one could imagine from the first sight.

9.3 Chosen empirical method

The chosen method for gathering empirical data is a web-based survey. A large data set is needed in order to find out interdependencies between the variables. Surveys are very useful because one can get a lot of structured data quite fast and relatively cheaply. However, surveys have some downsides, which make them sometimes seem rather fickle. The main problem is that it takes a lot of competence to design a good questionnaire and interpret it in the right way (Gideon 2012; Krosnick and Alwin 1987; Tourangeau et al. 2000); for example, phrasing affects the answers (Murray 1999). One needs to really understand the tool (questionnaire) and its features. It is necessary to overcome such problems as social desirability bias, the tendency to answer in a way that pleases the questioner (Fisher 1993; Fowler 1995; Grimm 2010; Nederhof 1985). The questionnaire in this study was designed and tested by a professional market researcher. One downside of surveys is the fact that they do not give more information than what one is asking. This was not a problem in this study, however, since the data was needed only for testing hypotheses not forming them.

Some researchers have argued that the order of alternatives and questions affects the answers (Alwin 2007; Saris and Gallhofer 2004). This problem was partly conquered since all the questions containing lists were randomized for each respondent. However, the order of questions was not possible to randomize, since many questions were in logical order and some were dependent on the former answers.

Some problems arise from the memory capacity (Alwin 2007; Fowler 1995; Growes et al. 2009). This was especially tricky for this research, since the last media choice was the focus. The problem of memory was overcome by two simple tricks: Firstly, the respondents were asked to choose one media event they remembered well. This was an attempt to help respondents subjectively delete the options they did not remember well. Secondly, there was a control question: *“How long ago was this*

media usage event". This question was used to delete such respondents from the data that had used media a long time ago (more than one day). However, there were none.

One of the most common mistakes in surveys is to ask people about things they do not have an opinion about. Forcing them to answer will cause unreliability for the results, since when lacking knowledge people guess. Some methods were taken to prevent this. All questions contained an option "Cannot say". In order to motivate respondents (create a sense of discussion) and make it easier to answer the questions, explanations were provided in some questions. For example, when asking about decision goals, in the end of the question there was: *"***Why is this asked? Several researchers have concluded that the "decision-making aims" people have affect their choices. The options above describe the different decision-making aims. Do you want to comment?"*

A great challenge for designing the questionnaire was caused by the very abstract nature of the concepts, and the research subject being the decision-making process, which the consumers are typically not even aware of and certainly not able to elaborate on. The steps can be taken automatically without conscious deliberation and the consumers are thus unable to elaborate on their behavior when asked directly. That is why many indirect methods have been used in this study when examining people's choice process.

Each method for collecting survey data has its own problematic aspects (Saris and Gallhofer 2004). Interviews are problematic, since they are costly and affected by the interviewer's personality (Cannell et al. 1981). Telephone surveys are also costly, and respondents find them irritating, since they disturb the respondent's life at unexpected moments. The response rate of mail surveys is affected by increasing volume of "junk mail" that gets ignored and the tendency to find longer surveys discouraging when they are presented on paper. Therefore, it was concluded that a web-based survey was the most suitable method with the given resources, despite some of its prementioned shortcomings.

This study was marketed on the Internet, and anyone who likes questionnaires, lotteries, science, or decision-making was able to respond. Therefore, the sample does not represent Finnish people evenly and might be biased. However, since the results are used to describe the way many people choose media products and test the hypothesis as a case study, it is not a problem. Additionally, there is no reason to believe that the results are systematically different than if the sample had been

collected with any other method. The methods developed and the way to explore consumer behavior has been replicated in several studies providing similar results. The forming of a consideration set when choosing beer (Willman-Iivarinen 2015f) or deciding whom to vote for (Willman-Iivarinen 2015c) were done in a very similar way. The brand relationships were tested in hockey fan research (Willman-Iivarinen 2015b), which implies that the empirical results are reliable.

Many steps were taken in order to make the questionnaires respondent friendly and easy to answer. The questionnaires were customized for each respondent providing only relevant questions. The respondents are not forced to form an opinion, if they do not want to. Some more complicated questions are explained and the motivations to answer them are provided by explaining why this is an interesting question. The lists were randomized for each respondent and many indirect methods have been used. The results and reasoning in this study are coherent with former studies; their views have only been widened. Validity of the study is good, since the hypothesis and questionnaire are firmly based on former studies and vast amount of scientific research.

9.4 Overcoming causality problems

The whole model of consumer media choice is based on the assumption on causality. The aim is to find a way to explain and predict the choice and propose possibilities to intervene with the process. What is causality? The philosophers have dived deeper to the issue and it transpires that causality is an immensely complex issue. See, for example, White (1990) for a good review of over 20 philosophers and their different definitions on causality. Shugan (2007) has noticed that the causality issue has been so complicated that many scientists and disciplines avoid talking about it and they use some synonyms for causality: economists talk about exogenous and endogenous variables; statisticians refer to correlation and statistical dependence.

Causality begins with a cause and an effect. Effect exists because of the cause. This seems simple enough, but it turns out to be pretty complex to prove. **Contrafactual approach** states that the effect exists only if the cause exists. This requires a lot from the potential causal connection and turns out to be very complex to prove, because even one single contradicting observation would fail the theory. **A contextual causality** (causality occurs only in certain contexts) has been

suggested to solve the problem, but according to Shugan (2007) and Cartwright (2006), it is too inadequate and too vague to have any practical use. If the causal connection exists only in very special conditions, does it have any relevance in practice? Heckman (2006) and Woodward (2003) define that causality exists only if a manipulation of causes leads changes in the effects (**experimental causality**). Causality exists if by producing a phenomenon (cause), one can also produce the effect. The problem is that manipulation is not always easy to do in practice. Yet another way to look at causality is to ignore the idea of determinism and adopt the idea of probable cause (**probable causality**). It is much easier to argue that something may cause something else, than just argue it does. In many cases the causes are not definitive; they only raise the probability of an event. For example, smoking raises the opportunity for lung cancer, but it does not always have that effect. Since in the real world the causes and effects are quite complex, the philosophers have recently adopted the idea on **causality net**, many causal mechanisms working together at the same time. The idea of causality net has been applied in this study. There are many things that affect the choices, some of which the study attempts to reveal piece by piece. The model does not cover all possible causes, but a lot of attention and effort has been paid in order to cover the relevant ones. But even when applying the idea of causality net, the problem of providing evidence for each single causal connection remains.

There are several causality cues that can reveal a causal connection. None of these is actual proof of causality or even necessary condition, even though they hint in that direction. All these methods are somewhat problematic. **Correlation** between the cause and effect may or may not exist. Correlation can be caused by some other unknown variables that affect both causes and effects. Correlation is not a necessary condition either; there might be a causal connection without linear relations. Variables may have complicated multieffects on each other (Kuorikoski 2006). Unknown variables are naturally problematic since they can be a cause for the events or change the causality mechanisms. **If causes and effects co-exist** at the same time, it might be difficult to distinguish which is the cause and which is the effect (Shugan 2007). Usually it is assumed that causes precede the effects, but it can be the other way around (reverse causation; Dowe 2004). For example, Christmas is a cause for severe cleaning and shopping even though these events take place before Christmas. We cannot conclude, either, that if one event occurs after another, it is caused by the first event. Even though timely connection may hint that there is causality, it cannot be used as single evidence. **Order of the events** may not be

relevant. Causality is usually understood **to be connected with changes**. However, Shugan (2007) points out that causality may exist without change. Causal relationships may hold a situation or variable steady. As Cartwright (2016) says, it is important to be absolutely sure when making causal claims. She explains that scientists are very accurate in their correlation analysis, but somewhat sloppy when generalizing the results and drawing conclusions.

What then, if anything, is the ultimate proof of causality? Statistically or methodologically there is no such proof. Causal connections are at best probable arguments based on theory and supported by data. This research is based on idea that in order for an argument to be causal enough, the following process needs to be done: First one needs to have an idea of causal connection (causality hypothesis). This can be based on a theory, reasoning, and former empirical research. Then one needs to form a hypothesis of causal connection and test the causal connection in practice. After obtaining some hint of causal connection (for example correlation), one needs to use a lot of imagination and rule out the other possible explanations for the connection. The problem of unthought variables remains, but it can be minimized with careful deliberation. Then one needs to create an explanation of causal direction and mechanism. Which one of the variables is the cause and how does it influence the other one? Why is there causation? Then this causal mechanism hypothesis can be tested, and causality argued. The process does not have to be in this order, but there needs to be a theory, empirical test/observation, an explanation of causal direction, mechanism, and ruling out other possible explanations.

Sometimes it is not even necessary to separate causes and effects. It is enough to show that some variables are connected. The idea of causality has been used when building the model. It is argued that some variables have an effect on other ones. However, the model does not show causal connections in the strict sense, that is, other possible explanations have not been ruled out completely. The model shows potential causation and is supported by empirical evidence. The hypotheses are based on theory or former research (or both) and some connections are hypothesized. It will also be explained why there would be a causal connection. Therefore, if there is a statistically significant correlation of difference in variables, it is concluded that the relationship is causal.

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APPENDIX 1: THE COMPARISON OF DATA IN THIS STUDY AND POPULATION OF FINLAND

	Sample	People in Finland
15-25 years	9 %	14 %
25-44 years	45 %	30 %
45-64 years	37 %	31 %
Over 65 years	9 %	25 %
Men	25 %	49 %
Women	75 %	51 %
Primary education	12 %	27 %
Secondary education	35 %	50 %
Post secondary /Bachelor's education	21 %	12 %
Master's or Doctoral education	32 %	22 %
Uusimaa	37 %	33 %
Pirkanmaa	10 %	12 %
Varsinais-Suomi	6 %	11 %
Pohjois-Pohjanmaa	6 %	10 %
Keski-Suomi	5 %	6 %
Satakunta	7 %	5 %
Lappi	2 %	4 %
Häme	6 %	7 %
Savo	8 %	8 %
Karjala	8 %	6 %
Kainuu	0 %	2 %
Pohjanmaa	7 %	9 %

Table 17. Comparison of data in this study with Statistic Finland's data on Finnish population by sex, age, education and living area

APPENDIX 2: QUESTIONNAIRE

**Q6. “Why did you not consider television/netpaper/newspaper?
(Please mark all the relevant reasons for not considering):**

I am not used to that media

It did not come to mind/ I did not remember

It was not appropriate for my need

I did not like some feature

I do not want to belong to the user group

I was not in the mood

I did not have time

I had no energy

~~It was too expensive~~

It was not available

~~Other reason, please specify~~

Q23. “How was your mood when you used the media?”

Good

Bad

Neutral/not in any specific mood.

Q24: “Did your mood change in consequence of media usage?”

I got into a better mood

~~No effect/ I cannot say~~

~~I got into a worse mood~~

Q26. Why did you read the paper or use media last time?

(A 3-point scale was used: 1= Not relevant/no effect, 2= Had some effect, 3 = Had great effect):

To get the latest news

To gain information on a specific matter or topic

To spend time pleasantly

To get something to do

To gain a better mood

To reward myself from something

To gain information on how others think and live

To use the same media my friends/acquaintances do

To know what people are talking about
To provide a better picture of myself in conversations
To get something else to think about
To avoid feeling lonely
To avoid doing anything
To comfort myself

Q27: How would you describe your relationship with the paper you read of media you used?

(A Likert scale was used: 1= strongly disagree, 2= somewhat disagree, 3= do not agree or disagree, 4= somewhat agree, 5=strongly agree):

The paper is like an apart of myself
The paper reminds me of nice things
The paper symbolizes my connection to a certain group or area
I want to belong to the readers of this paper
The paper symbolizes my future aims
Reading the paper signals my values and style
Reading the paper connects me to the other people in the area
~~I use this product because someone has acquired it for me~~
~~The paper is my secret vice, which I will tell no one about~~
I am entirely dependant from this paper; I could not do without it

Q28. “How did you experience the time while you used your chosen media last time?”

(A Likert scale was used: 1= strongly disagree, 2= somewhat disagree, 3= do not agree or disagree, 4= somewhat agree, 5=strongly agree):

I made the media choice in a big hurry
This media choice was especially important to me
Making media choice was easy (disagree)
I had a lot of time
I felt it was easy to concentrate
I felt energetic

Q29. How satisfied were you with your media choice?

It was above expectations
It was as expected
It was below expectations, but tolerable
It was way below expectations

Q30. How habitual was this choice for you?

I have a habit of reading this paper/using this media
I read quite often this paper/using this media
This was a rather random choice

I have a habit of reading another paper/using this media
I have never been in this situation before

Q32. How correct are the following statements according to your media habits?

(A Likert scale was used: 1= strongly disagree, 2= somewhat disagree, 3= do not agree or disagree, 4= somewhat agree, 5=strongly agree):

~~It would require effort to not read the paper~~
Reading the paper is very typical of me
I have been reading this paper for a long time
Sometimes I start to read this paper without any conscious decision
I would find it hard to let go of the habit of reading this paper
~~I do not want to change my habit~~
I am satisfied with this habit

Q33. How big were the following harms of this media usage event for you personally?

(A 3-point scale was used: 0= Not at all, 1= some harm, 2= a lot of harm):

It takes a lot of time to read the paper
It requires effort to read the paper
It requires concentration to read the paper
The ads/ commercials in the paper irritate me
It was expensive to acquire the paper
~~Reading the paper caused bad feelings~~
It was uncomfortable to read the paper
Reading the paper embarrasses me
Reading the paper takes time from other activities

Q34. Which of the following things did you consider important when you made the choice?

(Please mark all the alternatives, you considered important):

I wanted to decide fast
~~I was prepared to use a lot of time in decision making~~
I tried to minimize the risk of regret
I attempted to minimize the agony of decision making
I tried to decide with as less effort as possible
I made sure that I can justify my decision afterward
I tried to choose the best of all possible alternatives
I can't say/none of the above/ I did not precisely decide

Q35. Which of the following decision-making styles do you use at least occasionally?

(Please mark all styles you use):

Careful deliberation system: I deliberated all the alternatives carefully and compared their properties
Recognition system: I chose the only option I recognized
Good enough system: I chose the first suitable option that came to my mind
Best characteristics system: I chose according to one superior feature
Elimination system: First I eliminated all the options that did not meet my criteria
Cup system: I compared options pairwise and deleted the inferior one
Plusses and minuses system: I counted plusses and minuses and chose the best one
School grade system: I gave alternatives grades and chose best
Intuitive system: I trusted my instincts and chose the alternative that felt best without deliberation
Habitual system: I chose the same option I am used to without much deliberation

Q36. Which of the decision-making systems did you use when making this media choice?

(Choose one):

Careful deliberation system: I deliberated all the alternatives carefully and compared their properties
Recognition system: I chose the only option I recognized
Good enough system: I chose the first suitable option that came to my mind
Best characteristics system: I chose according to one superior feature
Elimination system: First I eliminated all the options that did not meet my criteria
Cup system: I compared options pairwise and deleted the inferior one
Plusses and minuses system: I counted plusses and minuses and chose the best one
School grade system: I gave alternatives grades and chose best
Intuitive system: I trusted my instincts and chose the alternative that felt best without deliberation
Habitual system: I chose the same option I am used to without much deliberation

