Green Media

Exploring Green Media Selection and its
Impact on Communication Effectiveness

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Dissertation for the Degree of Doctor of Philosophy, Ph.D.,
in Business Administration
Stockholm School of Economics, 2013

Foreword

This volume is the result of a research project carried out at the Department of Marketing and Strategy at the Stockholm School of Economics (SSE).

This volume is submitted as a doctor's thesis at SSE. In keeping with the policies of SSE, the author has been entirely free to conduct and present her research in the manner of her choosing as an expression of her own ideas.

SSE is grateful for the financial support provided by the Swedish Governmental Agency for Innovation Systems (VINNOVA) which has made it possible to fulfill the project.

Göran Lindqvist

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Acknowledgements

The journey towards the completion of this thesis has been a memorable experience as a result of the support of various people and organizations.

First and foremost, I would like to thank my main supervisor Richard Wahlund, who believed in me from day one. Richard, thank you so much for all your support, valuable insights and feedback that are always of the challenging kind. I will never forget the generous amounts of time that you have dedicated for discussions and to read numerous versions of the manuscript these past four years, with your never-failing eye for detail. Your enthusiasm for conducting 'fun' research has been an important source of inspiration and support.

In addition, I am indebted to my two other supervisors from my committee: Micael Dahlén and Sara Rosengren. Micael, thank you so much for all your support, vivid insights and most of all for teaching me to think upside down and inside out. Sara, many thanks for your great support, encouragement and valuable feedback. Richard, Micael and Sara, it has been a true privilege to have had you as my three guides on this journey. I could not have wished for a better or brighter constellation of academic guiding stars!

Many thanks to Rik Pieters who, one rainy afternoon at Tilburg University, dedicated time to listen to my early research ideas. Rik, thank you for encouraging me to find the topic that I feel passionate about and to do research on exactly that.

During this journey I could always count on the kind support of great colleagues. I would like to express a special thanks to Jan Eklöf, Sergiy Protsiv and Sergey Morgulis-Yakushev for their statistical insights. A special thanks also to Patric Andersson whose door I can always knock on for any type of research issue.

I am grateful for the loving support of my dear friends and family. A special gratitude goes to my parents. Thank you mom for inspiring me with your strength and for teaching me early on that the entire world is our playground together with its valuable diversity and all its possibilities. Thank you dad, your courage for daring to think outside the box, perseverance and stubbornness that I inherited from you came in very useful during this journey. I miss you!

I extend my deepest gratitude to my two best-friends-forever: my husband Patrik and my daughter Raquel. Thank you both for your loving support. Patrik, I feel fortunate to have had you on this journey to discuss any research matter, at any time of the day. My 'lilla inlämning', as you so eloquently call it, is finally done!

Now that it is time for me to finish writing this last page and close this chapter, I feel more humbled than ever by the insight that my knowledge gained is merely a small fraction of what I would like to know. There is yet so much to learn and I can hardly wait to turn the page and see what life has in store for me next.

Stockholm, January 27, 2013

Claudia A. Rademaker

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PART ONE

Research Focus and Method

Chapter 1

Introduction

"Sustainability, as a societal goal, includes all producers and consumers, willing or not, and requires a change in virtually everyone's behavior." (Van Dam and Apledoorn, 1996, p. 52)

1.1 Saving the Planet with Eco-friendly Media?

Does the choice of a medium, by which a company's advertising message is carried, communicate something about that company's commitment to act responsibly towards the green environment? Does the choice of a medium that consumers perceive as more harmful for the green environment than other media types, impact ad and brand evaluations more negatively than a medium that they perceive as less ecologically harmful? If so, to what extent do companies have knowledge of such change in consumer media behavior and thereby take into account the green environmental aspect with media selection? These were the types of questions that triggered my interest for studying the importance of the green environmental aspect with regard to advertising media from both the consumer's and company's perspective.

Research has shown that companies that are marketing products with green environmental characteristics will have a competitive advantage over companies that market non-environmentally responsible alternatives (Dubey, 2008). In a similar fashion, it can be questioned

whether a company using advertising media that consumers perceive as more ecologically responsible, will also pose a greater competitive advantage than when using media that are perceived as less ecologically responsible.

1.2 Nature's Call for Eco-friendliness

Green environmental problems and thereby the future of our planet has become a global concern among consumers and organizations alike (Vaccaro, 2009). Climate change, air pollution, water scarcity, biodiversity loss and ecosystem degradation are threatening our limited resources of natural capital (Trucost, 2010). Organizations and consumers have in the past acted as if the natural resources are infinite, which has led to the detriment of our planet's natural environment. For instance, at least 20 per cent of oceans' coral reefs, a natural barrier against storms to prevent the devastation of coastal areas, have been destructed. A similar however land-based problem is the deforestation in tropical jungles without sustainable forestry practices, which all too often leads to the destruction of huge assortments of plant species that are a natural resource for life saving drugs, vital for pharmaceutical companies and thus mankind (Anderson, 2010). Recently, there is also much debate about the devastating scenarios of what would happen to our planet if it warmed by four degrees Celsius by 2050[1], which is what scientists expect

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[1] According to the World Economic Forum (2012, p. 60), "Climate change presents a pressing environmental challenge. Scientists estimate that an increase in the global average temperature of 2 degrees Celsius (2° C) by 2050 is the threshold beyond which there is no longer a measure of assurance that we can avoid many negative climate impacts (UNEP, 2010). Even within a rise of 2° C, before reaching the precise threshold, a certain degree of adaptation to climate change will be required in most parts of the world. To have a reasonable chance of containing warming to 2° C, long-term concentrations of global greenhouse gas must be stabilized below 450 parts per million (ppm) of carbon dioxide equivalent (CO_2e). Achieving this goal demands mitigating 17 gigatonnes (Gt) of CO_2e by 2020, rather than continuing with business as usual (Project Catalyst, 2009). In 1880, the carbon dioxide level in the atmosphere was about 285 ppm. By 1960, this level was 315 ppm. Today, the global recorded CO_2 concentration exceeds 390 ppm (NASA, 2013; US Department of Commerce). According to Bond et al. (2013) black carbon, a short-lived climate pollutant, is the second most

to occur if no action is taken. Sea-level rises that will lead to major floods in many regions, increases in tropical heat wave and cyclone intensity, increasing aridity and drought in many country regions, are just a few of such devastating scenarios of likely impacts. It is argued that with action a world in which warming reaches four degrees Celsius above pre-industrial levels can and should be avoided (The World Bank, 2012).

Since the 1970's consumers' awareness of environmental issues has increased (Alwitt and Pitts, 1996; Loureiro et al, 2001) which led to the beginning of the *green revolution* with the aim to put a stop to further damage to the environment (Vaccaro, 2009). Consequently, consumers today are increasingly behaving environmentally responsible and are thereby more and more opting for eco-friendly products (Dubey, 2008; D'Souza, 2004; Loureiro et al, 2001). Even during a weak economy, studies found that consumers' attitudes toward eco-friendly products remain powerful and the demand for environmentally low-impact products remains high (Cone, 2009; The Co-operative Bank, 2011). Studies have also shown that consumers are increasingly avoiding products/services based on companies' environmental responsibility reputations. By way of boycotting specific products and/or brands, ethically motivated consumers are costing companies great amounts of revenue each year. For example, 55 per cent of consumers in the UK have, at least once during 2010, boycotted products/services from companies that they perceive to lack responsibility towards the green environment and/or society. This change in consumer behavior is estimated to have cost companies in the UK over EUR 3.3 billion during 2010 which is an increase of five per cent compared to the previous year (The Co-operative Bank, ibid).

A study conducted for the United Nations has estimated that the costs of use, loss and damage to the green environment by human activity could be comparable to one third of the combined profits of the

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powerful climate pollutant, after carbon dioxide and ahead of methane. Black carbon is causing the rapid warming in the northern United States, Canada, northern Europe, and northern Asia. As such, reducing black carbon emissions, besides carbon dioxide emissions, can rapidly reduce warming and is thereby more important than previously understood.

world's three thousand largest companies[2]. Medium to large sized companies are estimated to be responsible for one third (35 per cent) of annual global externalities (Trucost, 2010). Thus, for companies the damage to the green environment cannot and should not be ignored. Neither can companies afford to ignore the behavior of consumers determined to act responsible toward preserving the green environment, as it may have consequences for consumers' consumption behavior of products.

The environmental concern has led to organizations pursuing green or sustainable marketing (Vaccaro, 2009). *Green marketing* in the literature is referred to as "a holistic, integrated approach that continually re-evaluates how firms can achieve corporate objectives and meet consumer needs while minimizing long-term ecological harm" (Polonsky and Rosenberger, 2001, p. 22). *Sustainable marketing* ensures profitable exchanges without the detrimental effects on present and/or future generations. Whereas green marketing puts a major focus on minimizing long-term ecological harm when achieving corporate objectives, sustainable marketing takes on a holistic approach by putting equal emphasis on environmental sustainability, economical sustainability and social equity a.k.a the three P's: Planet, People and Profit, also called The Triple Bottom Line (Emery, 2012).

1.3 Purpose of the Thesis

The purpose of the thesis is to gain understanding of 1) whether and to what extent consumers' eco-harmful media perceptions impact communication effectiveness, 2) whether and to what extent marketing managers take into account the green environmental aspect with media selection, 3) which factors guide green media selection, and 4) whether

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[2] Annual environmental costs of USD 2.15 trillion in 2008 attributable to the largest three thousand public companies (Trucost, 2010, p. 6).

and to what extent consumers' eco-harmful media perceptions are consistent with marketing managers' beliefs about consumers.

An overarching objective of the thesis is to contribute *theoretically* to the literature on advertising planning in general and on media selection in particular. In addition, the thesis may result in *practical* contributions by gaining a deeper understanding of consumers' eco-harmful media perceptions, its impact on communication effectiveness, and to what extent these are consistent with marketing managers' beliefs about consumers. Furthermore, knowledge will be gained of the factors that guide marketing managers with (green) media selection. Possible discrepancies found, may in turn lead to a proposal for more effective advertising planning in general and media selection in particular as planning will be more consistent with consumers' green environmental attitudes in relation to advertising media.

1.4 Why study Green Media?

The United Nations Environment Programme (UNEP, 2007) states that personnel responsible for sales and marketing have the crucial role to ensure that proper information is shared to and from customers. As such, marketing has the responsibility to spread information about the impact of products on the environment and society (Simula et al., 2009). Given this, it could be argued that organizations committing to take part in caring for the green environment and the well-being of our planet ought to employ environmentally conscious and responsible marketing that stretches beyond merely a consideration of what impact a company's production and products have on the environment. A logical consequence of companies claiming to care for the environment, as they do by for example having green environmental policies, should also include considering to what extent the company's choice of advertising media impacts the green environment.

Today, green or sustainable marketing is implemented by companies committing to take part in minimizing harming the green environment. However, the current literature on green or sustainable marketing seems to put a major focus on minimizing the ecological harmful impact of products, products' contents, product packaging and production processes. On the topic of marketing communication, the green or sustainable marketing literature puts a main focus on *message content* and seems to overlook the *medium itself* that carries the message and its impact on the green environment. This latter observation may not be so surprising considering that this logic stems from and is consistent with the traditional marketing literature such as Kotler's (2000) Five M's basic advertising model.

In a literature review no scientific research was found that investigates the green environmental issue in relation to media and media selection for marketing communication purposes. However, in a few surveys some questions related to the topic were found. For example, in a survey by YouGov (2009) it was found that about 25 per cent of Swedish households prefer not to receive direct mail in paper form through their home postal boxes. The main reason given by the respondents for such behavior was increased environmental concerns. A similar example that has received much attention from the press is the finding of a survey showing that 39 per cent of Copenhagen's households have a sign on their doors stating "Advertising, no thank you". This has led to an environmental movement urging the remaining 61 per cent of Copenhagen's households to stop consuming direct mail in paper form and instead find ads using the internet, for the sake of preserving the green environment (Andersson, 2011). Another example, that has been subject to much public debate, is when one of Sweden's biggest supermarket chains launched its ad campaign by using helicopters to fly around with banners for days with the sole purpose of promoting an advertising message to consumers. When news articles reported about the supermarket chain's latest ad campaign, consumers strongly reacted upon and debated about the supermarket chain's use of helicopters as an advertising medium and its harmfulness for the green environment

(Jalleb, 2009; Jinge, 2011; Kannerberg, 2009; Lindstedt, 2009a; 2009b; Percan, 2010). These examples of observations indicate that consumers' concern for the green environment also seems to affect their advertising media attitudes.

According to the Environmental Performance Index (2006; 2008; 2010; 2012) Sweden belongs to the top ten most sustainable countries in the world[3] in terms of its environmental performance based on its environmental policies. Furthermore, according to the Sustainable Competitiveness Index (SCI) Sweden is among the top three ranked countries indicating that it has "very stringent and well-enforced environmental policies, which are leading to positive outcomes" (World Economic Forum, 2012, p. 62)[4]. In line with this, in 2010 the Swedish Green Party appealed for a motion to prohibit the distribution of unaddressed direct mail because of its harmfulness to the green environment. The announcement of the party's motion in the news was met with public debate. People started debating about other media types that are (more) harmful for the green environment during different stages in the media's life cycles. It was further argued that if direct mail is being prohibited because of green environmental concerns then other media types should also be prohibited for advertising purposes such as TV or media using the internet (Percan, 2010).

1.4.1 How harmful for the green environment are the different media types exactly?

With the development of new media platforms, new media products keep being introduced. In line with this development, the possibilities for

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[3] The ranking is based on 25 indicators covering environmental public health and eco-system vitality among 163 countries.

[4] Sustainable competitiveness is defined as "the set of institutions, policies, and factors that determine the level of productivity of a country while ensuring the ability of future generations to meet their own needs". The Sustainable Competitive Index (SCI) "accounts for the elements required to make competitiveness sustainable over the longer run, in economic, social, and environmental terms (World Economic Forum, 2012, p. 54).

companies to advertise through these new media platforms and products are also increasing. Research has investigated the impact of different media on the green environment such as printed media, electronic and broadcast media (Crosbie, 2008; Gard and Keoleian, 2003; Kronqvist et al., 2010; Moberg et al., 2010; Moberg et al., 2011; Reichard and Hischier, 2003; Toffel and Horvath, 2004). However, despite various findings of the environmental impact of media, researchers state that assessing, comparing and communicating the environmental impact of different media types, such as printed versus various electronic media, is still a challenging task because of the difficulty in defining its implications and that further studies are necessary (Achachlouei and Moberg, 2012). Consequently, the indistinct scientific facts that are available today may cause confusion among the public with regard to how harmful for the green environment the different media in fact are. Adding to this confusion is the fact that "as science has become more accessible to the public, it has also become more exposed to criticism and contestation. As a result, however, scientific argumentation in the media allows for more diversity" (Duarte and Yagodin, 2012, p. 167).

According to Reichart and Hischier, (2003) the key drivers of harming the green environment for online and broadcast media are energy consumption and power generation. These researchers state that when assessing the green environmental impact of media one should not only take into account the manufacturing of media products and its use but also its infrastructure such as energy consumption of data transferring via internet and the telephone network. Moreover, the growing consumer demands for information and communication technology and hence for constantly improved new media products, has led to shorter life cycles of electronic media products. For example, studies have shown that the average life span of computers is two to four years whereas for mobile phones it is less than two years (SEPA, 2011). It is found that only 20 per cent of global electronic waste is properly and formally recycled (Takeback Coalition, 2009), while 80 per cent is transported to developing countries to be informally recycled. Informally recycling means most often that the electronic products that contain

toxic substances (Sepulveda et al., 2010) are burned and/or dumped whereby acids are used to extract valuable metals (Umair et al., 2013). The majority of the disposal and recycling of electronic waste is thus a serious problem as it can spread hazardous substances and thereby harm the green environment, as well as the people involved, with such methods of recycling (Umair and Anderberg, 2011).

The above mentioned complexity in assessing the green environmental impact of the total life cycles of different media types and unclear facts that are available today may cause inconsistent perceptions of how harmful for the green environment a medium in fact is among people. Given this, companies ought to obtain knowledge about consumers' eco-harmful media perceptions as it may have consequences for communication effectiveness. Especially, when taking into account consumers' increasing concern for the green environment.

1.4.2 The important role of an advertising medium – the consumer perspective

While advertisements can come in many different forms, one denominator is that they are distributed by a medium. Each advertising message is thus carried by a medium in order to reach an audience. In the marketing literature, advertising media are referred to as "types of communications channels that can distribute a message" (De Pelsmacker et al., 2007, p. 237). The use of media is an increasingly part of our daily activities which means that we are being exposed to a growing exposure of advertising (Grusell, 2007). According to Creamer and Klaassen (2007), the average person is daily exposed to a range of 254 and 5 000 advertising messages. As a result, advertising and media have become a common part of our everyday life. Media in the marketing communication literature is often associated with traditional mass media. Yet researchers view this as a too narrow definition and argue that every touch point between the audience and the advertised brand should be taken into consideration and thereby integrated into the planning process

(Duncan & Moriarty, 1998). Accordingly, "anything that conveys a message is a medium and is brand defining" (Jenkinson, 2007, p.165). In order to define *eco-friendly* or *green media*, terms that are used throughout the thesis, I refer to an earlier study by Pieters (1991, p. 59) where eco-friendly consumption is defined as "those consumption activities that have a less negative or more positive effect on the natural environment than substitutable activities". Based on this and on the logic that the use of a medium usually does not have a more positive effect in the sense that it improves the natural environment[5], *eco-friendly* or *green media* in this thesis is defined as "media types that have a less negative effect on the natural environment than other media types". Pieters (ibid) means that consumers can choose to behave more environmentally responsible when using, acquiring and disposing products and argues that for the marketer it is thus crucial to obtain knowledge on such consumption trends and patterns as well as the underlying reasons that create such behavior. In a similar fashion, it can be argued that consumers can choose to behave more environmentally responsible towards advertising media in terms of their usage, acquirement and disposal thereof. Furthermore, consumers can have different specific attitudes toward different media types such as certain media types being more harmful for the green environment than other media types.

The use of different advertising media can generate different communication effects. This is the case even when the same advertisements are used towards the same target audience (Dahlén, 2005; Dahlén et al., 2009; Nilsson, 2006; Nowland et al, 1962; Politz, 1962). For marketers, deciding which medium to use is therefore of great importance, since the different media have different effects on the target audience. Marshal McLuhan (1964, p. 203) introduced the well-known phrase "the medium is the message" by which he meant that the

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[5] According to Swedish marketing legislation, misleading words ought to be used with caution when marketing products (Marknadsföringslag 6 § - 8 §, 2007). The word 'eco-friendly' can give the impression that the product in its total form has specific advantages for the planet such that it improves or at least does not harm the natural environment. As such, the term 'eco-friendly' ought to be used with caution with the marketing of products (Laurell and Jonsson, 2007).

medium embeds itself in the message. This in turn creates a symbiotic relationship whereby the medium impacts how the message is perceived. For instance, studies of Dahlén (2005) and Dahlén et al. (2009) investigated creative media, where the use of an unexpected medium induces significantly more positive brand and ad attitudes as opposed to a traditional medium.

Marketing managers often cooperate with market research agencies to provide statistics on advertising media distribution (Rademaker, 2011a). However, while these statistics could be helpful for the marketing manager to obtain an overall impression of the number of prospects that should be exposed to the company's message at least once (reach) and the number of times that the prospects are exposed to the message in a specified period (frequency), they do not provide information about consumers' actual attitudes toward advertising in different media. Consumers may have beliefs about the use of different media regarding its impact on the green environment. For example, if consumers perceive paper-based media to be more harmful as opposed to electronic media types, the context of an ad placed in a paper-based medium may also be perceived as more ecologically harmful than when placed through an electronic medium, and vice versa. Considering consumers' increasing awareness of the urgent need to preserve the natural resources of our planet, a company's choice of advertising media and its ecological characteristics, as perceived by consumers, may affect communication effectiveness. In a literature review conducted on media context effects (see Chapter 4), no prior research was found that has investigated effects of consumers' eco-harmful media perceptions on communication effectiveness.

1.4.3 Media selection – the company perspective

Decisions in media selection are often a great concern for marketing managers since the largest portion of the marketing communication budget is spent on buying media. For example, in 2011, nearly EUR 7.2 billion was spent on marketing communication in Sweden. Of this, the

amount spent on media investments surpassed EUR 5.8 billion, an increase by 6.2 per cent compared to the previous year (IRM, 2012). One of the classic concerns and challenges for marketing managers is to make sure that the media budget is spent effectively and not distributed towards the wrong audience (Iyer et al., 2005). Furthermore, decisions in media planning and consequently the media selection are becoming increasingly complex and challenging as more media options are available (Percy and Elliot, 2005, p. 164; Turk and Katz, 1992). Besides the economic importance of these decisions whereby advertising investments are at stake, rapid technological developments in for example the digital media environment lead to increasing ways in which companies can communicate with consumers (Crosier et al., 2003). In addition, marketing managers are also confronted with a highly competitive communication environment where message competition exists in marketing communication. Marketing managers are hence challenged to break through the clutter of competing advertising messages towards the same target audience (Rosengren, 2008).

The task of media selection is even more challenging by the fact that each medium has its advantages and disadvantages, not only in terms of how many persons of the target audience are expected to be exposed to the advertiser's message during a given time period (reach), how often each person of the target audience, on average, is expected to be exposed to the advertiser's message during a given time period (frequency), its impact and costs, but also in terms of how each of the selected media from the media mix complements each other, i.e. integrated marketing communication (Coulter and Sarkis, 2005).

Based on the above discussion regarding, a) observations of changes taking place in consumers' advertising media attitudes as a result of consumers' increasing concern for the green environment, b) the complexity of marketing managers' task of media selection, and c) the unclear facts that are available today about the ecological harmfulness of different media types due to the complexity in assessing and comparing the green environmental impact of the total life cycles of the different

media, I found it important to study the green environmental aspect with regard to advertising media from the perspectives of consumers as well as marketing managers. In the next two sections I present definitions of key terms used throughout the thesis, followed by an outline of the thesis.

1.5 Definitions of Key Terms

Advertising medium: Anything that conveys a message is a medium and is brand defining[6].

Communication effectiveness: The ability to successfully exchange information, by speaking, writing, or using some other medium, and produce the intended results[7].

Eco-brand image: The association of the advertised brand with a corporation which is green environmentally responsible.

Eco-friendly/green media: Media types that have a less negative effect on the green environment than other media types[8].

Eco-media information: Information about a medium's impact on the green environment.

Eco-harmful media perception: The perception of how harmful for the green environment a medium is.

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[6] Jenkinson, 2007, p. 165.
[7] Based on The Cambridge Academic Content Dictionary, Cambridge University Press, and Oxford Dictionaries, Oxford University Press.
[8] Based on Pieters, 1991, p. 59.

GERA: Green   environmental   responsibility
                               attitudes[9].

Green thinking: Reflecting on the (unintended) damage
                               we cause nature in the daily course of
                               our lives[10].

1.6 Outline of the Thesis

The thesis comprises three main parts. Part One (Chapter 1 through 3)
presents the research focus and sets the ground for the thesis by
discussing key issues such as the thesis' main research questions, central
concepts and the applied methods. Part Two (Chapter 4 through 7)
presents the empirical studies of the thesis whereby each of the four
chapters seeks to answer one of the thesis' four main research questions,
as posed in Chapter 2. Each chapter discusses the specific theories from
which the specific hypotheses and/or research questions have been
derived and ends with conclusions of the findings. Part Three (Chapter 8
and 9) discusses the thesis' overall conclusions, its theoretical and
practical contributions, its limitations, and concludes with suggestions for
future research.

Figure 1 presents an overview of the thesis.

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[9] An index. See Chapter 6 and 7.
[10] The Environmental Action Alliance, 2004, p. 1.

Figure 1: Overview of the thesis

| Part One
Research focus and method | Part Two
Empirical studies | Part Three
Conclusions and future research |
|---|---|---|
| **Chapter 1**
Introduction | **Chapter 4**
Consumers' eco-harmful media perceptions and its impact on communication effectiveness | **Chapter 8**
Conclusions and implications |
| **Chapter 2**
The research questions | **Chapter 5**
Exploring green thought in media selection | **Chapter 9**
Future research and limitations |
| **Chapter 3**
Methodology and research design | **Chapter 6**
Green media selection: an act of organizational ideology, personal beliefs or model-use? | |
| | **Chapter 7**
Eleven shades of green: the media perception gap | |

In this introductory chapter I presented the thesis' overall research topic and its main purpose. The thesis contains further the following chapters:

Chapter 2 – The Research Questions - discusses theoretical concepts and research gaps that are central to the thesis and that serve as a base for the research topics to be investigated. The thesis' main research questions are presented in this chapter.

Chapter 3 – Methodology and Research Design - starts with my methodological standpoints in a broader sense followed by a presentation of the research design, data collections and methods applied.

Chapter 4 – Consumers' Eco-harmful media Perceptions and its Impact on Communication Effectiveness – presents an experimental study that investigates the impact of consumers' eco-harmful media perceptions on ad and brand evaluations.

Chapter 5 – Exploring Green Thought in Media Selection - presents an exploratory study, based on interviews, on the factors that guide and influence advertising media selection with a focus on the green environmental aspect among marketing managers.

Chapter 6 – Green Media Selection: An Act of Organizational Ideology, Personal Beliefs or Model-use? – presents a quantitative study that investigates some potential factors for guiding green media selection among marketing managers.

Chapter 7 – Eleven Shades of Green: The Media Perception Gap – presents a quantitative study that examines consumers' eco-harmful media perceptions and compares it to marketing managers' beliefs about consumers. In this chapter, both consumer *and* marketing manager perspectives are studied and compared.

Chapter 8 – *Conclusions and Implications* – summarizes and discusses the main findings of the four empirical studies and relates it to previous research by outlining the contribution of the thesis in terms of both its theoretical and practical implications.

Chapter 9 – Limitations and Future Research - discusses the limitations of the thesis and suggestions for future research.

Chapter 2

The Research Questions

Part One
Research focus and method

Part Two
Empirical studies

Part Three
Conclusions and future research

Chapter 1
Introduction

Chapter 2
The research questions

Chapter 3
Methodology and research design

Chapter 4
Consumers' eco-harmful media perceptions and its impact on communication effectiveness

Chapter 5
Exploring green thought in media selection

Chapter 6
Green media selection: an act of organizational ideology, personal beliefs or model-use?

Chapter 7
Eleven shades of green: the media perception gap

Chapter 8
Conclusions and implications

Chapter 9
Future research and limitations

In this chapter I present and discuss central theories and concepts that have led to the thesis' main research questions. Accordingly, this chapter functions as a main platform for the subsequent empirical studies and throughout the thesis.

2.1 Marketing Communication and the Green Environmental Aspect

Advertising is closely linked to two areas, i.e. marketing and communication. While the purpose of marketing is to create, communicate and deliver value to customers (Darroch et al., 2004), the purpose of communication is to share meaning (Dibb and Simkin, 1991) or to establish oneness of thought between a sender and a receiver (Schramm, 1955). Since these two areas share common roots, marketing theory and communication theory are thus enriching each other (Duncan and Moriarty, 1998). Merging these two streams of studies leads us into the area of marketing communication which comprises a context whereby information is distributed to inform, persuade, motivate, and to make potential customers aware of an organization's offering (Keller, 2001). Marketing communication is an essential part of marketing that comprises various activities with the aim to communicate to the company's target audience(s). Marketing communication represents "the voice of a brand and the means by which companies can establish a dialogue with consumers concerning their product offerings" (Keller, 2001, p. 823). There are various reasons why companies wish to communicate to their markets, however often the purpose is to bring to customers' attention information regarding new goods and services, to change/strengthen attitudes toward a product or to remind consumers about products. Marketing communication activities are carried out by staff and functions within the organization and/or together with external organizations. Marketing communication, often called promotion is a broad concept covering the sub areas of advertising, personal selling,

sales promotion and public relations (Duncan and Moriarty, 1998). However other researchers argue that these sub areas can be expanded by direct marketing, packaging, point of purchase display and event marketing (Keller, 2001).

According to Schultz et al. (1993) brands are affected by brand messages sent by everything a company does but also by everything a company does not do. Thus, inferring that the marketing mix is the only or primary source of brand messages, can be a too limiting view. In order to manage its brands well, a company should carefully take into account the messages that they deliver through its planned marketing communication, its unplanned communication (e.g., word of mouth), its products (price, distribution, design/performance), its services as well as what they do not say. For example, "a company's hiring practices, its environmental policies and behavior, and its financial performance have communication dimensions that cue or signal important meanings that can affect brand relationships" (Duncan and Moriarty, 1998, p. 2).

2.1.1 Integrating green environmental attitudes

For marketing communication to be successful cautious planning is crucial. The overall marketing plan in which the latest in consumer demands, attitudes and behavior are to be considered, serves as a base for all marketing communication (Percy and Elliot, 2005). The literature discusses various management orientations that adopt different philosophies serving to guide which strategies should be applied. Management strategies are commonly based on five alternative concepts, i.e. the production, product, selling, marketing and societal marketing concepts. While the marketing concept and the societal marketing concept alike have a strong focus on consumer needs and wants, the marketing literature makes a clear divide between the two concepts. The marketing literature explains the divide by a difference in satisfying short-term consumer needs (marketing concept) and long-term consumer needs (societal marketing concept) according to Kotler and Armstrong (2012). In a similar fashion, the sustainable marketing literature makes an

even stronger division between so-called *conventiona*l and *sustainable* marketing (for example Emery, 2012). However, companies employing, what is termed by the sustainable marketing literature as *conventional* marketing somehow seem to have failed to take into account the sustainability/societal factor to the extent that it is in line with consumers' growing concern for sustainability such as the green environment. On the other hand, companies committing to and implementing green sustainable marketing strategies have succeeded with the insight that for example consumers' concern for the green environment is not merely a trend that subsides: consumers' concern for the green environment is here to stay.

If sustainability such as acting responsible towards the green environment is important for the consumer such that it affects consumers' lifestyles and thereby consumption in general, shouldn't it then also be of importance to any marketing manager when making marketing decisions? Considering that the function of marketing is "satisfying consumers' needs and wants" (Kotler and Armstrong, 2012, p. 29) a true marketer should answer this question with a solid yes. Thus, when taking into consideration the function of marketing there should not be a divide between sustainable marketing and conventional marketing. Conventional and green/sustainable marketing should not be treated as separate marketing practices. Instead, there should be a parallel line that evolves in the same direction between how consumers evolve and how marketing management identifies this and adjusts marketing strategies accordingly.

2.2 Media and its Role in Advertising

Media as a means to convey messages has developed closely together with advertising. The reason for this is that media and advertising are intertwined. Although advertising, as we know it today, started about the middle of the 19th century, some form of advertising has existed ever

since there have been methods for expressing ideas by way of visual symbols. This includes thus even the pre-printing period prior to circa 1450, the period before the invention of the printing press. Advertisements prior to that time could be found in the form of wall inscriptions and announcements of sheets of papyrus, which can be seen as one of the first types of media for marketing communication purposes. Possibly the most historical advertisement[11] is one from about 3000 B.C. written on a sheet of papyrus, found in the ruins of ancient Thebes, in Egypt (Starch, 1923).

Furthermore, a forerunner of present day mass selling was conceivably the town-crier during the pre-printing period whose method of announcing or selling was oral. Such public criers' function was to provide opportune and persuasive information about available offers on town markets such as ancient Babylon, Ur and Jerusalem (Nilsson, 2006). Many such town-criers could also be found in various larger cities in Europe. Later, in 1141, town criers in France formed a well-organized union which was made possible through a license granted by King Louis VII. This license limited the amount of town-criers and enabled town-criers to earn a penny each time they would blow their horn and cry their usual cries (Starch, 1923). From 1258 the French authorities made various attempts to regulate the town-criers. In the following, some examples of such regulations, as stated by Sampson (1874, pp. 44-45), are given:

> "Whosoever is a crier in Paris may go to any tavern he likes and cry its wine, provided they sell wine from the wood, and that there is no other crier employed for that tavern; and the tavern-keeper cannot prohibit him.
>
> If a crier finds people drinking in a tavern, he may ask what they pay for the wine they drink; and he may go out and cry the wine at the prices they pay, whether the tavern-keeper wishes it or not, provided always that there be no other crier employed for that tavern.

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[11] This perhaps oldest known advertisement can be found in the British Museum in London.

If a tavern-keeper sells wine in Paris and employs no crier, and closes his
door against criers, the crier may proclaim that tavern-keeper's wine at the
same price as the king's wine (the current price), that is to say, if it be a good
wine year, at seven denarii, and it be a bad wine year, at twelve denarii.

Each crier to receive daily from the tavern for which he cries at least four
denarii, and he is bound on his oath not to claim more.

The criers shall go about crying twice a day, except in Lent, on Sundays and
Fridays, the eight days of Christmas, and the Vigils, when they shall cry only
once. On the Friday of the Adoration of the Cross they shall cry not at all.
Neither are they to cry on the day on which the king, the queen, or any of
the children of the royal family happens to die."

Hence, when looking back in history, advertising, which is a sub function
of marketing communication, originates not only from the town-criers on
town markets (Dyer, 1982) but also from the historical announcements
inscripted on walls and written on sheets of papyrus. One of the earliest
definitions of advertising suggests that,

"Advertising is selling in print. Or to put it more completely, commercial
advertising consists in presenting a commodity in print to the people in such
a way that they may be induced to buy it." (Daniel Starch, 1923, p. 5)

Although quite comprehensive and presented at a time when print was
the central means to convey advertising messages, Starch's definition is
quite narrow and not applicable today. The definition excludes all other
types of advertising media. When further reviewing the literature a
definition of advertising that captures the broad scope of advertising
including new technologies, the following was found:

"…a paid mediated form of communication from an identifiable source,
designed to persuade the receiver to take some action, now or in the future".
In addition to this definition is the following footnote: "Mediated
communication is that which is conveyed to an audience through print,
electronics or any method other than direct person-to-person
communication" (Richards and Curran, 2002, p. 74).

A more recent definition of advertising is found in the following:

> "…the activity or profession of producing advertisements for commercial products or services" in order to "describe or draw attention to (a product, service, or event) in a public medium in order to promote sales or attendance" (New Oxford American Dictionary, 2010).

According to Barker and Groenne (1996), regardless of the media that is used for advertising campaigns, they share five main commonalities namely, 1) a one-way communication flow, 2) a standardized message, 3) brief exposure, 4) single message content, and 5) a captive audience. Traditionally, scholars and practitioners have accepted the following definition of media:

> "…any class (of media), such as newspapers, magazines, direct mail, radio, television, and billboards, that is used to convey an advertising campaign message to the public. These classes of media are further broken down into geographic and time segments" (Sissors and Bumba, 1996, p. 5).

However, during the 1970s and parallel with an era of high media inflation, the elements of media have begun to expand and include items that were in the past considered to be promotion. Since these various marketing variables are competing for resources within an organization's marketing budget, the differences between media spending and promotional spending have begun to blur. Thus, a cutback in advertising expenditure could be compensated by an increase in promotional expense, and by the expanded definition of media the total media spending could then be reported as unchanged when compared on a year-to-year basis. More recently, advertising media has been referred to as:

> "Anything that conveys a message is a medium and is brand defining" (Jenkinson, 2007, p. 165).

It is stated that in order to improve marketing communication efforts it is important to continuously assess consumers' attitudes toward advertising media:

> "If we are to improve both the interest and the involvement of consumers in commercial communication, then we need to ensure that whatever we create is of greater relevance to them. To achieve this we need to add to our understanding of the ways in which consumers choose and use their media. We need to put more effort, time and resources into building greater understanding of the attitudes, needs and beliefs of consumers and how they relate to the media they consume. Only armed with a better understanding of this relationship can we hope to break through the wall of indifference to commercial messages that exists amongst consumers" (Tilley, 2000, p. 197).

2.3 Consumers and Advertising Media

Perceptions of advertising media

According to Creamer and Klaassen (2007), the average consumer is daily exposed to a range of 254 and 5 000 advertising messages. At the same time as advertising can bring pleasure and enjoyment previous research have found that it can also evoke opposing feelings such as irritation (Coulter et al., 2001; Shavitt et al., 1998; Calfee and Ringold, 1994; Pollay and Mittal, 1993; Dunér and Jönsson, 2007; Ha, 1996). Researchers also found that consumers perceive advertising as something "bad", and that they often tend to associate advertising with negative aspects rather than positive ones (Nordström, 2000; Sternvik, 2003; Larsson, 2004; Larsson, 2005). A reason for this negativity is that advertising is a communication form that is usually perceived as aiming to influence consumers. As a result, advertising is viewed upon with skepticism (Grusell, 2007). Studies have shown that consumers do not pay much attention to ads (Dahlén and Edenius, 2007; Pham and Johar, 1997). Edelman (2009) states that with consumers less trustful of all

sources of information about companies, trust in business has never been as low and continues to diminish, including trust in advertising.

Studies have found that advertising is perceived differently depending on which medium is used and that consumers' association to advertising is multifaceted and ambivalent (Dahlén, 2005; Dahlén et al., 2009; Grusell, 2007; Moorman, 2003; Nilsson, 2006). The way in which consumers perceive an ad is much affected by the media source. A media context that is in line with the mood or affect of an advertisement will enhance learning and evaluations of the ad and the ad message (Coulter, 1998; Kamins, 1991; Lord et al., 2001; De Pelsmacker et al., 2002). Brand perceptions can also be influenced by the media source (Assmus, 1978; Fuchs, 1964). By way of influencing how an ad is interpreted, the media source can also act as a cognitive prime (Yi, 1990a, 1990b, 1993). For example, Yi (1990a) has shown that when the context of a print ad of a large car comprises an editorial article about safety, the car can be perceived as safe while, in a similar fashion, the car can be perceived as fuel-thirsty when the context comprises an editorial about oil (Yi, 1990a).

The way people perceive objects or situations is based on accessing information acquired via their sense organs and transforming these into experiences of such objects or situations (Roth, 1986). In the cognitive psychology literature it is argued that people tend to augment inadequate information provided by the senses by making unconscious inferences. An explanation for this is to add meaning to sensory information. For example, we often are not aware when we are making inferences while perceiving objects or situations (Helmholtz, 1866). This constructivist approach for studying human perceptions is supported by other influential psychology theorists such as Bruner (1957), Neisser (1967), and Gregory (1972; 1980). In accordance with Helmholtz (1866) "perception is influenced by hypotheses and expectations that are sometimes incorrect, and so it is prone to error" (Eysenck and Keane, 2001, p. 54). Thus, making inferences or forming hypotheses about an object or situation is often based on insufficient or biased information supplied by the senses. Furthermore, with regard to studies in advertising effectiveness researchers argue that "the way the context influences an

advertisement, depends more on the perception of the context than the characteristics of the context per se" (Moorman, 2003, p. 4). It is in this line of thought that I study consumer perceptions of advertising media in this thesis. Hence, *consumer perceptions* of advertising media are a focal point in the thesis and not whether or not these perceptions are consistent with *factual* advertising media characteristics per se.

Changing consumers' perceptions

The marketing and communication literature provides models for changing consumer perceptions (Hadjikhani et al., 1998). Marketing's boundaries are expanded by including news information[12] as a third player in the buyer-seller relationship (Assael, 1992). Its positive utility can make news information a marketing tool to promote changes in consumer perceptions. News information is rapidly spread and can influence the behavior of people. Researchers found that because of individual or social attachment to a specific topic, consumers are inclined to adapt their behavior to their perception of that specific topic. In addition, news information can cause positive changes in consumer behavior and can thus change a previously negative perception into a positive one and vice versa (Hadjikhani et al., 1998). A study by Keane (1991) found that due to its unclear lines of responsibility and to its doubtful legitimacy, news information can influence positively and negatively at the same time. Previous research also suggest that companies making use of celebrity endorsements, which can be seen as just another type of advertising medium, may lead to increasing financial returns (Erdogan et al., 2001; Farell et al., 2000). However, previous research also found that negative information about a celebrity impacts the endorsed brand negatively (Erdogan and Baker, 2000; Hunter, 2009).

With respect to research findings on priming it could be inferred that the effects of news information and ads are intertwined (Meijer and

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[12] In this chapter the term news information refers to information distributed by journalists.

Kleinnijenhuis, 2007) whereby consumers make judgments about companies and brands using criteria based on information in for example the news. "According to the priming hypothesis, if television news becomes pre-occupied with the environment, then citizens would *evaluate* Shell primarily by its environmental policy" (Meijer and Kleinnijenhuis, ibid, p. 509). In a similar fashion, it could be argued that if news information becomes pre-occupied with the green environmental aspect with regard to advertising media (eco-media information), then consumers would increasingly include evaluating brands by companies' way of conducting marketing communication in general and, by companies' choice of advertising media in terms of its ecologically harmfulness in particular. Researchers have found that information distributed by the press can change a previously negative perception into a positive one and vice versa and thereby cause positive changes in consumer attitudes and behavior (Hadjikhani et al., 1998). Furthermore, with regard to purchase decisions research has found that consumers care about brand reputations (Page and Fearn, 2005).

Ethical and social responsibility issues of companies are current topics of discussion ever since the start of industrial capitalism in the eighteenth century (Cacioppe et al., 2008). Today, social responsibility is found to be of increasingly important concern for companies as ethics[13] has become "a critical success factor in today's business world (Paine, 2003, p. 21). Researchers have studied both consumers' and investors' evaluations of companies based on companies' ethical and social responsible reputations (for example Social Investment Forum, 2003; Vershoor, 2000; Webey et al., 2001). Prior research has also studied how managers' perceptions of other companies' ethical and social responsibility reputations affect their attitudes and behavior towards those companies (Cacioppe, 2008). However, research has not studied whether and to what extent *consumers* evaluate *companies' ads and brands* with respect to companies' choices of green/eco-friendly media for

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[13] Ethics is in the literature referred to as moral science/the science of values/ the science of right conduct (Paine, 2003).

marketing communication purposes. Thus, the first main research question of the thesis is:

MainRQ1: Do consumers' eco-harmful media perceptions matter for communication effectiveness?

2.4 Marketing Managers and Advertising Media

Investigating the need for integrating a green environmental responsibility review with media selection

Advertising and media investments range from the simple use of newspaper ads to complex global web advertising, and the number of alternative media to reach out to consumers increases to rise. Regardless of the media type used to communicate to an audience, advertising can be used to market an offer, to provide knowledge about certain brands or to educate people about important issues in society. As messages are directed to specific target groups, advertisers do not merely involve corporate firms but also other organizations such as museums, government agencies and charity organizations (Kotler, 2000). Today, the global market place finds itself in a fast changing environment with high message competition (Rosengren, 2008). There are various ways in which organizations handle their advertising. Organizations can hire and cooperate with outside advertising agencies and/or create their own internal advertising department. However, it is most common for organizations to hire advertising agencies to help them to create ad campaigns and to select and purchase media (Kotler, 2000; Rademaker et al., 2012).

After identifying the target market and buyer motives, the marketing manager develops an advertising program based on five key decisions, also known as Kotler's five M's of advertising: Mission, Money, Message,

Media, and Measurement. *Mission* refers to the company's purpose for advertising. Commonly, there are three different main objectives: informative (for example when a new product is launched), persuasive (urging people to buy the product) and reminding (to remind people about the brand existence). After the ad campaign's objective is formulated, the next issue to be decided upon is the *budget*, i.e. how much money should be spent on advertising to reach its objective. The next step is to decide which *message* the company wants to convey. The latter, is most commonly left to advertising agencies to create appealing advertising that can win consumers into an interest in the company's product(s). In existing advertising planning models, decisions with regard to *media* refers to selecting suitable media to carry the communication message. Reach, frequency and impact are terms that are focused on when making media decisions. Timing decisions are also taken into account during this step as different industries are dealing with seasonal sales fluctuations and/or cycles. The last step is *measurement* which is necessary to evaluate the advertising investment. Measurements such as reach and impact on sales, brand awareness and brand preference. Such an assessment of the advertising investment will enable the company to decide whether or not to continue and/or repeat the advertising investment (Kotler, 2000).

Interestingly, the literature does not include taking into account social responsibility issues in relation to the media selection. Instead, a social responsibility review is focused upon in terms of *the message* whilst overlooking such review in relation to the selection of *the medium itself* that carries the message. This can be seen in Figure 1 under "Message" and "Media".

When reviewing the literature, no empirical study was found that investigates whether and to what extent the green environmental aspect is taken into consideration when marketing managers make media decisions for advertising. Recalling the observations indicating consumers' concern for the harmful impact of advertising media on the green environment, as discussed in Chapter 1, and that basic advertising

models do not seem to take the green environmental aspect into account with media selection, the thesis' second main research question is:

MainRQ2: Do marketing managers take the green environmental aspect into consideration when selecting media for marketing communication?

Figure 1: Kotler's Five M's of Advertising

2.5 Factors guiding Green Media Selection

When reviewing the literature, no empirical study was found that investigates factors guiding green media selection. However, a few empirical studies could be found that have explored the factors guiding media selection among marketing managers. Among these few, Grønhaug (1972) showed that one of the factors influencing advertising media selection is the degree of determination of the marketing manager

when grounding media selection on mostly previous experience of industry, which may lead to routine based decisions. Research conducted in the United States found that audience reach and targeting are the main determinants of media selection among marketing managers (Nowak et al.,1993). Research conducted among Swedish marketing managers, advertising and media agencies showed that the factors that influence media selection were product type, target group, a medium's communication characteristics, type of ad campaign, geographical focus, budget, season and availability of media space (Sandén-Håkansson, 1994).

Pickton (2005) argues that marketing plans will not function optimal when not being adjusted to the changed technical environment of consumers. Much too often old media plans are being repeated with a main focus on conventional media while new media are not being tested. He further claims that the media planning process is also too often left to the agencies where the focus is mostly on what "reach" the various media have instead of consumer media behavior. In line with Pickton, I argue that when old media plans are being repeated, the risk exists that current (new) consumer media attitudes are overlooked. For example, consumers' increasing concern for the green environment may affect attitudes toward advertising media such that when a company chooses advertising media that are perceived to be very harmful for the green environment, it could negatively impact the company's advertised brand(s). If so, media planning should include taking into account consumers' eco-harmful media perceptions; a central issue to be explored in the thesis. In the following, a review of the literature on media planning is presented.

Literature review of media planning and media selection

Media selection is incorporated in media planning (Bogart, 1996). Since the start of advertising, media planning has existed and is hence an important part of marketing communication. Media planning comprises a series of decisions to find the most optimal way(s) to deliver a message

to a target audience (Sissors & Baron, 2002; Sissors and Bumba, 1996). A media plan comprises a document that states courses of actions on how and when the media budget is used to reach advertising and marketing objectives (Barban et al., 1993; De Pelsmacker et al., 2007).

Up until the late 1950's, media decisions were more of a tactical character. Starch (1923, p. 798) for example suggested that "The intelligent selection of magazines requires a careful comparison of the available mediums and an intimate knowledge of the nature and characteristics of the various types of magazines". Starch presented a score card plan for evaluating the suitability of a medium to address a certain problem. He explained that the purpose of the score card is to assist the advertiser to evaluate the desirable and undesirable points in regards to a medium. When using a score card, the advertiser judges on a scale from zero to one hundred on a number of points (Appendix A). The advantage of using a score-card plan is not so much in the final score that is assigned to each particular point, but rather in the care taken to assure that all of the essential points in regards to media selection are considered. Organizations have worked with variations of similar plans. In 1957 Brown, Lessler and Weilbacher published one of the first books dealing exclusively with, in today's terms, "media planning". By viewing media planning as an analytical area of study, Brown, Lessler and Weilbacher (1957) contributed a great deal to the development of media planning courses. As a result, a clear shift evolved in academic course contents from a heavy buying orientation to an approach that is more strategic in regards to media decision making and where media planning was given much more thought. For the first time advertising programs added a course in media planning because media planning was now accepted as a fundamental part of marketing. Articles in academic journals did not start to deal with media planning until about the same time. The first and possibly one of the most influential articles was written by Agostini (1961), where the first media selection model was introduced. Research within the area of media planning has grown since (Pasadeos, Barban and Kim, 1997).

Media planning models

The early media planning literature has been much influenced by mass communication theory such as the widespread communication models developed by Schramm (1954) and Schramm and Roberts (1971) as well as the hierarchy of effects models (Lavidge and Steiner, 1961; Colley, 1961). Media planning models have taken basic concepts into account such as *reach* (the number of prospects that should be exposed to the message at least once), *frequency* (the number of times that the prospects are exposed to the message in a specified period) and *impact* (the qualitative value of an advertising message in a specific medium compared to the same advertising message in another medium; Coulter and Sarkis, 2005). Media planning models originate from the early 1960's when Agostini's (1961) widespread reach estimation formula was published. Many competing formulations followed that made it possible to not only estimate the reach but also the average frequency of a schedule (Bower, 1963; Caffyn and Sagovsky, 1963; Marc, 1963; Kuhn, 1963; Hofmans, 1966; Claycamp and McClelland, 1968). Reach and average frequency estimation made it possible to integrate duplicate exposures since two elements of media strategy were addressed: how many people are exposed to the ad at least once (reach) as well as how much advertising each person receives (frequency). Although reach and average frequency estimation is superior to the alternative of a campaign's total audience delivery (raw media weight), it is a basic planning tool.

It was not until the late 1980's that the issue of using frequency distributions instead of simple reach and average frequency analysis was heavily discussed in the popular advertising literature. Because of poor computational control, media planners found that reach and frequency analysis was inadequate and that frequency distributions analysis would be a better way. With the introduction of computers in media planning together with the corresponding drop in the cost of computations, working with frequency distributions became useful (Cannon et al., 2002).

Extensive reviews of the media schedule simulation literature have been conducted by for example Gensch (1973). Many models that estimated frequency distributions became widely accepted in daily media planning practices (Beardon, Haden, Klompmaker and Teel, 1981; Rust and Leone, 1984; Leckenby and Boyd, 1984; Leckenby and Kishi, 1984; Leckenby and Rice, 1985; Danaher, 1988, 1989, 1991, 1992). According to Wray (1985), organizations such as Foote, Cone and Belding Communications developed a more advanced planning system. However, Naples (1979) claimed that the industry adopted the simpler notion of effective reach and frequency, namely effective frequency planning (EFP). Although estimates vary on how widespread EFP was applied in practice, EFP was the dominant media planning model in the 1980s and 1990s (Kreshel et al., 1985; Leckenby and Kim, 1994). Other researchers such as Cannon and Goldring (1986) argue however that while EFP was widely used in practice in the advertising industry, it proved to have major conceptual problems. Later, researchers introduced the concept of frequency value planning (FVP), a model dealing with the main weaknesses of EFP (Cannon et al., 1996; 2002).

The media landscape has changed drastically with new media alternatives that have been introduced and whereby digital media have become a natural media choice to include together with traditional media. This change is handled by media planning that has developed into a process that includes integrated marketing communication (IMC) thought as an input as well as an assessment of the communication environment. Despite the lack of a clear and common definition, the IMC concept has developed from the growing body of literature as well as from experiences in practice such as from a) reactions by advertising agencies regarding the development and use of databases, b) requests of clients for interaction/synergy across media, and c) the increasing need for coordination (Kitchen and Schultz, 1999; Schultz and Kitchen, 2000). IMC can be described as "a cross-functional process for creating and nourishing profitable relationships with customers and other stakeholders by strategically controlling or influencing all messages sent to these groups and encouraging data-driven, purposeful dialogue with

them" Duncan (2002, p. 7). Dewhirst and Davis (2005) argue that IMC is not merely a coordinated multimedia campaign, but more of a tactical consistency, also referred to as *one voice, one look* (Duncan and Mulhern, 2004). Powerful integrating forces for organizations are a customer-focused strategy and well-defined brand positioning (Dewhirst and Davis, 2005).

Hoffman and Novak (2000) proclaim that conventional approaches to media planning cannot be applied for non-traditional media such as internet media. They argue that traditional media models do not provide much guidance to measure results from online advertising and that the unique characteristics of internet media also require new strategies. Cannon et al. (2002), on the other hand, take a contrary view by arguing that all media can and should be held to a universal standard and should thereby be put on an equal footing. Furthermore, while Pasadeos et al. (1997) speculate that the development of new technologies and new media could create new demands for media modeling, Cannon et al. (2002) argue that when using integrated marketing communication (IMC) thought as an input, established models can be applied to both conventional and new media.

Fundamentals of media planning models

For over a decade the topic of media planning fusing into the broader concept of integrated communication planning has been heavily discussed, i.e. conventional mass media, social media, Customer Relationship Management (CRM), database-marketing, customer media and other communication efforts were recognized and evaluated as a whole. Figure 2 presents an illustration of a basic media planning model (based on Cannon et al., 2002 and De Pelsmacker et al., 2007).

The basic media planning model starts off with the well accepted notion that media planning originates from a situational analysis (see A in Figure 2) which is important to formulate the marketing strategy and marketing plan. The communication objectives are formulated in the marketing plan. Colley (1961) suggested this by the classic DAGMAR

paradigm. DAGMAR is an acronym for Defining Advertising Goals for Measured Advertising Results and refers to a model where objectives of an advertising campaign are set in such a way so that its success can be quantitatively measured. A situational analysis thus sets the ground for the marketing strategy and the creation of the marketing plan.

The next step (see B in Figure 2) is an assessment of the communication environment. An assessment of the communication environment is necessary to formulate a media plan, i.e. the screening of legal aspects, regulations, local media consumption habits and the communication efforts of the competition. Screening the latter mentioned requires an assessment of category spending (the development of the advertising spending in the product category over the last five years), share of voice (dividing a brand's category spending by the total category spending including that of competitors) and the media mix - assessing possible trends in media mix compositions of the competitors. Screening local media consumption habits is in the media planning literature referred to as questions such as "does the target market primarily watch TV, read newspapers or use the internet?" (De Pelsmacker et al., 2007, p. 225).

An IMC evaluation has become crucial for media planning for the reasons explained in the section above. Consequently, the step that follows (see C in Figure 2) comprises an evaluation and selection among IMC alternatives. The IMC evaluation determines the type of marketing communication activities[14] that are required in order to reach the communication objectives formulated in the marketing plan (Cannon et al., 2002; Wahlund et al., 2013).

Setting the media objectives is the step that follows next (see D in Figure 2). These are derived from communication objectives formulated in the marketing plan. Media objectives are usually expressed in *reach* (the number of people that are expected to be exposed to the ad message at least once during a specific time period), *frequency* (the times a consumer of the target group is expected to be exposed, on average, to the ad

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[14] For example, advertising, sales, sales activities, PR, events, sponsoring and the like.

message within a specific time period) and *impact* (the qualitative value of an advertising message in a specific medium compared to the same advertising message in another medium), *cost*[15], *weight*[16] and *continuity*. The latter concerns campaign continuity whereby advertisers can opt for a continuous schedule[17], a pulsing schedule[18] or a flighting schedule[19] (De Pelsmacker et al., 2007).

We have now come to the stage where the actual media decision process starts (see step E – G in Figure 2). The costs and when the different media will be used are also factors to be taken into consideration at this stage (De Pelsmacker et al., ibid). The first step in the media decision process is to allocate the communication objective(s) to different types of media (E). The next step is to identify the specific media vehicles (for example particular programs and/or magazines within each type of media) that are most cost-effective in performing each communication objective (F). The last step in the media decision process consists of developing a media schedule to support each task. Because of the possibility of duplicate exposures, the process attempts to adjust the schedules to maximize their frequency value. This part of the media decision process has changed during the 1980's with the introduction of computers in relation to media planning (G).

The media planning process ends with buying media space (H). Buying media space can be done through direct contact with the media

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[15] The cost of an advertising medium usually refers to the cost per thousand (CPT), i.e. the cost of reaching 1000 people. CPT is also termed CPM whereby the M refers to the Roman symbol for thousand. To calculate CPM one divides the cost of a medium such as a one-page magazine ad by the medium's audience (De Pelsmacker et al., 2007).

[16] The weight of an ad campaign is usually expressed by GRPs (Gross rating points, i.e. a percentage/amount of the target group). For example, an objective of a brand could be to realize a total of 400 GRPs in a month for a target group people (De Pelsmacker et al., ibid).

[17] A continuous schedule refers to a continuous amount of money that is spent throughout the entire ad campaign. Budget constraints which is very common among companies, often lead to too low expenditures per period.

[18] A pulsing schedule is used when a set level of advertising is executed during the whole campaign period, with exception during specific periods when higher levels of advertising are executed (De Pelsmacker et al., 2007).

[19] A flighting schedule means that no advertising takes place during specific periods while higher levels of advertising takes place during peak demand periods (De Pelsmacker et al., ibid).

supplier(s) or by way of hiring an external agency such a media agency[20]. Figure 2 presents the basic media planning model.

Figure 2: The basic media planning model (based on Cannon et al., 2002; De Pelsmacker et al., 2007; Wahlund et al., 2013)

| A. Situational analysis and marketing plan |
| B. Assessment of the communication environment |
| C. IMC evaluation |
| D. Set the media objectives |
| E. Selection of media types |
| F. Selection of media vehicles by cost effectiveness |
| G. Adjust media schedule to maximize frequency value |
| H. Buy media |

[20] For a detailed discussion on the responsibilities of different tasks with an ad campaign and the media planning process, see Rademaker, Wahlund and Nilsson (2012).

Based on the literature review on media planning and selection, it can be questioned whether and to what extent marketing managers who use models for media selection take the green environmental aspect into account when making media decisions.

Green organizational policies and green personal beliefs

Some factors that could influence green thinking with media selection are companies' documented green environmental policies and practitioners' personal attitudes toward protecting the green environment. According to the Environmental Performance Index (2006; 2008; 2010; 2012) Sweden belongs to the top ten most sustainable countries in the world in terms of its environmental performance based on its environmental policies [21]. Furthermore, according to the Sustainable Competitiveness Index (SCI) Sweden is among the top three ranked countries in the world indicating that it has "very stringent and well-enforced environmental policies, which are leading to positive outcomes" (World Economic Forum, 2012, p. 62)[22]. Given this, it could be questioned whether and to what extent a company's documented green environmental policy is a guiding factor for taking into account the green environmental aspect with media selection among marketing managers.

With regard to theory of marketing ethics, it is postulated that an *employee's* personal ethical beliefs influence ethical decision-making, besides his or her professional and organizational environment (Hunt and Vitell, 1986; 1993; Chiou and Pan, 2008). In addition, green environmental coverage in the news media is often criticized for *a climate of doubt* (Painter, 2011) that contributes to public confusion on issues such as climate change and the importance of taking action. As such, it can be

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[21] The ranking is based on 25 indicators covering environmental public health and eco-system vitality among 163 countries.

[22] Sustainable competitiveness is defined as "the set of institutions, policies, and factors that determine the level of productivity of a country while ensuring the ability of future generations to meet their own needs". The Sustainable Competitive Index (SCI) "accounts for the elements required to make competitiveness sustainable over the longer run, in economic, social, and environmental terms (World Economic Forum, 2012, p. 54).

questioned whether and to what extent marketing managers' personal beliefs about protecting the environment is a guiding factor for taking into account the green environmental aspect with media selection.

Based on the above discussion regarding some factors that could influence green media selection, such as green policies, the use of models and green personal beliefs, the third main research question of the thesis is:

MainRQ3: Which are the factors that guide green media selection among marketing managers?

In the next section, the thesis' fourth and final main research question is posed whereby a succinct overview of the media landscape is given as well as a presentation of the different types of media studied in the thesis. The chapter concludes with a discussion on the environmental impact of different media types.

2.6 The Media Landscape

The consumer information environment comprises the total range of available product-related information to the consumer (Bettman, 1975). Because of technological developments there are today many different media alternatives available that can carry messages about information on products to (and from) consumers. Not too long ago mostly conventional media were used for marketing communication such as newspapers, magazines, TV, outdoor, DR, in-store promotion and exhibitions/events. During the 90's new types of media were starting to be used such as e-mail. In 1994, the same year as the internet got its first user from outside the academia, the first advertisement was published by the American company AT & T in an online magazine called Hotwired. Since then, the digital media landscape, has developed tremendously and at a fast pace.

From a marketing communication perspective, it is important to understand that the many different types of media have also different characteristics and that each medium may suit different objectives and target groups better than other media alternatives (Rademaker et al. 2012). For example, one and the same ad can have different communication effects, depending which medium is used and how the medium is used (Dahlén, 2005; Dahlén et al., 2007; Moorman et al., 2003; Nilsson, 2006). In order to reach its target market(s) marketing managers are thus challenged to be on the forefront of consumer media habits. The time has passed when consumers could be easily identified based on merely segmentation variables such as values, opinions, motivation and product attitudes. Nor can merely using traditional advertising media be used in order to reach and influence consumers (Bezjian-Avery et al., 1998). While almost any medium can be used for advertising, in the following sections the media types most commonly used for advertising and those studied in the thesis are presented. Thereafter follows a separate section that discusses the environmental impact of different media types.

Internet

Besides its interaction property, compared to other media alternatives, internet advertising allows for a vast amount of available information online at relatively low or almost no cost, to and from consumers. Media using the internet has the capability to combine the properties of TV, print and radio into a single presentation, i.e. video, text and sound (Coupey, 1999). The literature identifies different types of internet ad formats such as, banner ads, pop-up ads, internet sponsorships, hypertext links, web sites, paid keyword search listing, advergames and to a certain extent mobile advertising (for example Faber et al., 2004; Rodgers and Thorson, 2000). However, because of technological developments, new advertising media using the internet continue to develop. In addition, the web comprises a broad variety of websites that fulfill different functions and that can be used in various ways. Some types of websites that are frequently used are news sites, e-mail, search engines, TV streaming,

video sharing and download sites. In addition, there is a broad variety of websites that enable users to interact and exchange information and experiences with others, i.e. social media. Some examples are Twitter, YouTube, Facebook, Flickr, LinkedIn, Spotify and Pinterest. Another type of social media is blogs, often written by private persons. Consequently, social media have given new ways for companies to communicate to and *with* consumers. The possibilities to have a dialogue with consumers are greater with social media than with traditional media (Rademaker et al., 2012). In the thesis, internet advertising in general (Chapter 7) and web banner ads in particular (Chapter 4) are studied.

Mobile

Mobile advertising is considered a relatively new form of advertising medium, to communicate messages to consumers. The advantage lies in the on-the-go nature of this type of medium (Senn, 2000; Faber et al., 2004). Wireless communication technology makes it possible to reach out to consumers via their mobile phones and other personal digital gadgets. A major advantage of mobile advertising is that, by way of global satellite positioning, it allows for companies reaching consumers in connection to their establishments. For example, consumers can use their mobile phones to find out about opening hours of stores or check for special offers at local restaurants, or the times and movies offered at the local cinema. Consumers can also be reached through their mobile phones and offered special offers as consumers happen to be in the vicinity of an establishment. An important disadvantage of mobile advertising may be consumers' perception of it as irritating and intrusive when consumers do not have an essential desire for the promotional message. These aforementioned downsides of mobile advertising have made the so called do-not-call lists (such as the Swedish NIX) for uninvited calls and/or text messages quite popular (Faber et al., 2004). In the thesis, mobile advertising is studied with regard to SMS and MMS (Chapter 7).

Newspapers and magazines

Newspapers' main advantage is that it can convey large amounts of information, is flexible and can reach a large audience within a very short time frame. It is flexible in the sense that newspapers allow for last-minute changes, i.e. a company can take advantage of current events[23]. Newspapers also allows for targeting specific regions. One of the disadvantages is that its reproduction is usually of low quality (De Pelsmacker et al., 2004).

Magazines can reach a large number of people while special interest magazines can reach different target groups. Magazines are often reproduced with high quality and can be a suitable medium for image-building depending on the type of magazine. For example, ads placed in a magazine such as *Vogue* can be image building as it offers a high-quality context. Magazine readers have the tendency to use magazines more than once before they dispose of it. Because of this behavior, the advantage with magazines is that consumers can process messages in magazines at their own pace and read them more than once. However, magazines are considered a slow medium, i.e. for example monthly magazines may not be read immediately which delays reach. Furthermore, some magazines are highly cluttered with competing advertising messages contributing to less effective messages (De Pelsmacker et al., 2004).

Catalogues and brochures

Catalogs and brochures in printed format are commonly sent to selected addresses of both business prospects and customers. Both small and large companies often make use of catalogs. Successful catalog advertising is much dependent on a company's various skills. First, it should carefully manage its customer lists such that duplication of addresses is minimized. Second, it should manage its inventory such that it is continuously updated. Third, it should offer good quality products to avoid high

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[23] According to De Pelsmacker (2004, p. 242) "Ads referring to recent events are called top topicals´ and usually can count on more attention."

returns of merchandise. Fourth, it should represent a unique image such that their catalogues are distinguished from other competitors. In order to obtain the latter, companies try hard to distinguish themselves by adding other services such as 1) by operating a special hot line to provide (prospect) customers with more information, 2) by sending gifts to loyal customers, or 3) by donating to charity. At present, catalogs are enhanced by the internet through which catalogues in print are complemented and orders are taken (Kotler, 2000).

Direct mail

Direct mail, also called door-to-door advertising, refers to locally distributions that are free of charge and delivered by mail to a person at a particular address. This type of medium is geographically flexible with quite a high reach. While the costs of direct mail per thousand people are higher compared to mass media, it is a more effective medium as the people reached are better prospects. Direct mail is hence considered a medium that can convey much information at a relatively low cost (Kotler, 2000). Ads that are sent via e-mail can be regarded as another type of direct mail that is sent over the internet and is thereby distributed at a low cost. The costs of a so called e-mail campaign can sometimes be very low or at almost no cost in cases when the sender has access to the receivers' e-mail addresses and when the ad is produced in-house. However, similar to door-to-door advertising, consumers often have a negative attitude towards this type of advertising medium as e-mail marketing can trigger irritation on the receivers' side (Wahlund et al., 2013). In the thesis, direct mail with regard to door-to-door advertising is studied (Chapter 4 and Chapter 7).

Television (TV)

A major advantage of television (TV) is its communication power through audiovisual messages. TV is very suitable for building a brand image or brand personality as it is a passive medium. Studies have shown that different consumers with different lifestyles watch different TV programs. As such, TV allows for targeting specific consumer groups.

Furthermore, a large audience can be reached within a short time frame. Local TV allows for targeting specific regions. Some disadvantages of television are the high production costs as well as the fact that it does not always allow for targeting a message to a specific target group. Reaching so-called occasional viewers are much too often the case which contributes to a low effective reach. Because messages on TV last most often no longer than 15 to 30 seconds, the lifetime of a TV message is considered as short. Other competing TV ads necessitate increasing TV ad exposures which adds even more to the total costs. TV consumption is affected by season, i.e. people spend more time outdoors during the summer and thus tend to spend less time watching TV which leads to a lower reach during summer than during winter (De Pelsmacker et al., 2004)

Cinema

Cinema advertising is similar to TV in the sense that its communication power is through audiovisual messages. The impact on the audience visiting a cinema is even greater than for TV since more attention is paid to the advertising message whereby the audience is less distracted. People tend to have a positive mood when going to the cinema which can lead to advertising messages being processed more positively. Furthermore, consumers tend to like cinema advertising as it seem to be an accepted form of advertising and a part of cinema visits (Magiera, 1989). Similar to TV, cinema advertising messages have a short lifetime and production costs are rather high.

Radio

A major advantage of radio is that advertising messages can be reached to a large audience. Additionally, production costs are relatively low. Different people with different lifestyles listen to different radio channels which allows for targeting specific consumer groups. However, radio advertising messages have a short lifetime and people tend to use the radio as background noise which means the risk for potential low reach (De Pelsmacker et al., 2004).

Outdoor

Outdoor advertising comprises ads placed in media such as billboards and flyers out in the open. One of the advantages of outdoor advertising is its ability to reach consumers when they are out to buy a product (Hayward, 2003).

Transit media

Transit media is a form of outdoor media whereby vehicles are used to carry advertising messages, in addition to posters at for example train stations and bus shelters. Ad messages are placed inside or on the sides/backside of vehicles such as trains, buses and taxis. Because of its characteristics ads placed in transit media have usually high reach, frequency and geographic flexibility. Transit advertising media is increasing in popularity among practitioners as ads can be placed inside and outside of vehicles and even on receipts (Veloutsou and O'Donnell, 2005). In the thesis, transit media is studied with regard to ads on the sides (exterior) of city buses (Chapter 4 and Chapter 7).

In-store

In-store advertising refers to any advertisement placed in a retail store promoting a specific product. Examples of in-store advertising are posters, shopping car ads, in-store video displays and point of purchase displays (POP displays). As in-store advertising is gaining in popularity, companies are increasingly hiring consultants with retail expertise to handle this area of advertising (Nelson and Ellison, 2005). In the thesis, in-store posters are studied (Chapter 7).

The harmful impact of media on the green environment

With the development of new media platforms and thereby the introduction of new media products, research has investigated the impact of different media on the green environment such as printed media, electronic and broadcast media (Crosbie, 2008; Gard and Keoleian, 2003; Kronqvist et al., 2010; Moberg et al., 2010; Moberg et al., 2011;

Reichard and Hischier, 2003; Toffel and Horvath, 2004). It is found that a medium's different parts of its total life cycle impact the green environment on different levels and should thus be taken into account when making assessments on environmental impact (Edwardsson, 2012).

According to Reichart and Hischier, (2003) the key drivers of harming the green environment for online and broadcast media are energy consumption and power generation. These researchers state that when assessing the green environmental impact of media one should not only take into account the manufacturing of media products and its use but also its infrastructure such as energy consumption of data transferring via internet and the telephone network. They found that newspapers in printed form cause more harm to the green environment than TV or internet.

While most of the studies on the environmental impact of media have focused on media products, researchers such as Kronqvist et al., (2010) argue that the editorial work processes involved with content production of media also impact the green environment. They found that media consumption, in printed and online formats alike, lead to emissions of greenhouse gases. In addition, energy consumption due to editorial work and travels contribute significantly to the total environmental impact. A recent study on media life cycle assessment shows that the biggest part of the total emissions of both printed and electronic media is caused by business travel, electronic equipment and electricity use (Edwardsson, 2012).

The growing consumer demands for information and communication technology and hence for constantly improved new media products, has led to shorter life cycles of electronic media products. Consumers are thus also more frequently discarding their outdated media products. For example, the average life span of computers is two to four years while for mobile phones it is less than two years (SEPA, 2011). As a result, studies have found that only 20 per cent of global electronic waste is properly and formally recycled (Takeback coalition, 2009), while 80 per cent is transported to developing countries to be informally recycled. Informally recycling means most often that the

electronic products that contain toxic substances (Sepulveda et al., 2010) are burned and/or dumped whereby acids are used to extract valuable metals (Umair et al., 2013). The majority of the disposal and recycling of electronic waste is thus a serious problem as it can spread hazardous substances and harm the green environment as well as putting people involved in the recycling process at risk for health problems (Umair and Anderberg, 2011). Despite these findings of the environmental impact of media, researchers state that assessing, comparing and communicating the environmental impact of different media, such as printed versus various electronic media, is still a challenging task because of the difficulty in defining its implications and that further studies are necessary (Achachlouei and Moberg, 2012). As a consequence, the complexity in assessing the environmental impact of the total life cycles of the various media types as well as the indistinct scientific facts that are available today may cause confusion among people with regard to how harmful for the green environment the different media in fact are (eco-harmful media perception). Adding to this confusion is the fact that "as science has become more accessible to the public, it has also become more exposed to criticism and contestation. As a result, however, scientific argumentation in the media allows for more diversity" (Duarte and Yagodin, 2012, p. 167). No studies were found that investigates consumer eco-harmful media perceptions. Hence, to examine to what extent consumers' eco-harmful media perceptions of different types of advertising media are consistent with marketing managers' beliefs about consumers, the thesis' fourth and final main research question is:

MainRQ4: To what extent are consumers' eco-harmful media perceptions consistent with marketing managers' beliefs about consumers?

Based on the discussion in this chapter, the model presented in Figure 3 below illustrates the thesis' four main research questions, derived from the proposal to investigate the need for an integration of a green environmental responsibility review with media decisions in established advertising models such as Kotler's (2000) Five M's of Advertising.

Figure 3: Integrating a green environmental responsibility review with media decisions for advertising (adapted from Kotler, 2000)

Chapter 3

Methodology and Research Design

Part One Research focus and method	Part Two Empirical studies	Part Three Conclusions and future research
Chapter 1 Introduction	**Chapter 4** Consumers' eco-harmful media perceptions and its impact on communication effectiveness	**Chapter 8** Conclusions and implications
Chapter 2 The research questions	**Chapter 5** Exploring green thought in media selection	**Chapter 9** Future research and limitations
Chapter 3 Methodology and research design	**Chapter 6** Green media selection: an act of organizational ideology, personal beliefs or model-use?	
	Chapter 7 Eleven shades of green: the media perception gap	

The way in which research objectives are being met depends much on the research approach of the one conducting the study. As such, in this chapter I start by explaining the research approach that I have applied to address the objectives of the thesis. Thereafter, I discuss methodology and research design. Following this, I introduce the empirical studies and its applied research methods. The chapter, which concludes Part One of the thesis, ends with a discussion on quality appraisal and validity.

3.1 Research Approach

Considerations in regards to the choice of research issue and research method should not be determined without reflecting on the researcher's methodological standpoints in a broader sense (Alvesson and Sköldberg, 1994; Van de Ven, 2007). My assumptions of grounding knowledge lie in the belief that knowledge can be obtained. My view of conducting research is based on the key elements of a critical realist philosophy of science. This view takes an objective ontology and a subjective epistemology. Critical realism emphasizes that all facts, observations and data are theory-laden and that social sciences have no absolute truths or laws. The development of robust knowledge is a product of carefully considering existing theory and method(s) whereby new research findings can be inconsistent with and/or even contradicting previous findings. As such, models that better fit the problems of today's practice are developed and thereby "allowing an evolutionary growth of knowledge" (Van de Ven, 2007, p. 70). In addition, gaining knowledge of a complex reality demands the use of multiple perspectives whereby some methods are better suited than others, depending on the phenomenon to be studied (Van de Ven, ibid). When conducting research, I view myself as mostly taking a deductive standpoint while at times finding the need to work inductively. Tom Wengraf (2001) explains this combination by the fact that researchers may experience different moments in the research cycle where different levels of the combined models of induction and deduction may be applied.

3.1.1 Integrating a quantitative and qualitative research approach

The thesis combines a quantitative and a qualitative research approach. The literature's view on methodology states that the character of the research issue should govern the choice of research method, and not vice versa. This is crucial in order to make causal and/or descriptive inferences from research findings in a least ambiguous way (Alvesson and Sköldberg, 1994; King et al., 1994). The research problem and the purpose of the research thus play a crucial role as they will guide the research process. A posed research problem can be approached by a qualitative or a quantitative approach or a combination of both. The quantitative approach, studies a larger selection of individuals whereby knowledge statements are provided allowing for generalization (Denzin, 2002). Solely relying on quantitative methods may ignore the social and cultural construction of the "variables" which quantitative research seeks to correlate. On the other hand, in qualitative research there may be cases where certain types of quantitative measures may be suitable (Silverman, 2006). Rather than viewing quantitative and qualitative methods that are describing two different realities, both methods are needed to describe one reality (Hentschel, 1998; 1999). Researchers argue that "all good research can be understood – indeed, is best understood – to derive from the same underlying logic of inference. Both quantitative and qualitative research can be systematic and scientific" and "neither quantitative nor qualitative research is superior to the other" (King et al., 1994, p. 4). Integrating qualitative and quantitative methods can take three different forms: parallel, sequential and iterative. In the case of parallel forms, quantitative and qualitative research teams work separately however when analyzing, they compare and combine findings. When dealing with very large projects, this approach is most suited. For projects of modest scale and scope, sequential and iterative are best suited. These latter approaches are where the greatest gains are to be found from mixing both methods (Rao and Woolcock, 2003).

To study eco-harmful media perceptions among *consumers*, solely a quantitative approach was opted for (Chapter 4 and 7) whereby knowledge statements of a larger selection of individuals are studied, hence allowing for generalization. In order to study green media selection from the perspective of *marketing managers* a *sequential* approach was opted for whereby qualitative and quantitative methods respectively were employed (see Chapter 5 and 6). Since no prior research could be found that studied factors guiding green media selection among marketing managers, an initial exploratory study was opted for to gain a deeper understanding of the topic to be studied, and in a broader sense. By adopting this sequential approach I could minimizes the probability of ignoring certain questions on topics of importance. Conducting semi-structured interviews was considered useful for exploring new areas of importance not to my prior knowledge, which was the exact purpose of the study. Therefore, the interviews provided valuable input for a suitable design for the subsequent quantitative survey among marketing managers presented in Chapter 6. Following the exploratory study, a subsequent quantitative study was found necessary to be able to make standardized and systematic comparisons among marketing managers. As such, the quantitative study permitted for a narrower and stronger focus on the green environmental aspect with media selection. Hence, integrating qualitative and quantitative methods enabled me to gain understanding of the marketing managers' complex task with media selection (qualitative exploratory study) as well as to spot trends in green media selection (quantitative study).

3.2 Methodology

3.2.1 Experiments

To answer the first main research question of the thesis, I opted for an experimental design. Since the aim was to test how differences in eco-harmful media perception impact communication effectiveness, and hence whether a cause and effect relation exists, experiments were opted for to test the hypotheses presented in Chapter 4.

The purpose of an experimental design is to establish a causal connection between the independent and dependent variables and to extract as much possible information with the least possible costs of resources. An experimental design "is a plan for assigning experimental units to treatment levels and the statistical analysis associated with the plan" (Kirk, 1995, p. 1). Conducting experiments that are carefully designed and executed remains one of science's most dominant methods when investigating causal relationships (Kirk, ibid). According to the statistician, eugenicist, evolutionary biologist, geneticist and prominent researcher in modern experimental design Sir Ronald Aylmer Fisher (1890-1962), experiments are "only experience carefully planned in advance, and designed to form a secure basis of new knowledge" (Fisher, 1935, p. 8). Modern science, having its roots in natural philosophy, has emerged from the focus on experimentation to establish causal relationships in the sixteenth and seventeenth centuries (Hacking, 1983). One of the recognized discussions on the principles of experimentation is the lady tasting tea-test, illustrated in Fisher's (1935) "Design of Experiments". The basic idea behind this tea tasting-test was to check the lady's claim to tell faultlessly whether a cup of tea was made by the addition of milk to the tea or the other way around. A total of eight cups of tea, of which four cups were made one way and four the other, were placed in a coded random arrangement. The lady was requested to sort the cups, solely by taste, into the two proper subgroups. The topics raised by Fisher (ibid) in the chapter about the lady tasting tea-test are eminent

to inspire and educate many researchers interested in experimental design (Gridgeman, 1959). Experiments have the following characteristics: a) the manipulation of one or more independent variables, b) the use of controls such as randomly assigning participants or experimental units to one or more independent variables and c) careful observation or measurement of one or more dependent variables. The use of manipulation of an independent variable and the use of controls such as randomization distinguishes experiments from other research strategies. A causal relationship can be called to exist when the following can be concluded: 1) the effect follows the cause; 2) the effect takes place when the cause is present and 3) for the effect to take place the cause must be present (Kirk, 1995).

For the first empirical study presented in Chapter 4, the *randomized* experiment was opted for. An experimental approach with post-test control- and between-group design was used for the data collection among consumers.

3.2.2 Interviews

In order to answer the thesis' second main research question (MainRQ2), I opted for interviews. Since the aim of the study was to explore whether marketing managers take the green environmental aspect into consideration with media selection, and to gain a deeper understanding of marketing managers' complex task of media selection, interviews were opted for to answer the specific research questions posed in Chapter 5.

According to Patton (1987), there are three fundamental approaches to conducting qualitative interviewing; informal conversational interview, guided interview and standardized open-ended interview. Silverman (2006) uses different names for these three approaches and adds one more namely: structured interview, semi-structured interview, open-ended interview and focus group. *Informal conversational / open-ended interview* resembles somewhat of a chat. During this type of interview, questions asked will flow from the direct context. When exploring topics for

investigation, informal conversational interviews are useful and are typical of ongoing participant observation fieldwork. On the other hand, by using the *standardized open-ended/structured interview* approach, the researcher makes use of an in advanced prepared set of open-ended questions in order to minimize variation in the questions posed to the interviewees. This method is suitable when more than one researcher is involved. Compared to the two other methods mentioned previously, this method provides less flexibility for questions. However, probing is still possible and depends on the nature of the interview and the skills of the interviewers.

For the exploratory study presented in Chapter 5, I opted for a *semi-structured interview* approach. A *semi-structured* interview approach aims to elicit information about specific topics yet in an exploratory fashion (Patton, 1987, Silverman, 2006).Using this approach involves a basic checklist in order to make sure that all relevant topics are covered, however the interviewer is free to explore, probe and ask questions of interest to the study at hand. Thus, this type of data collection allowed me to ask targeted issues and specific questions whereby I could probe wherever necessary in order to obtain useful data. Conducting semi-structured interview also allowed me to pursue matters as they appear. I opted for this interview approach as not to predefine clear dependent and independent variables while instead focusing on the complexity of the interviewee's working situation (Kaplan and Maxwell, 1994). Compared to *structured* interviews, conducting *semi-structured* interviews require much more planning and preparation, discipline and creativity during the interview sessions (Wengraf, 2001). Yet, applying the *semi-structured* interview style enabled me to explore new areas of importance not to my prior knowledge, which was the exact purpose of the study. Thus, by adopting this interview style I could minimizes the probability of overlooking certain questions on topics of importance (Silverman, 2006).

3.2.3 Surveys

Since I aimed to spot trends with regard to a) some factors guiding green media selection among marketing managers (MainRQ3) as well as b) consumers' eco-harmful media perceptions and to what extent these are consistent with marketing managers' beliefs about consumers (MainRQ4), I opted for online surveys.

While there are different types of techniques of observation, a survey most often comprises a questionnaire and is used to measure certain characteristics and/or attitudes. Surveys have become an established and standard tool for empirical research in the social sciences ever since the 1930's, when probability sampling started to be applied (Vehovar and Lozar, 2008). The most common modes of administering a survey are online surveys, surveys by mail or telephone, and mixed-mode surveys - combining several methods (Groves et al., 2009). According to the European Society for Opinion and Marketing Research about 20 per cent of global data-collection expenditure is spent annually on online survey research (ESOMAR, 2006). There are advantages of online surveys that are beyond other available types of self-administered questionnaires (Dillman, 2006). For example, besides the lower economical costs, the total data collection period is considerably shortened for online surveys because of the immediate processing of the collected data. Furthermore, online surveys are less intrusive whereby issues of social desirability are reduced (Bethlehem, 2012).

3.3 Research Design

3.3.1 Introducing the empirical studies

As the thesis investigates a relatively novel research subject, namely the importance of the green environmental aspect in relation to advertising media, I found it suitable to contribute to a wide-ranging understanding

by studying both the consumer and the marketing manager's perspective. The thesis comprises four empirical studies that have evolved from a literature review. Each empirical study aims to answer one of the thesis' main research questions as posed in Chapter 2. In the sections that follow, a short introduction of each empirical study is presented in terms of its overall purpose and its methods applied. Table 5 at the end of this chapter provides an overview of the empirical studies and the applied methods.

Consumers' eco-harmful media perceptions and its impact on communication effectiveness – Chapter 4

Chapter 4 aims to answer the first main research question of the thesis: *MainRQ1: Do consumers' eco-harmful media perceptions impact communication effectiveness?* The purpose and ambition of the study was two-fold, namely to investigate 1) effects of consumers' *actual* eco-harmful media perceptions on ad and brand evaluations and 2) whether these effects even hold after negative and positive manipulation of consumers' actual eco-harmful media perceptions, i.e. *manipulated* eco-harmful media perceptions. To test the impact of consumers' perceptions of how harmful for the green environment an advertising medium is (eco-harmful media perception) on communication effectiveness, an online experimental approach was opted for ($N = 2411$). To increase the robustness of the experiment, and to be able to make conclusions that are valid for low and high involvement products alike, both a low and high involvement product ad were included. To measure eco-harmful media perception, three media types were selected, based on its ecologically related properties, i.e. direct mail (paper-based), city buses (engine driven vehicles) and webpages (electronic-based).

To investigate the effects of *actual* eco-harmful media perception the study is based on a 2x3x2 between subjects factorial design, i.e. two types of actual eco-harmful media perceptions (less eco-harmful and more eco-harmful) x three types of media (direct mail, city buses, web page) x two types of products (a low and a high involvement product). A *'more eco-*

harmful' perception of a medium in the thesis refers to the perception of a medium as to a great extent harmful for the green environment. A *'less eco-harmful'* perception of a medium, on the other hand, refers to the perception of a medium as to some extent harmful for the green environment.

To investigate the effects of *manipulated* eco-harmful media perception the study is based on a 2x3x2 between subjects factorial design, i.e. two types of eco-media information priming (negative and positive) x three types of media (direct mail, city buses, web page) x two types of products (a low and a high involvement product). This experimental design then opened up for direct comparison of the communication effectiveness between the two categories/levels of consumers' eco-harmful media perception (actual eco-harmful media perception) as well as between the two groups with different manipulations of eco-harmful media perception (manipulated eco-harmful media perception).

Exploring green thought in media selection – Chapter 5

The objective of Chapter 5 is to answer the thesis' second main research question: *MainRQ2: Do marketing managers take the green environmental aspect into consideration when selecting media for marketing communication?* The ambition to study the topic of green thought in media selection was to explore the factors that guide and influence marketing managers when they select media for advertising campaigns. Of particular interest was to examine to what extent the green environmental aspect is taken into account. The exploratory study is based on eight semi-structured interviews in order to gain a deeper understanding of the topic to be studied in a broader sense. Conducting semi-structured interviews was considered useful as it enabled me to explore new areas of importance not to my prior knowledge, which was the exact purpose of opting for interviews. Hence, the interviews provided valuable input for a suitable design and focus of the subsequent quantitative survey among marketing managers presented in Chapter 6

Green media selection: an act of organizational ideology, personal beliefs or model-use? – Chapter 6

Chapter 6 aims to answer the third main research question of the thesis, namely: *MainRQ3: Which are the factors that guide green media selection among marketing managers?* Data is gathered by way of an online survey among marketing managers (N = 499) in Sweden. Since my ambition was to spot trends in some factors guiding green media selection and to make generalizable comparisons among marketing managers, this quantitative study had a narrower and stronger focus than the exploratory study in Chapter 5. The study presented in Chapter 6 investigates some potential factors for guiding green media selection among marketing managers. The study does so by examining to what extent the green environmental aspect is taken into account by marketing managers: 1) who work at companies with and without documented green environmental policies (green organizational ideology), 2) who have different personal beliefs about protecting the green environment (green personal beliefs) and 3) who use models for media selection (users) and those who do not use models.

Eleven shades of green: the media perception gap – Chapter 7

The ambition of chapter 7 is to answer the fourth and concluding main research question of the thesis: *MainRQ4: To what extent are consumers' eco-harmful media perceptions consistent with marketing managers' beliefs about consumers?* To obtain further knowledge about consumers' and marketing managers' attitudes toward green media, this chapter investigates and compares 1) consumers' and marketing managers' green environmental responsibility attitudes (GERA), 2) consumers' eco-harmful media perceptions with marketing managers' beliefs about consumers, 3) marketing managers with different GERA and their beliefs about consumers' eco-harmful media perceptions, and 4) some other types of consumer media perception with marketing managers' beliefs about consumers.

Data for this study were gathered using the same samples as used for the online consumer survey (N = 2411) and the online marketing manager survey (N = 499) for the studies presented in Chapter 4 and 6, respectively.

3.3.2 Data collection and sample characteristics

For the thesis, both primary and secondary data have been used whereby a combination of qualitative and quantitative methods has been employed. Data were collected in four stages. First, an online survey among 2411 consumers was conducted that included an experimental part. Second, secondary data were collected comprising annual media investments of the 40 largest advertisers in Sweden. The data were obtained from SIFO, a Swedish research institute. The purpose was to employ cluster analysis in order to design a suitable sample for the exploratory study based on different types of media expenditure portfolios. Third, by way of semi-structured interviews an exploratory study among marketing managers was conducted which functioned to broaden my knowledge about the research topic from the point of view of marketing managers. It also allowed me make decisions with respect to the focus of the subsequent quantitative study among marketing managers and thus to design a suitable survey. Fourth, based on the results of the exploratory study a subsequent quantitative online survey for marketing managers was designed. The survey was conducted among 499 members of the Association of Swedish Advertisers (ASA). In the sections that follow, each data collection is described in further detail.

Experimental survey – consumers

Data for the studies presented in Chapter 4 and 7 were collectively gathered, using the same sample. The experimental section of the survey was used for the study in Chapter 4.

Target sample

The total sample (N = 2411) consisted of consumers representative to the Swedish population randomly selected from an internet panel[24].

Data collection

The consumer survey was conducted during July 2 – 6 2010. An invitation to the survey was sent by e-mail. Of the total sample 80 per cent (n = 1928) completed the questionnaire. The non-response rate was thus 20 per cent (n = 483). The sample was found to correspond well to the Swedish population as to gender, age and geographic location (see Table 1 below). The gender distribution of the sample was 50.1 per cent (966) females and 49.9 per cent (962) males.

Table 1: Sample characteristics - consumers

Total	*n=1928*	*100%*
Gender		
Female	966	50.1%
Male	962	49.9%
Age		
20-29 years	363	18.8%
20-39 years	444	23.0%
40-49 years	474	24.6%
50-54 years	647	33.6%
Region		
North of Sweden	233	12.1%
North Central Sweden	341	17.7%
Stockholm	422	21.9%
South Central Sweden	587	30.5%
Skåne, Halland and Blekinge	345	17.9%

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[24] YouGov Sweden

Secondary data – annual media expenditure

To create a suitable sample for the exploratory study (Chapter 5), the use of secondary data was employed.

Target sample

The target sample comprised marketing managers belonging to the top 40 media buyers in Sweden. A main reason behind opting for this sample is that these marketing managers and their companies (advertisers) spend the most on advertising and thereby on buying advertising media in Sweden. Their behavior is thus of great importance for the Swedish media industry.

Sample design

In the attempt to create a sample for the interviews that consists of marketing managers or marketing managers with similar titles, representing a wide variety of industries and different types of media expenditure, a cluster analysis was conducted based on secondary data. The secondary data originated from SIFO (a Swedish research institute) which comprised the total yearly gross media mix expenditure of top media buyers in Sweden. Because of the economic recession that took off during 2008 and was still going on at the time of this study (spring 2009) data from 2007 were used for the cluster analysis since the aim was to obtain a sample with typical media expenditure during a stable economy.

The original amounts spent on the different advertising media were transformed into percentages in relation to the total annual amount spent. The number of media categories was also reduced by combining the different types of newspapers and magazines into one category, namely "Print". Print consisted therefore of local newspapers and magazines, big city morning and evening newspapers, popular press and specialized magazines. The other media categories were TV, Radio, In-store, Movie theatre, Outdoor and Direct Mail. From these data a total of eight clusters were obtained. It could then be observed that each cluster represented a certain type of advertising media expenditure portfolio.

The percentages invested in a specific media category were grouped in different categories according to the following measures: None (no expenditure), Light (≤ 15%), Medium (>15-40%), Heavy (>40-70%) and Extra Heavy (>70-100%). The eight clusters were analyzed and labeled according to their media investment portfolio, namely cluster A (Light TV, Heavy Print & Unaddressed) with four companies, cluster B (Medium TV, Heavy print, Light unaddressed) with seven companies, cluster C (Extra Heavy TV, Light print) with nine companies, cluster D (Heavy TV, Medium print, Light unaddressed) with 11 companies, cluster E (Heavy TV, Medium print, Medium unaddressed) with three companies, cluster F (Medium TV, Extra Heavy print, Light unaddressed) with two companies, cluster G (Light TV, Medium print, Heavy unaddressed) with two companies and cluster H (Medium TV, Light print and Extra Heavy unaddressed) with two companies.

The results of the cluster analysis showed correspondence with type of industry, such that cluster A is dominated by the retail industry, cluster B is dominated by the automobile industry, cluster C is dominated by the production of consumer goods industry (FMCG), cluster D is dominated by the telecommunication industry, cluster E is dominated by the home electronics industry, cluster F is dominated by the banking industry, cluster G is dominated by the low-price grocery retailer industry and cluster H by the low-price home products industry. Thus, the eight clusters combined represent a broad variety of industries with different types of advertising media expenditure portfolios. Table 2 presents an overview of the results of the cluster analysis.

Table 2: Clusters of types of annual media expenditure in percentages

Cluster	TV	Print	Direct Mail	Outdoor	Radio	Cinema	In Store
A	Light	Heavy	Heavy	Light	Light	None	Light
M	14.75	42.53	41.40	.52	.77	.00	.02
SD	9.74	4.35	3.10	.51	.76	.00	.03
N	4	4	4	4	4	4	4
B	Medium	Heavy	Light	Light	Light	Light	None
M	34.87	54.94	1.91	4.87	3.01	.41	.00
SD	5.75	5.02	4.33	2.23	2.86	.49	.00
N	7	7	7	7	7	7	7
C	Extra Heavy	Light	None	Light	Light	Light	None
M	90.32	5.93	.00	2.71	.81	.31	.00
SD	4.75	1.37	.00	2.83	1.37	.28	.00
N	9	9	9	9	9	9	9
D	Heavy	Medium	Light	Light	Light	Light	Light
M	65.73	21.84	.34	7.94	2,93	1.00	.22
SD	7.11	4.78	.69	4.32	4.42	1.52	.44
N	11	11	11	11	11	11	11
E	Heavy	Medium	Medium	Light	Light	None	None
M	46.71	16.63	32.01	1.69	2.96	.00	.00
SD	8.03	1.63	12.82	2.83	5.13	.00	.00
N	3	3	3	3	3	3	3
F	Medium	Extra Heavy	Light	Light	Light	Light	None
M	16.79	78.86	.64	.84	2.76	.10	.00
SD	.76	1.72	.24	.61	3.69	.14	.00
N	2	2	2	2	2	2	2
G	Light	Medium	Heavy	Light	Light	Light	None
M	2.61	28.33	57.98	10.58	.08	.04	.00
SD	3.69	1.77	4.17	12.37	.12	.06	.00
N	2	2	2	2	2	2	2
H	Medium	Light	Extra Heavy	None	None	None	None
M	27.26	1.88	70.88	.00	.00	.00	.00
SD	1.05	1.14	1.21	.00	.00	.00	.00
N	2	2	2	2	2	2	2

Semi-structured interviews – marketing managers

For the exploratory study (Chapter 5), data were gathered based on semi-structured interviews.

Target sample

The ambition was to obtain a sample that would represent a broad variety of industries and to conduct interviews with marketing managers of companies with different media expenditure portfolios. Thus, the aim was to interview one marketing manager from each of the eight clusters that came forth from the secondary data collection and analysis of Swedish advertisers' annual media expenditures, as discussed above.

Data collection

Due to no response to invitations or lack of willingness to participate in an interview, marketing managers belonging to cluster E and H could not be included in the sample. However, to cover a broad representation of industries in the sample, a second interview was included from cluster B namely a respondent from the tele communication industry. To facilitate gaining further insights into advertiser-agency cooperation and media selection, an interview with a senior agency consultant linked to an association of Swedish advertisers was also included. Members of this association turn to this agency consultant whenever they need help to improve the cooperation between them and their cooperating agencies and/or with selecting new suitable agencies. Hence, a total of eight interviews were conducted. The respondents were promised anonymity and thus their names and respective companies cannot be specifically mentioned in the thesis (see Table 3).

The interview guide (see Appendix B) was developed based on extant literature on the research topics discussed earlier as well as through observations in practice and current debates in the media. Accordingly, the main topics of the interview were 1) marketing communication, 2) media selection for ad campaigns, 3) advertiser-agency cooperation, 4) environmental aspects and 5) the economic recession. To maximize the reliability of the interviews the interview guide was pre-tested and

adjustments were made in regards to certain formulations and re-wording of the questions. Table 3 presents an overview of the sample characteristics.

Table 3: Sample characteristics – marketing managers

Interviewee	Cluster	Industry	Title	Gender
One	A	Retail	Director of Marketing	Female
Two	B	Automobile	Director of PR and Marketing	Female
Three	C	TV broadcasting	Director of Marketing	Male
Four	D	Fast food restaurant	Senior Marketing Manager	Male
Five	F	Banking	Director of Marketing	Female
Six	G	Retail	Head of Marketing	Female
Seven	B	Tele communication	Director of Marketing Communication	Female
Eight	-	Agency consultancy	Senior Agency Consultant	Male

Survey among marketing managers

For the studies presented in Chapter 6 and 7, data were collectively gathered, using the same sample.

Target sample

The target sample comprised 499 members[25] of the Association for Swedish Advertisers (ASA). A main reason behind opting for the sample is that Swedish largest media buyers can be found among these members and they account for a great deal of the total advertising media market in Sweden. Consequently, their behavior has great consequences for the Swedish media industry. A broad diversity of companies with various types of annual media investments can also be found among the members of the ASA.

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[25] The members of ASA are most often marketing managers or managers with similar titles.

Data collection

An online survey among the 499 members of the ASA was conducted using the software Qualtrics during October 4-18, 2010. One week prior to the launch of the survey an announcement was sent per email informing ASA's members of the upcoming survey. On the date of the survey launch, a link to the online survey was included in a message sent by email to all members of the ASA. Respondents were promised anonymity. Thereafter, reminder emails were sent to non-respondents. The response rate was 39 per cent (193 respondents). The partially completed surveys (88 respondents) were included in the study. The majority of the respondents were professionals with more than ten years of experience of media selection. Thus their input was considered valuable. The sample characteristics are presented in Table 4 below.

Table 4: Sample characteristics - marketing managers

Sample N=193 (100%)	Completed 105 (54.4%)	Partially Completed 88 (45.6%)
Gender		
Female	54 (51%)	n. r.
Male	51 (49%)	n. r.
Age		
20 – 29 years	2 (1.9%)	n. r.
30 – 39 years	30 (28.6%)	n. r.
40 – 49 years	45 (42.9%)	n. r.
50 – 59 years	22 (21%)	n. r.
60 – 65 years	6 (5.7%)	n. r.
Business type		
100% B2C	15 (14.2%)	n. r.
10-30% B2C/70-90% B2B	29 (27.6%)	n. r.
40-60% B2C/40-60% B2B	19 (18.1%)	n. r.
70-90% B2C/10-30% B2B	16 (15.2%)	n. r.
100% B2B	26 (24.8%)	n. r.

Experience with media selection		
2 – 3 years	8 (7.6%)	n. r.
4 – 6 years	19 (18.1%)	n. r.
7 – 9 years	6 (5.7%)	n. r.
10 years and up	72 (68.6%)	n. r.
Annual media investments		
< 2 million SEK	23 (21.9%)	n. r.
< 5 million SEK	12 (11.4%)	n. r.
< 10 million SEK	19 (18.1%)	n. r.
< 15 million SEK	10 (9.5%)	n. r.
< 20 million SEK	8 (7.6%)	n. r.
< 40 million SEK	14 (13.3%)	n. r.
< 70 million SEK	7 (6.7%)	n. r.
> 70 million SEK	12 (11.4%)	n. r.
Employees		
< 10	7 (6.7%)	n. r.
11 – 50	15 (14.3%)	n. r.
51 – 500	35 (33.3%)	n. r.
501 – 1000	12 (11.4%)	n. r.
1001 – 5000	15 (14.3%)	n. r.
5001 – 10 000	5 (4.8%)	n. r.
> 10 000	16 (15.2%)	n. r.
Environmental Policy		
Yes	85 (79.4%)	n. r.
No	18 (16.8%)	n. r.
Do not know	4 (3.7%)	n. r.

The Studied Advertising Media

The selection of advertising media to be studied was based on previous studies such as Grusell's (2007) with the exception of three media types that were added, i.e. city buses, catalogues and brochures, and in-store ads (posters). These three media in particular were added because of its green environmental related characteristics, i.e. paper-based (catalogues,

brochures and in-store posters) and engine-driven vehicles (city buses). Thus, for the thesis, the following 11 advertising media were studied:

- Newspapers and magazines
- Mobile phones (SMS and MMS)
- Outdoor
- Radio
- Direct mail (delivered through home postal box)
- TV
- Catalogues and brochures
- City buses (the exterior of city buses)
- Cinema advertising
- Internet (media using the internet)
- In-store posters

3.4 Measures

The measures and scales applied are discussed and elaborated on in Chapters 4 through 7 for each empirical study.

3.5 Considerations of Alternative Methods

Various other methods were considered in order to answer the main research questions of the thesis. In order to spot trends in media selection among marketing managers, thought was given to solely a quantitative survey method. However, since it is necessary to establish well defined constructs, causalities and/or other relationships, an initial exploratory qualitative study based on semi-structured interviews was opted for. A subsequent quantitative survey was developed as a means of strengthening the exploratory data and analysis. Quantitative data may

indicate relationships and foundations for theories while the qualitative data will provide a deeper and more thorough understanding, thus strengthening the development of theory. The combination and synergy between qualitative and quantitative data is a common way of giving results added substance and has been suggested by various authors (e.g. Eisenhardt, 1989; Mintzberg, 1979b).

Conducting case studies among marketing managers was also considered. At first it seemed a suitable method for purposes of description and generating theories (Eisenhardt, 1989) and it seemed to be appropriate when attempting to answer questions of how and why (Yin, 1989). When opting for case studies meant being guided by writings on grounded theory (Glaser and Strauss, 1967); Glaser, 1978; Strauss and Corbin, 1990), case study design (Yin, 1989; Yin, 1993), qualitative data-analysis techniques (Miles and Huberman, 1994), scientific inference in qualitative research (King et al., 1994) and Eisenhardt's (1989) guidelines for developing theories from case studies. However this option was rejected since the purpose of the thesis was not to explore media choice of advertisers within a particular industry but 1) to test causality, 2) to spot trends in typical media selection behavior, and 3) to generalize the phenomenon studied for the Swedish advertising media market. Hence, with respect to the data collection of marketing managers, the final decision was to adopt a dual methodology that combined quantitative and qualitative methods, whereby primary data was collected through semi-structured interviews and an online survey.

3.6 Statistical Techniques

In the following, a presentation of the main analytical approaches that were used for the quantitative data analyses is provided. Table 5 at the end of this chapter lists each empirical study and the main analytical technique(s) used.

3.6.1 Cluster analysis

Cluster analysis of secondary data is used to create a suitable sample for the exploratory study presented in Chapter 5. Cluster analysis is used among researchers ranging from the physical sciences (for example to create a biological taxonomy to classify various animal groups) to the social sciences (for example to analyze different psychiatric profiles). Cluster analysis refers to a group of multivariate techniques commonly used for the purpose of identifying groups of homogeneous objects, whether they are individuals, companies, products, or behaviors. Due to the usage of clustering methods in various disciplines it has been referred to a variety of different names such as Q analysis, typology construction, classification analysis, and numerical taxonomy. Yet, they all share a common dimension, i.e. it searches for a "natural" structure among the observations in the data (Aldenderfer et al., 1984; Bailey, 1994; Hair, et al., 2006; Punj and Stewart, 1983). The clustering method used for this thesis was Ward with Squared Euclidian Distances.

3.6.2 Multivariate analysis of variance (MANOVA)

More than 70 years ago the concept of multivariate analysis of variance was introduced by Wilks (1932). Through the development of suitable test statistics with tabled distributions and the availability of computer programs the concept was made possible to use as a practical tool for researchers. MANOVA as a statistical analytical tool is concerned with assessing differences between groups or experimental treatments across multiple metric dependent variables simultaneously. MANOVA measures each (treatment) group on two or more dependent variables (Hair et al., 2006). MANOVA is used to test the hypotheses in Chapter 4.

3.6.3 T-tests

T-tests are used for comparing two groups (e.g. males and females) or two sets of data (before and after). Paired-samples t-test is commonly used when the researcher is interested in changes in the scores of the respondents of the same sample at Time 1 and Time 2 respectively. Often, but not necessary Time 2 is measured after some intervention or event. Independent samples t-tests is commonly used when the researcher is interested in comparing the scores of respondents belonging to different groups whereby information is collected at only one occasion (Pallant, 2010). Both independent and paired samples t-tests are used to test the specific hypotheses and/or research questions posed in Chapters 4, 6 and 7.

3.6.4 Principal component analysis (PCA)

PCA is mathematically referred to as "an orthogonal linear transformation that transforms the data to a new coordinate system such that the greatest variance by any projection of the data comes to lie on the first coordinate (called the first principal component), the second greatest variance on the second coordinate, and so on" (Jolliffe, 2002, p. 28). Principal component analysis (PCA) is closely related to factor analysis whereby a mathematical procedure to transform a set of possibly correlated variables into a set of values of linearly uncorrelated variables, i.e. principal components. As such, the number of principal components is reduced from the original number of variables. PCA was invented by Karl Pearson (1901) and has been a tool which is often used by researchers in exploratory data analysis and/or for making predictive models (Abdi and Williams, 2010). In the analysis of the studies presented in Chapter 6 and 7, PCA is employed to check whether one or more factors were to be formed based on the items to measure green environmental responsibility attitude (GERA).

3.7 Quality Appraisal and Validity

In the section that follows, an appraisal of the overall quality of the studies in the thesis with respect to its validity and reliability will be discussed and relates to the research design and the methods applied. In Chapter 9 – Limitations and Future Research – the limitations of each empirical study are discussed in further detail.

3.7.1 Reliability and validity

"All data and analyses should, insofar as possible, be replicable." (King, et al., 1994, p. 26).The reliability of a study refers to the quality of its measurements and to which extent similar results would be generated should the study be replicated by other researchers using the same procedures. Reliability evaluates a study's robustness and whether random errors and/or certain biases of the researcher are reflected in the results (de Vaus, 2001). As such, reliability does not merely apply to data however also to the entire process of the researcher's reasoning leading to the conclusions (King, et al., 1994). The results that have come forth from the thesis' data collection among marketing managers can be called reliable in the sense that the findings of the quantitative main study (Chapter 6) provide support for the main findings/indications of the preceding exploratory study (Chapter 5).

Although striving for both high *internal* and *external* validity, when designing a study, the researcher is faced with choices that are necessary to be made with regard to trade-offs between the two. Regarding experimental studies, high internal validity is in general obtained by conducting experiments in laboratory settings whereas high external validity is in general better established when conducting field or quasi experiments (Cook and Campbell, 1979; Shadish et al., 2002).

Internal validity is an imperative consideration for any research study. Internal validity concerns the researcher's confidence to conclude that the observed effect was indeed caused by the experimental treatment and

not by any other alternative cause (Campbell and Stanley, 1963). As the experimental study conducted in the thesis is not of a field/quasi experimental character strong control over the treatment groups was necessary to establish causal relationships between the independent and dependent variables. As such, randomization is required (Zikmund, 2003) and was hence applied throughout the experimental study to ensure a controlled environment that would enable the examination of relationships and/or comparisons between groups.

External validity refers to the generalizability of a study (Cook and Campbell, 1979). When sample sizes are large enough they allow for statistical generalization which is the case in the studies presented in Chapter 4, 6 and 7. There is reason to believe that the findings and conclusions can be called relevant, not merely to the specific contexts in which they were generated, but also to a larger population of consumers and marketing managers. Certain caution is warranted with respect to the possibility that this thesis studies consumers and marketing managers in a Swedish context. As such, to investigate whether the findings presented in this thesis also hold in different other cultural contexts would be valuable for future research.

Construct validity refers to how well a study measures what it sets out to capture whereby clear and well defined constructs are employed. Thorough planning increases construct validity. As such, commonly used constructs and their meanings used in prior relevant studies were employed whenever possible. In the cases where no previously used constructs could be found, new constructs were composed and derived from relevant research literature. Each construct and its validity is presented in each empirical study presented in Chapters 4 through 7.

Table 5 below presents an overview of the empirical studies and methods applied.

Table 5: Overview of the thesis' empirical studies and methods applied

MainRQ	Chapter	Method	Unit of analysis	Statistical technique
MainRQ1	Chapter 4 Consumers' eco-harmful media perceptions and its Impact on communication effectiveness	Online experiment 2 EMP* x 3 media x 2 products 2 primings x 3 media x 2 products	Consumers $n = 1928$	MANOVA T-tests
MainRQ2	Chapter 5 Exploring green thought in media selection	Exploratory Secondary data Semi-structured interviews	Marketing managers $n = 8$	Cluster Descriptives Interviews
MainRQ3	Chapter 6 Green media selection: an act of organizational ideology, personal beliefs or model-use?	Online survey Green policy vs. no policy Low GERA vs. High GERA‡ Model users vs. non-model users	Marketing managers $n = 193$	T-tests PCA†
MainRQ4	Chapter 7 Eleven shades of green: the media perception gap	Online surveys Consumers vs. marketing managers' GERA Consumer eco-harmful media perceptions vs. marketing managers' beliefs about consumers	Consumers $n = 1928$ Marketing managers $n = 193$	T-tests PCA† Pearson correlation tests

Note: *) EMP = Eco-harmful media perception; ‡) GERA = Green environmental responsibility attitude; †) PCA = Principal component analysis

PART TWO

Empirical Studies

Chapter 4

Consumers' Eco-harmful Media Perceptions and its Impact on Communication Effectiveness

Part One Research focus and method	**Part Two** Empirical studies	**Part Three** Conclusions and future research
Chapter 1 Introduction	**Chapter 4** Consumers' eco-harmful media perceptions and its impact on communication effectiveness	**Chapter 8** Conclusions and implications
Chapter 2 The research questions	**Chapter 5** Exploring green thought in media selection	**Chapter 9** Future research and limitations
Chapter 3 Methodology and research design	**Chapter 6** Green media selection: an act of organizational ideology, personal beliefs or model-use?	
	Chapter 7 Eleven shades of green: the media perception gap	

"The way the context influences an advertisement, depends more on the
perception of the context than the characteristics of the context per se."
(Moorman, 2003, p.4)

4.1 Background

Consumers' increased positive attitudes toward protecting the green environment have led to consumers opting for more eco-friendly products and consumption patterns (Dubey, 2008; D'Souza, 2004; Loureiro et al., 2001). This phenomenon is consistent with the extensive literature on attitudes in the sense that attitudes are reflected in the combinations of beliefs on an object or situation and signify a predisposition to respond (for example Rokeach, 1968; Stiff and Mongeau, 2003). In a similar fashion, it could be questioned whether and to what extent consumers' perceptions of a medium's ecological characteristics (eco-harmful media perception), influence ad and brand evaluations when companies use advertising media to communicate their messages to consumers. More specifically, do eco-harmful media perceptions matter in the sense that they affect communication effectiveness, i.e. when consumers perceive a medium as less eco-harmful as opposed to a medium that consumers perceive as more eco-harmful? Furthermore, does the choice of the medium itself, by which the company's advertising message is carried, communicate something about the company's responsibility and commitment to care for/not harm the green environment based on consumers' eco-harmful media perceptions?

As a consequence of consumers' increasing concern for the green environment and its impact on consumer behavior, green/sustainable marketing is gaining in importance (Emery, 2012). However, when reviewing the green/sustainable marketing literature it tend to put a major focus on a company's products, its packaging and its production processes. With respect to the topic of marketing communication the green/sustainable marketing literature tend to be mostly concerned with the *message content* and do not take into account the *medium itself* that

carries the message, in terms of its ecological characteristics. Prior research has not investigated the impact of consumers' eco-harmful media perceptions on communication effectiveness. This chapter aims to answer the first main research question of the thesis as presented in Chapter 2:

MainRQ1: Do consumers' eco-harmful media perceptions matter for communication effectiveness?

The purpose of this chapter is to investigate the effects of consumers' eco-harmful media perceptions on communication effectiveness, i.e. ad attitude, brand attitude, purchase intention and eco-brand image[26].

The chapter does so by investigating 1) effects of consumers' *actual* eco-harmful media perceptions and 2) whether or not these effects hold after negative and positive manipulation of consumers' actual eco-harmful media perceptions, i.e. *manipulated* eco-harmful media perceptions. Building on prior research the main aspiration of the present study presented in this chapter is to contribute further to the green/sustainable marketing communication literature in general and to theories and previous findings on media context effects in particular.

4.1.1 Media context effects

Practitioners in advertising and academic researchers in consumer psychology alike have recognized that the context of advertising is an essential factor for explaining and forecasting advertising effectiveness (e.g. Aaker and Myers, 1975; Chook, 1985; New, 1991). Media context studies focus predominantly on investigating the impact of context-induced psychological responses on advertising effects. Research on media context factors have demonstrated that "the way the context influences an advertisement, depends more on the perception of the

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[26] The term eco-brand image refers to the association of the advertised brand with a green environmentally responsible corporation. See also the introductory chapter.

context than the characteristics of the context per se" (Moorman, 2003, p.4). The literature states that differences in the media context of an ad can influence advertising effects, even when the same ads are used towards the same target audience (e.g. Dahlén, 2005; Dahlén et al.,2009; Moorman et al., 2002; Nilsson, 2006; Norris and Colman, 1992; Nowland et al., 1962; Politz, 1962).

The findings from research on media context effects are important for our theoretical and practical understanding of moderating effects in advertising. For marketing management practice, media context effects are central to media planning. "The effectiveness of advertising may be greatly improved by embedding it in the appropriate media context. If the media context proves relevant, ad pre-tests that do not take this factor into account may become less useful or even totally irrelevant" (De Pelsmacker et al., 2002, p. 50).

Since the early 1960's various studies have demonstrated the importance of media context effects. Research have studied media context factors such as consumers' involvement in the medium, mood, the medium's status, style, humor, language and sexual content and its impact on ad effectiveness. In particular, studies have investigated media context factors on ad attitude and ad cognitions (Coulter, 1998; Kennedy, 1971; Soldow and Principe, 1981), brand attitude (Krugman, 1983; Murry et al., 1992; Lord et al., 2001), purchase intention (Yi, 1990a; Feltham and Arnold, 1994; Lloyd and Clancy), ad recall (Clancy and Kweskin, 1971; De Pelsmacker et al., 2002; Gunter et al., 1997; Lloyd and Clancy, 1991), ad recognition (Moorman et al., 2002; Norris and Colman, 1994; 1996; Singh and Churchill, 1987; Tavassoli et al., 1995), and on ad processing (Shapiro et al., 2002). By way of influencing how an ad is interpreted, the medium can act as a cognitive prime (Yi, 1990a, 1990b, 1993). For example, Yi (1990a) showed that when the context of a print ad of a large car comprises an editorial article about safety, the car can be perceived as safe whereas the car can be perceived as fuel-thirsty when the ad context comprises an editorial about oil. Most of these researchers have focused on the direct editorial *content* of a

medium, for example articles and television shows (De Pelsmacker et al., 2002; 2007).

Furthermore, some studies have focused on the *total* media context (Moorman et al., 2002; Dahlén, 2005; 2009). Examples of such studies investigated creative media choice, where it was found that the use of a unique medium *is* the communication message (Dahlén, 2005; 2009). No study has investigated the impact of a medium's ecological characteristics, as perceived by consumers, as a media context factor on ad and brand evaluations (see Table 1).

Table 1: Research on media context effects 1962-2010

Author(s)	Year	Independent variable(s)	Dependent variable(s)
Winick	1962	Involvement	Ad attitude
Fuchs	1964	Prestige of a medium	Ad attitude, brand attitude
Aaker and Brown	1972	Prestige and expertise	Ad attitude, brand attitude
Assmus	1978	Involvement	Brand attitude
Murphy, Cunningham and Wilcox	1979	Humor	Ad recall
Lambert	1980	Ego states	Ad recall
Mattes and Cantor	1982	Arousal, enjoyment	Ad recall, ad attitude
Bello, Pitts and Etzel	1983	Sexual content	Ad recall
Krugman	1983	Involvement	Ad recall
Goldberg and Gorn	1987	Feelings	Ad attitude, brand attitude
Pavelchak, Antil and Munch	1988	Pleasure	Ad recall, ad attitude, brand attitude
Yi	1990	Affective and cognitive priming	Ad effectiveness
Kamins, Marks and Skinner	1991	Mood, feelings	Ad attitude, purchase intention
Lloyd and Clancy	1991	Involvement	Ad recall, ad attitude
Murry, Lastovicka and Singh	1992	Feelings and liking	Ad attitude, brand attitude
Norris and Colman	1992	Involvement	Ad recall, ad recognition, buying intention
Lord and Burnkrant	1993	Involvement	Brand attitude
Norris and Colman	1993	Program involvement	Ad attitude, purchase intention
Lord, Lee and Sauer	1994	Liking	Ad recall, ad attitude
Norris and Colman	1994	Entertainment, enjoyment	Ad attitude, purchase intention
Feltham and Arnold	1994	Program involvement	Memory, ad attitude, brand attitude
Coulter and Sewall	1995	Involvement	Ad recall, ad recognition

Broach, Page and Wilson	1995	Arousal	Ad attitude
Aylesworth and MacKenzie	1998	Feelings	Ad recall, ad attitude
Coulter	1998	Feelings	Ad attitude
Furnham, Gunter and Walsh	1998	Humor, media content	Ad recall
Lynch and Stripp	1999	Involvement	Ad effectiveness
Watt	1999	Feelings	Ad recall
Bruner and Kumar	2000	Involvement	Attitudes toward advertising
Unnava	2001	Mood	Ad attitude
De Pelsmacker, Geuens and Anckaert	2002	Mood	Ad attitude, brand attitude
Moorman	2002	Involvement, liking, feelings	Ad attitude
Dahlén	2005	Creative media	Ad attitude, brand attitude, ad credibility, brand associations
Nilsson	2006	Background complexity of web pages, involvement	Ad recall, ad recognition
Tipps, Berger and Weinberg	2006	Background complexity of web pages	Ad attitude, brand attitude, purchase intention
Malthouse, Calder, Tamhane	2007	Ad experiences	Advertising effectiveness
Dahlén, Friberg and Nilsson	2009	Creative media	Brand attitude, brand associations
Cauberghe, De Pelsmacker and Janssens	2010	Interactivity, simultaneous exposure	Attention and clicking
Sar, Nan, Myers	2010	Mood	Ad recall, ad attitude
Bishop and Peterson	2010	Language	Ad recall, ad cognition, ad involvement, perceptions of advertiser cultural sensitivity

Eco-harmful media perception as a media context factor

Based on the above discussion and previous findings of media context effects there are reasons to believe that the perception of a medium's ecological characteristics (eco-harmful media perception), will influence the attitude toward the advertised ad and brand in such a manner that it is assimilated with the medium. More explicit, one's eco-harmful media perception is expected to affect ad effectiveness (ad and brand attitude and purchase intention). Furthermore, one's eco-harmful media perception is expected to also affect the extent to which the advertised brand is associated with a green environmentally responsible corporation (eco-brand image). Hence, I expect that the perception of a medium as

less eco-harmful will lead to more positive ad and brand evaluations among consumers than the perception of a medium as more eco-harmful. Furthermore, I expect that these effects even hold when consumers' eco-harmful media perceptions are negatively and positively manipulated. The following is hypothesized:

H1a: The use of an advertising medium that is perceived as less eco-harmful will have a more positive effect on eco-brand image among consumers than the use of a medium that is perceived as more eco-harmful.

H1b: The use of an advertising medium that is perceived as less eco-harmful will have a more positive effect on ad attitude among consumers than the use of a medium that is perceived as more eco-harmful.

H1c: The use of an advertising medium that is perceived as less eco-harmful will have a more positive effect on brand attitude among consumers than the use of a medium that is perceived as more eco-harmful.

H1d: The use of an advertising medium that is perceived as less eco-harmful will have a more positive effect on purchase intention among consumers than the use of a medium that is perceived as more eco-harmful.

4.2 Method

4.2.1 Experimental setup

Stimuli

To test the hypotheses H1a-d, an online experiment was conducted. For the experiment, three types of media were selected to measure consumers' eco-harmful media perception namely, direct mail (delivered to home postal box), a city bus (the exterior of the vehicle) and a banner on a web page using the internet. These three media types were selected after taking into consideration its ecologically related properties, i.e. paper-based (direct mail), engine-driven vehicles (city buses) and electronic-based (webpages using the internet).

To increase the robustness of the experiment, and to be able to make conclusions that are valid for both low and high involvement products, both a low and high involvement product ad were included and combined in the analysis. This was based on the logic that buying low involvement products is commonly driven by an affective or a non-informational appeal while buying high involvement products require more of a thinking or cognitive orientation first (Engel and Blackwell, 1982; Zaichkowsky, 1987). In addition, when buying a product there is usually a risk (monetary and/or psychological) involved depending on the consumer's involvement in the product (Percy and Rossiter, 1987). Thus, for the experiment two fictitious ads were created, each promoting a different product type, i.e. a chocolate bar (representing a low involvement product) and a computer printer (representing a high involvement product)[27].

A first purpose of the experiment was to investigate possible effects of consumers' *actual* eco-harmful media perceptions on communication

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[27] A pre-test (n = 54) was conducted on a $0 – 10$ scale and showed that the subjects consider chocolate bars low involvement products (M = 2.38) and computer printers high involvement products (M = 6.70).

effectiveness. For this purpose, a 2 (eco-harmful media perception: less and more eco-harmful) x 3 (media: direct mail, city buses, web pages) x 2 (product types: low and high involvement) between-subjects design was used.

A second purpose of the experiment was to investigate whether or not the effects found in the previous part of the experiment even hold after manipulation of consumers' actual eco-harmful media perceptions. Actual eco-harmful media perception was manipulated on two dimensions: negative and positive information priming about a medium's ecological characteristics. Hence, a 2 (negatively and positively manipulated eco-harmful media perception) x 3 (media: direct mail, city buses, web pages) x 2 (product types: low and high involvement) between-subjects design was used.

Sample and procedure

A gross sample of 2411 subjects representative of the Swedish population in terms of age (20-64 years), gender and geographic location was selected from an online consumer panel data base. A net sample of 1928 subjects participated in the study. The sample comprised 50.1 per cent (966) females and 49.9 per cent (962) males. To measure the impact of subjects' actual eco-harmful media perceptions on communication effectiveness 641 subjects were randomly assigned to the non-primed group. To measure the impact of subjects' manipulated eco-harmful media perceptions on communication effectiveness, 643 and 644 subjects respectively were randomly assigned to the negative and positive primed groups. For a more detailed description of the sample characteristics of the present study, see Chapter 3 – *Methodology and Research Design.*

The experimental procedure comprised five phases (see Table 1). The first phase involved a number of questions that were similar for all the subjects. In this phase it was measured how harmful for the green environment the subjects perceive 11 different media types (actual eco-harmful media perception).

In the second phase, the subjects were randomly assigned to one of nine cells: each cell was either not primed or primed with positive or negative ecological information about one of the three media types studied. The non-primed groups (one for each media type) were used for the analysis of subjects' *actual* eco-harmful media perceptions whereas the primed groups were used for the analysis of subjects' *manipulated* eco-harmful media perceptions.

The third phase had the purpose to distract the subjects who have been exposed to the negative or positive eco-media priming[28]. During this phase all of the subjects were exposed to a range of distracting filler questions. The non-primed were also exposed to the filler questions.

In the fourth phase, each subject was exposed to an image representing one of the two ads placed in one of the three media studied and the only difference was the priming or non-priming of positive or negative information about the ecological properties of such medium prior to the exposure of the image. Thus, each of the nine cells was divided into another two cells (for the two different product ads), resulting in a total of 18 cells. This experimental design then opened for direct comparison of the effectiveness between the primed and non-primed negative or positive ecological information about the advertising media used.

In the fifth and last phase of the experiment, ad and brand evaluations were measured. Following this, it was measured how harmful for the green environment the subjects perceive media types similar to the type of media that they have been exposed to during the experiment (manipulated eco-harmful media perception). An overview of the experimental setup is shown in Table 2.

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[28] The filler questions, as a means to distract the subjects from previous questions and their exposure to the information priming, comprised questions regarding attitudes toward ads in books and book reading preferences/habits.

Table 2: Experimental setup (*N* = 1928)

Phase I BACKGROUND	Phase II PRIMING Eco-media information[†]	Phase III DISTRACT	Phase IV AD STIMULUS			Phase V MEASURE
			n	*Medium*	*Product*	
- Advertising & media perceptions

- Actual Eco-harmful media perceptions of (Time1):

  1. TV
  2. radio
  3. direct mail
  4. internet
  5. mobile phones
  6. outdoor
  7. cinema
  8. in-store
  9. newspapers/ magazines
  10. city buses
  11. catalogues/ brochures | *No priming* | F I L L E R | 106 | DM | Chocolate | - Eco-brand image
- Ad attitude
- Brand attitude
- Purchase intention

- Manipulated Eco-harmful media perceptions (Time2) |
			100	DM	Printer	
	DM +		104	DM	Chocolate	
			113	DM	Printer	
	DM –		107	DM	Chocolate	
			116	DM	Printer	
	No priming		113	Bus	Chocolate	
			100	Bus	Printer	
	Bus +		99	Bus	Chocolate	
			110	Bus	Printer	
	Bus –		103	Bus	Chocolate	
			111	Bus	Printer	
	No priming		111	Web	Chocolate	
			111	Web	Printer	
	Web +		108	Web	Chocolate	
			110	Web	Printer	
	Web –		106	Web	Chocolate	
			100	Web	Printer	

Note: +) = positive priming; –) = negative priming

4.2.2 Stimuli development

Ad stimuli

In order to avoid confusing the subjects, and not to collect data based on their previously formed attitudes toward existing brands, two fictitious

brand names were employed as stimuli in the study. The brand for the chocolate bar ad was named "Chokolé" with the slogan "Kärlek från ruta ett" (Love from square one)[29]. The brand for the printer ad was named "Phoenix Printer" with the slogan "Skrivaren med det lilla extra. Snabbare. Smartare. Sparsammare." (The printer with that little extra. Faster. Smarter. More economical)[30]. The two ads were first designed by hand including the copy texts and the six images of the ads placed in the three different media. Thereafter the designs were taken to an advertising agency for professional production. An illustration of the two ads is presented in Figure 1 and 2.

Figure 1: Ad #1: Chocolate bar – "Chokolé"

Figure 2: Ad #2: Computer printer – "Phoenix Printer"

To ensure that the two fictitious ads held the appeals as intended for the study, a manipulation check was performed among students. To lend support for the brand names, copy (slogans) and visuals, the

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[29] Translated from Swedish
[30] Translated from Swedish

manipulation check using a ten-point scale whereby participants were randomly assigned to one of two groups, the chocolate bar or the printer ad, confirmed that the visuals and slogan fit well with the selected product features and that the brand names were appropriate for the product categories ($M_{\text{ad chokolé}}$ = 7.94[31], n = 46 and $M_{\text{ad phoenix printer}}$ = 7.42, n = 56). The two ads were further designed such that it would resemble what one might find in one's home postal box (direct mail), on the exterior of a city bus and on an internet web site. To make the ad images comparable, they were produced of the exact same size in pixels such that the size of each entire image was of equal format, i.e. 643 x 500 pixels as well as each ad projected within each of the images, i.e. 90 x 470 pixels.

To obtain representative ad images, a manipulation check using a ten-point scale[32] was conducted in which participants (n = 47-50) rated the six images on the likelihood that such ads would appear in the selected media. The results revealed that the images were realistic representations and resemble ads that one might find in one's home postal box ($M_{\text{ad direct mail}}$ = 7.26), on the exterior of a city bus ($M_{\text{ad city bus}}$ = 8.58) and on an internet web page ($M_{\text{ad web page}}$ = 9.10).

Figure 3 presents the six images used for the experiment[33].

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[31] Scale: 0 = does not fit at all, 10 = fits very well

[32] Scale: 0 = not at all likely/realistic/resembles not at all, 10 = very much likely/realistic/resembles very much

[33] The ad images depicted in Figure 3 are a smaller version of its original sizes when used in the experiments.

Figure 3: Ad stimuli

Direct mail - chocolate bar	City bus – chocolate bar	Web page – chocolate bar
Direct mail – printer	City bus – printer	Web page – printer

The eco-media information primings

The different types of eco-media information priming comprised 1) *negative priming* whereby negative information about the ecological properties of one of the three media (city bus, direct mail or a website on the internet) was given, and 2) *positive priming* whereby positive information about the ecological properties of one of the three media was given. In the following, the negative and positive eco-media primings for the three media are presented.

Direct mail: negative eco-media information priming

In a number of newly published scientific articles new findings reveal that:

Direct mail delivered by post is much more harmful for the environment than what the average consumer believes. One reason for this is that most of the bulk of direct mail is burned after distribution and not recycled. Most of the bulk of direct mail is also produced in a way that is harmful for the environment whereby each step in the production process has a negative impact on the environment, from the mass production of pulp to the printing process. Furthermore, most of the bulk of direct mail is today being distributed in a way that is harmful for the environment.

Direct mail: positive eco-media information priming

In a number of newly published scientific articles new findings reveal that:

Direct mail delivered by post is much more environmentally friendly than what the average consumer believes. One reason for this is that most of the bulk of direct mail is recycled after distribution and not burned. Most of the bulk of direct mail is also produced in a way that is environmentally friendly whereby each step in the production process has a positive impact on the environment, from the mass production of pulp to the printing process. Furthermore, most of the bulk of direct mail is today being distributed in a way that is environmentally friendly.

City bus: negative eco-media information priming

In a number of newly published scientific articles new findings reveal that:

City buses are negative for the environment. City buses are made out of almost no recyclable material and most of the city buses are ecologically harmful diesel-driven. Carbon dioxide emissions from city buses have increased and have contributed to a clear deterioration of the environment. These findings are based on calculations made by the Swedish Transport Administration and the Swedish Environmental Protection Agency.

City bus: positive eco-media information priming

In a number of newly published scientific articles new findings reveal that:

City buses are positive for the environment. City buses are made out of almost only recyclable material and most of the city buses are eco-friendly biogas-driven. Carbon dioxide emissions from city buses have decreased and have contributed to a clear improvement on the environment. These findings are based on calculations made by the Swedish Transport Administration and the Swedish Environmental Protection Agency.

Internet: negative eco-media information priming

In a number of newly published scientific articles new findings reveal that:

The internet is an environmental thief. The internet has many disadvantages with regard to the environment. New studies have shown that the global use of the internet has contributed to a vast increase of energy consumption on many areas, and thereby to increasing carbon dioxide emissions, to such an extent that the total effect is clearly negative for the environment.

Internet: positive eco-media information priming

In a number of newly published scientific articles new findings reveal that:

The internet is an environmental friend. The internet has many advantages with regard to the environment. New studies have shown that the global use of the internet has contributed to a vast decrease of energy consumption on many areas, and thereby to decreasing carbon dioxide emissions, to such an extent that the total effect is clearly positive for the environment.

Manipulation check: eco-media information primings

To ensure that the information primings held the negative and positive appeals for the study, a manipulation check was conducted among

students (scale: 0 = negative, 5 = neither negative nor positive, 10 = positive) and revealed that the subjects (n = $31 - 44$) found the negative and positive content of the six information stimuli as intended ($M_{\text{directmailnegative}}$ = .92, n = 35, $M_{\text{directmailpositive}}$ = 8.30, n = 31, $M_{\text{busnegative}}$ = .89, n = 39, $M_{\text{buspositive}}$ = 8.75, n = 33, $M_{\text{internetnegative}}$ = 1.28, n = 44, $M_{\text{internetpositive}}$ = 8.80, n = 40).

4.2.3 Measures

The dependent variables

Advertising effectiveness and eco-brand image

Referring to previous research, ad effectiveness in the current study was estimated by measuring attitude towards the ad, attitude towards the brand and purchase intention (Lutz, 1975; Olson & Mitchell, 1975; Mazis and Adkinson, 1976; Mackenzie et al., 1986; MacKenzie and Lutz, 1989). The following measures were recorded on a sliding scale with the end points 0 and 10:

Ad attitude was measured with the following question and three items: "What do you think about the ad?" (Scale: 0 = very bad/unpleasant/ unfavorable, 10 = very good/pleasant/favorable). Responses were averaged to form an index[34].

Brand attitude was measured with the following question and three items: "What do you think about Chokolé/Phoenix Printer?" (Scale: 0 = very bad/unpleasant/un-favorable, 10 = very good/pleasant/favorable). Responses to the three items were averaged to form an index[35].

Purchase intention was measured with the two items "I would like to buy something from Chokolé/Phoenix Printer" and "I would like to try Chokolé/Phoenix Printer" (Scale: 0 = not at all, 10 = very much). Responses to the items were averaged to form an index[36].

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[34] Cronbach α for the groups varied between .904 and .943.
[35] Cronbach α for the groups varied between .918 and .953.
[36] Cronbach α for the groups varied between .891 and .949.

Eco-brand image was measured with the question: "How well does Chokolé/Phoenix Printer represent the following: Chokolé/Phoenix Printer acts responsibly towards the green environment?" (Scale: 0 = not at all, 10 = very much).

The independent variables

Eco-harmful media perception

Eco-harmful media perception was measured at two occasions namely, *before* the subjects' exposure to the stimuli, i.e. *actual* eco-harmful media perception as well as *after* the subjects' exposure to the stimuli, i.e. *manipulated* eco-harmful media perception. Both actual and manipulated eco-harmful media perception were measured with the question: "To what extent do you perceive direct mail/city buses/internet media to be harmful for the natural environment?" (Scale: 0 = not at all harmful and 10 = very harmful).

Actual eco-harmful media perception was measured in phase I of the experiment (Table 2). Eco-harmful media perception was measured only for the medium that each subject was exposed to at a later stage during the experiment, i.e. either direct mail, city buses or media using the internet. For example, if subject A was at a later stage (phase IV) exposed to the ad stimulus comprising an ad placed on the exterior of a city bus, his or her eco-harmful media perception for only city buses (phase I) was included to measure his/her actual eco-harmful media perception. Subject A's eco-harmful media perception of the remaining 10 media types (measured in phase I) were omitted in the analysis.

As the purpose of the experiment was to investigate whether and to what extent consumers' eco-harmful media perceptions matter for communication effectiveness, and not to investigate consumers' eco-harmful media perceptions *of specific types of media* on communication effectiveness, the three media types were in the analysis combined to form an index, i.e. eco-harmful media perception. In addition, to be able to analyze the impact of different levels of actual eco-harmful media

perception on ad effectiveness and eco-brand image, a new categorical variable was created by way of visual binning in SPSS from the existing independent variable "to what extent do you perceive direct mail/city buses/internet media to be harmful for the natural environment?" (Scale: 0 = not at all harmful and 10 = very harmful). This new categorical variable uses the integer values 1 or 2 to represent actual eco-harmful media perception with the categories 'Less eco-harmful' (< 6) and 'More eco-harmful ($\geq$ 6). Accordingly, the actual eco-harmful media perception variable was divided into two groups whereby 'Less eco-harmful' represents the group of those who perceive the specific medium *to some extent*[37] harmful for the green environment and 'More eco-harmful' represents the group of those who perceive the specific medium *to a great extent* harmful for the green environment. The cut point for 'More eco-harmful' was set at < 6 as the scale's characteristics were found to be rather skewed to the right, namely the scale used is not balanced with regard to its extreme points, 0 = not at all and 10 = very harmful.

 Manipulated eco-harmful media perception was measured in phase V of the experiment (Table 2) *after* exposure of the stimuli using the same question and scale as used for measuring *actual* eco-harmful media perception. No categorical variable was created for manipulated eco-harmful media perception. Instead, the group exposed to negative eco-media priming represents "More eco-harmful media perception" whereas the group exposed to positive eco-media priming represents "Less eco-harmful media perception". This was based on the results from the manipulation check presented in Table 4 and 5.

4.3 Analysis and Results

H1a-d were tested in two steps. First, the subjects' *actual* eco-harmful media perceptions were used to measure its effects on the dependent

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[37] It has to be kept in mind that those who answered this question with a zero value consider the specific medium to be not at all harmful for the environment.

variables. Second, to test whether the effects found would hold after negative and positive manipulation of the actual eco-harmful media perceptions, the subjects' *manipulated* eco-harmful media perceptions were used for the analysis. Multivariate analysis of variance (MANOVA) was used to simultaneously investigate differences in the variables eco-brand image, ad attitude, brand attitude and purchase intention between groups of subjects based on different eco-harmful media perceptions, i.e. those who perceive a medium as less eco-harmful and those who perceive a medium as more eco-harmful (H1a-d). Preliminary assumption testing was conducted to check for normality, linearity, univariate and multivariate outliers, homogeneity of variance-covariance matrices, and multicollinearity. No violations were noted for the assumption of homogeneity of variance-covariance matrices (Tabachnik and Fidell, 2007, p. 252). The MANOVA results of the effects of actual and manipulated eco-harmful media perception are presented in the sections that follow.

4.3.1 Eco-harmful media perception on communication effectiveness

The hypotheses to be tested were:

H1a: The use of a medium that is perceived as less eco-harmful will have a more positive effect on eco-brand image among consumers than the use of a medium that is perceived as more eco-harmful.

H1b: The use of a medium that is perceived as less eco-harmful will have a more positive effect on ad attitude among consumers than the use of a medium that is perceived as more eco-harmful.

H1c: The use of a medium that is perceived as less eco-harmful will have a more positive effect on brand attitude among

consumers than the use of a medium that is perceived as more eco-harmful.

H1d: The use of a medium that is perceived as less eco-harmful will have a more positive effect on purchase intention among consumers than the use of a medium that is perceived as more eco-harmful.

Actual eco-harmful media perceptions

Subjects' actual eco-harmful media perceptions (the non-primed group) were analysed and grouped into the two groups 'More eco-harmful' ($n = 454$) and 'Less eco-harmful' ($n = 187$). After being exposed to the advertising stimulus, i.e. an image of one of the two ads (the chocolate bar or the printer ad) placed in one of the three media (direct mail, a city bus or a web page) subjects' scores on eco-brand image, ad- and brand attitude and purchase intention were measured. Pillai's Trace instead of Wilks' Lambda statistics was used in the MANOVA analysis because of the groups' unequal sample sizes.

The results showed that *actual* eco-harmful media perception has a significant main effect on the combined dependent variables $F(4, 644) = 4.84$, $p = .001$ (two-tailed), Pillai's Trace $= .03$. This suggests that the dependent variables combined vary significantly between the two groups, i.e. Less eco-harmful vs. More eco-harmful. In other words, this suggests that there is a significant difference between those with a perception of the medium as *less* eco-harmful and those with a perception of the medium as *more* eco-harmful.

When the results for the dependent variables were considered separately, differences to reach statistical significance using a Bonferroni adjusted α level of .013[38], was found for eco-brand image $F(1, 647) =$

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[38] To reduce the chance of a Type 1 error a higher alpha level of .013 is set after dividing the original alpha level of .05 by the number of dependent variables, i.e. four variables (Tabachnik and Fidell, 2007, p. 270).

15.18, $p < .001$. This finding suggests that eco-brand image is more favorable when the brand is advertised in/on a medium that is perceived as less eco-harmful by consumers than when the brand is advertised in a medium that is perceived as more eco-harmful ($M_{\text{less eco-harmful}} = 4.07$ versus $M_{\text{more eco-harmful}} = 3.38$).

Differences were also found for ad attitude $F (1, 647) = 8.42$, $p = .004$. This suggests that ad attitude is more favorable when the ad is placed in/on a medium that is perceived as less eco-harmful by consumers than when the ad is placed in/on a medium that is perceived as more eco-harmful ($M_{\text{less eco-harmful}} = 4.76$ versus $M_{\text{more eco-harmful}} = 4.26$).

Furthermore, the results showed differences for brand attitude, $F (1, 647) = 7.30$, $p = .007$. This finding suggests that brand attitude is more favorable when the brand is advertised in a medium that is perceived as less eco-harmful among consumers than when the brand is advertised in a medium that is perceived as more eco-harmful ($M_{\text{less eco-harmful}} = 4.84$ versus $M_{\text{more eco-harmful}} = 4.42$).

No significant difference was found for purchase intention $F (1, 647) = 2.09$, $p = .149$, partial $\eta^2 < .01$. An observation of the mean scores indicates that the subjects who perceive a medium as less eco-harmful score higher on purchase intention than those who perceive a medium as more eco-harmful ($M_{\text{less eco-harmful}} = 3.69$ versus $M_{\text{more eco-harmful}} = 3.37$).

Table 3 and Figure 4 present an overview of the findings.

Table 3: MANOVA results for H1a – H1d: effects of actual eco-harmful media perception

| | Actual Eco-harmful media perception | | | | | | |
| | More eco-harmful N = 187 | | Less eco-harmful N = 454 | | | Partial | |
Dependent variable	M	SD	M	SD	p	η²	F
Eco-brand image^	3.38	2.34	4.07	1.90	<.001	.02	15.18
Ad attitude	4.26	2.38	4.76	1.82	.004	.01	8.42
Brand attitude	4.42	2.08	4.84	1.63	.007	.01	7.30
Purchase intention	3.37	2.73	3.69	2.47	n.s.	< .01	2.09

Note: $F(4, 644) = 4.84$, $p = .001$, Pillai's Trace = .03, partial $\eta2$ = .03;

^) Brand X is associated with a green environmentally responsible corporation

Figure 4: Effects of actual eco-harmful media perception

Manipulated eco-harmful media perception

Prior to testing the effects of the subjects' manipulated eco-harmful media perceptions (the primed groups) on the dependent variables, a manipulation check among the studied subjects was conducted to test whether the negative and positive information primings held the negative and positive appeals as intended for the study. This manipulation check differs from the first manipulation check that was conducted among a student sample[39] since it was an integrated part of the experiment using the same sample.

Consistent with the intended manipulation the results of the paired samples t-tests revealed that negative eco-media priming impacts actual eco-harmful media perception negatively ($M_{\text{actual EMP}}$ = 4.54 versus $M_{\text{negative prime EMP}}$ = 5.74; t = -11.15, p < .001) whereas positive eco-media priming impacts actual eco-harmful media perception positively ($M_{\text{actual EMP}}$ = 4.44 versus $M_{\text{positive prime EMP}}$ = 4.12; t = 3.03, p < .001). It could be confirmed that the negative and positive eco-media primings held the negative and positive appeals as intended for the study. Hence, a subject exposed to negative eco-media priming showed to lead to a more eco-harmful media perception compared to his or her actual eco-harmful media perception. Similarly, a subject exposed to positive priming showed to lead to a less eco-harmful media perception compared to his or her actual eco-harmful media perception. These results are presented in Table 4 and 5 below.

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[39] See also the Method section of this chapter.

Table 4: Manipulation check: negative eco-media priming on actual eco-harmful media perception

Eco-harmful media perception[†]					
Actual M (SD)	Manipulated M (SD)	N	t	P	η^2
4.54 (3.32)	5.74 (2.73)	643	-11.15	<.001	.16

Note: [†] Medium X is harmful for the green environment;
Scale: 0 = not at all harmful, 10 = very harmful

Table 5: Manipulation check: positive eco-media priming on actual eco-harmful media perception

Eco-harmful media perception[†]					
Actual M (SD)	Manipulated M (SD)	N	t	P	η^2
4.44 (3.37)	4.12 (2.66)	644	3.03	<.001	.01

Note: [†] Medium X is harmful for the green environment;
Scale: 0 = not at all harmful, 10 = very harmful

The results of the MANOVA showed that negative and positive priming on the ecological properties of a medium (eco-media priming) had a significant main effect on the combined dependent variables: $F(4, 1307) = 2.84$, Wilks' Lambda = .99, $p = .023$. This suggests that the dependent variables (eco-brand image, ad attitude, brand attitude and purchase intention) vary significantly between the two groups that were negatively and positively primed.

When the results for the dependent variables were considered separately, differences to reach statistical significance using a Bonferroni adjusted α level of .013 (Tabachnik and Fidell, 2007, p. 270) was found for eco-brand image, $F(1, 1310) = 10.41$, $p = .001$. An inspection of the mean scores indicate that the subjects who were positively primed about a medium's ecological properties, and thus who perceive the medium as less eco-harmful, reported higher levels of eco-brand image than those who were primed negatively ($M_{\text{positive prime EMP}} = 4.03$ versus $M_{\text{negative prime EMP}} = 3.65$). Thus the results support H1a whereby similar effects are found for both actual eco-harmful media perception as well as for manipulated eco-harmful media perception.

In support of H1b, at a significance at $p < .05$, differences were found for ad attitude, $F(1, 1310) = 4.25$, $p = .040$. An inspection of the mean scores indicate that the subjects who were primed positively about a medium's ecological properties, and thus who perceive the medium as less eco-harmful, rated higher ad attitude scores than those who were primed negatively ($M_{\text{positive prime EMP}} = 4.66$ versus $M_{\text{negative prime EMP}} = 4.44$).

Similarly, in support of H1c ($p < .05$), differences were found for brand attitude, $F(1, 1310) = 4.05$, $p = .045$. An inspection of the mean scores indicate that the subjects who were primed positively about a medium's ecological properties, and thus who perceive the medium as less eco-harmful, rated higher brand attitude scores ($M_{\text{positive prime EMP}} = 4.46$ versus $M_{\text{negative prime EMP}} = 4.66$).

Differences ($p < .05$) were found for buying intention $F(1, 1310) = 3.92$, $p = .048$. These results suggest that whereas actual eco-harmful media perception does not influence purchase intention, manipulated eco-harmful media perception does to some extent. An inspection of the mean scores point out that the subjects who perceive a medium as less eco-harmful rated higher scores on purchase intention ($M_{\text{positive prime EMP}} = 3.59$ versus $M_{\text{negative EMP}} = 3.30$). H1c is partially supported.

Table 6 and Figure 5 provide an overview of these findings.

Table 6: MANOVA results for H1a – H1d: effects of manipulated eco-harmful media perception

| | Manipulated eco-harmful media perception | | | | | | |
| | More Eco-harmful[†] N = 643 | | Less Eco-harmful[‡] N = 644 | | | | |
Dependent variable	M	SD	M	SD	P	Partial η^2	F
Eco-brand image[^]	3.65	2.13	4.03	2.16	.001	.01	10.41
Ad attitude	4.44	1.95	4.66	1.94	.040	<.01	4.25
Brand attitude	4.46	1.90	4.66	1.84	.045	<.01	4.05
Purchase intention	3.30	2.56	3.59	2.76	.048	<.01	3.92

Note: $F(4, 1307) = 2.84$, $p = .023$, Wilks' Lambda = .99, partial $\eta^2 = .01$;
[†]) negatively primed; [‡]) positively primed;
[^]) Brand X is associated with a green environmentally responsible corporation

Figure 5: Effects of manipulated eco-harmful media perception

4.4 Conclusions

Effects of eco-harmful media perception on communication effectiveness

The purpose of this chapter was to answer the first main research question of the thesis:

MainRQ1: Do consumers' eco-harmful media perceptions matter for communication effectiveness?

The chapter showed that consumers' perceptions on a medium's ecological characteristics (eco-harmful media perception), can impact ad and brand evaluations. The results of the study presented in this chapter suggests that the use of a less eco-harmful medium, as perceived by consumers, can have positive effects on ad and brand evaluations. The effects even hold after negative and positive manipulation of consumers' actual eco-harmful media perceptions, i.e. after consumers have been primed with either negative or positive information about a medium's ecological characteristics.

The chapter has demonstrated that the use of an advertising medium affects eco-brand image[40] *more positively* when an ad is placed in a medium that consumers perceive as less eco-harmful, than when the same ad is placed in a medium that consumers perceive as more eco-harmful. More specifically, a brand that is advertised through a *medium* that consumers perceive as less eco-harmful tends to be more associated with a brand/company that is responsible for caring for/not harming the green environment, than when a medium is used that consumers perceive as more eco-harmful.

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[40] Eco-brand image refers to the association of the advertised brand with a green environmentally responsible corporation.

The chapter has also demonstrated that consumers' eco-harmful media perceptions affect ad attitude and brand attitude *more positively* when an ad is placed in a medium that consumers perceive as less eco-harmful than when the same ad is placed in a medium that is perceived as more eco-harmful. Based on these findings it can be inferred that advertising media that are perceived as more eco-harmful can *lower* ad and brand attitude whereas advertising media that are perceived as less eco-harmful can *enhance* such ad and brand evaluations.

When eco-harmful media perceptions are negatively and positively manipulated it was found that eco-harmful media perceptions can also impact purchase intention. This suggests that consumers' eco-harmful media perceptions can positively influence purchase intention when consumers are exposed to positive information about such medium's ecological characteristics. Similarly, when consumers are exposed to negative information about a medium's ecological characteristics can negatively influence purchase intention.

The answer to the first main research question is thus; yes, consumers' eco-harmful media perceptions do matter for communication effectiveness! As such, the results from this chapter support and contribute to prior research findings on media context factors and research on cognitive priming effects by showing that a medium's green characteristics can be the communication message. Based on the results presented in this chapter it is suggested that the choice of a medium should not only match a company's standpoint on its concern for the green environment but more importantly it should match consumers' eco-harmful media perceptions. Hence, the findings also support and expand previous research on match-up effects that are obtained between the medium and brand-related associations (such as Dahlén, 2005), in this case eco-brand related associations (eco-brand image).

The results of the study presented in this chapter has shed light on the importance for practitioners to include the green environmental aspect when they select advertising media to communicate with consumers as it can have consequences for ad and brand evaluations. This chapter showed the importance for companies to take into account

consumers' eco-harmful media perceptions when they select advertising media. This is especially important for companies that are committed to care for the green environment (for example by having documented green environmental policies) and thereby wish to be associated as such through their brands and their marketing communication thereof. The findings presented in this chapter contribute to the green marketing literature that, on the topic of marketing communication, seems to put a major focus on *message content* and seems to overlook the importance of the carrier of the message, i.e. the *medium itself* and its green characteristics in the eyes of the consumer.

A plausible explanation for why consumers' eco-harmful media perceptions can affect ad and brand evaluations may be that consumers feel personal responsible for caring for the green environment such that, in their role as consumers, they avoid or even boycott specific types of advertising media and/or brands that are associated with harming the green environment. Consumers are thereby indirectly demanding of companies to act more responsible towards the green environment by for example making use of, what consumers perceive as less eco-harmful advertising media.

Now that it is found that consumers' eco-harmful media perceptions matter for communication effectiveness, in the chapters that follow I will explore whether or not *marketing managers* take the green environmental aspect into account when they select advertising media (Chapter 5) and investigate which key factors that drive green media selection among marketing managers (Chapter 6). Furthermore, I will examine to what extent consumers' eco-harmful media perceptions are consistent with marketing managers' beliefs about consumers (Chapter 7). A summary of the findings of this chapter is presented in Table 7.

Table 7: Summary of the findings - Chapter 4

Dependent variables	Actual eco-harmful media perception		Manipulated eco-harmful media perception	
	Less eco-harmful	More eco-harmful	Less eco-harmful[†]	More eco-harmful[‡]
Eco-brand image[^]	+	−	+	−
Ad attitude	+	−	+	−
Brand attitude	+	−	+	−
Purchase intention	O	O	+	−

Note: +) more positive; −) more negative; O) no significant difference; [†]) positively primed with eco-media information; [‡]) negatively primed with eco-media information; [^]) The association of the advertised brand with a green environmentally responsible corporation

Chapter 5

Exploring Green Thought in Media Selection

Part One Research focus and method	**Part Two** Empirical studies	**Part Three** Conclusions and future research
Chapter 1 Introduction	**Chapter 4** Consumers' eco-harmful media perceptions and its impact on communication effectiveness	**Chapter 8** Conclusions and implications
Chapter 2 The research questions	**Chapter 5** Exploring green thought in media selection	**Chapter 9** Future research and limitations
Chapter 3 Methodology and research design	**Chapter 6** Green media selection: an act of organizational ideology, personal beliefs or model-use?	
	Chapter 7 Eleven shades of green: the media perception gap	

5.1 Background

Whereas Chapter 4 has shown the importance for companies to take the green environmental aspect into consideration with media selection, from the perspective of the consumer, this chapter explores the perspective of the company represented by the marketing manager. The aim of the present chapter is to answer the thesis' second main research question:

MainRQ2: Do marketing managers take the green environmental aspect into consideration when selecting media for marketing communication?

The main purpose of the current chapter is to explore whether or not marketing managers are 'thinking green' with their work with marketing communication in general and media selection in particular. 'Thinking green' refers to "being aware of our interconnectedness with the world and reflecting on the unintended damage we cause nature in the daily course of our lives" (The Environmental Action Alliance, 2004, p.1). Given the rapid developments and transformations in the media environment, consumers' increasing demand for environmentally responsible products and the economic importance of media selection for ad campaigns, this exploratory study seeks to gain a deeper understanding on how Swedish marketing managers go about in practice with marketing communication planning in general and with media selection in particular. Specifically, this study seeks to explore whether or not green environmental aspects are taken into consideration by marketing managers. The findings of the exploratory study presented in this chapter are intended to serve as a base for the design of the subsequent quantitative study among marketing managers presented in Chapter 6. When scanning the environment I found some important factors necessary to include in the study as these may influence marketing managers' green thought in media selection. The factors that

are included in the study are the economic recession at the time of this study and agency-cooperation.

5.1.1 The green environmental aspect in media selection

At the same time as consumers' concern for the green environment is increasing, they are also gaining more knowledge about and are becoming more skilled in buying eco-friendly products (Stisser, 1994). Even during a weak economy, it is postulated that consumers' attitudes toward environmentally responsible products remain powerful and the demand for environmentally low-impact products remains high (Cone, 2009). For the marketer it is thus crucial to obtain knowledge on such consumption trends and patterns (Pieters, 1991).

For marketing managers, decisions in media planning and consequently in advertising media selection are becoming increasingly complex and challenging as more media options are available to consumers (Turk and Katz, 1992), for example due to the developments taking place in digital media. This has led to increasing ways in which companies can communicate with consumers (Crosier et al., 2003). Simultaneously, the economic consequences of media selection decisions are of great importance, since they directly affect the turnover and profits of the company.

As earlier discussed in the introductory chapter, observations of public debate indicate that consumers' concern for the green environment also seem to affect their advertising media attitudes toward various media types. This was confirmed by the findings from the previous study among consumers. As such, taking into account the green environmental aspect into account with media selection is important as it can impact communication effectiveness. No prior research among marketing managers on media selection that includes the green environmental aspect has been found. Based on this reasoning, the chapter's first research question is formulated:

RQ1: Are green environmental aspects considered when marketing managers select advertising media?

5.1.2 Marketing communication planning and media selection

In order to gain a deeper understanding of green media selection among marketing managers, an assessment of the factors that usually guide marketing managers with marketing communication planning and media selection, was found valuable.

Researchers such as Nowak et al. (1993) showed that audience reach and targeting are the main determinants of media selection among marketing managers in the United States. A study conducted among Swedish marketing managers, advertising and media agencies found that the main factors that influence media selection are product type, target group, a medium's communication characteristics, type of ad campaign, concentrated geographical focus, budget, season and availability of media space (Sandén-Håkansson, 1994). Tapp (2005) found that among marketing managers there is not much evidence of widespread good practice of selecting media objectively, that marketing managers feel comfortable being creatures of habit and are thereby missing out on the opportunity to differentiate by a consistent, objective reassessment of media selection.

Marketing managers and other practitioners are the ultimate intended users of models resulting from research in the field of marketing. Scientific knowledge seeks to give explanation, prediction and comprehension of phenomena. As such, the purpose of marketing theory and models is thus to help practitioners in understanding core issues and in guiding key decisions in practice (Otteson and Grønhaug, 2004). Evidence suggests however that the actual use of academic theory in general by intended user groups is limited (e.g. Ankers and Brennan, 2002: Caplan et al., 1975; Grønhaug and Haukedal, 1997; Hambrick, 1994; Knorr, 1977; Lee et al., 1987). Time pressures may be one possible

explanation for not using strategic models as was the case in a study on the use of advertising models among advertising agencies (Gabriel et al., 2006). The second research question is:

RQ2: What are the factors that guide and influence marketing managers with marketing communication planning and media selection?

5.1.3 The economic recession and its influence on media selection

The economic recession at the time of this study (2009), provided a unique opportunity to explore its influence on marketing communication planning and (green) media selection. It is found that during times of an economic recession marketing managers tend to adjust their marketing strategy and actions in order to remain profitable and consumer-responsive. This often means adaptations to the marketing and/or media mix and/or a change of target market(s). Sometimes marketing communication plans are even totally adjusted (see for example Shama, 1993; Court, 2009). Hence, the third research question is:

RQ3: How does an economic recession affect marketing communication planning in general and media selection in particular?

5.1.4 Advertiser-agency cooperation and its influence on media selection

Assessing advertising-agency cooperation issues was found important in order to gain a better understanding of the marketing managers' involvement with (green) media selection.

According to King et al. (1997) it is the advertiser that plays the most powerful role in the media planning process: that of the power of the purse. Later, King et al. (2004) concluded that areas that need more empirical research were the roles of advertisers as well as the involvement of the advertiser in the actual media planning process. Today we can find many different agencies to assist advertisers in their marketing communication efforts, and the number is increasing (Soberman, 2005). Examples of such agencies are advertising, media, public relations, web and market research agencies. According to Grønhaug (1972) the degree to which marketing managers determine media decisions beforehand and the briefing that the media selector is given were among the influencing factors on media selection. Gagnard and Swartz (1988) found that companies hire other agencies in order to integrate all types of research into the planning process because advertising agencies are perceived to be mostly up to date on creative trends than on market research methods.

Grant and McLeod (2007) showed that working with a network of influential parties and various types of communication agencies can create complexity and fragmentation. This coincides with earlier research by Hirschman (1989) that found that while advertisers view an advertisement as a promotional tool with the main objective to change attitudes and/or behaviors, creative people tend to work according to ideas that are more intuitive, artistic and with less apparent connections to the marketing objectives. Therefore the risk for conflicts may exist as advertisers focus mainly on minimizing risks whereas creative people often attempt to maximize the ad's impact of creativity by "newness of thought" (Sternberg and Lubert, 1999).

Companies may appoint a main agency among their network of agencies. However, Grimes (2004) does not share the idea of advertisers appointing a main agency and argues that cooperation across a range of parties is central for successful marketing communication campaigns. This view is also supported by Grant and McLeod (2007) who argue that more democratic positions across the agency network will lead to better collaborating relationships. A consequence of appointing a main agency

is that it could create a barrier for incorporating integrated marketing communication (IMC) when integration should be initiated and guided by the marketing manager (Schultz and Kitchen, 1997). Appointing a main agency may thus create a hierarchical structure in the network of agencies and thereby cause a barrier between the other agencies and the advertiser. As a consequence, agencies may not be fully willing to share crucial knowledge that could benefit the advertiser. This may include critical input on green media selection.

Wackman et al. (1987) studied advertiser-agency cooperation among advertisers in the United States and found that relationship factors were more crucial than measures of concrete agency performance. Interestingly, Verbeke (1988) found when replicating Wackman et al.'s (1987) study in the Netherlands that evaluations of performance did not alter over time, personal relations were of no importance and that social bonding was not a concern.

According to Sandén-Håkansson (1994), advertiser-agency relationships in Sweden last about three years. Selecting and building relationships with new agencies demand a lot of time and other resources whereby much of the collaboration time may be spent on getting to know the agency. Hammarkvist et al. (1982) point out that stability is the foundation for change and that long-term relationships create stability, which in turn creates a strong foundation for change. In long-term relationships all parties have clear expectations of each other. Furthermore, the 1991 Nobel laureate Coase (1937) argues that it may cost more to obtain a good/service via the market than the price of the good/service itself. Assuming that switching agencies involves a number of transaction costs such as search and information costs, bargaining costs and keeping trade secrets, long-term agency collaborations could benefit advertisers over short-term agency collaborations. In addition, agencies trying to pick up early signals of advertiser dissatisfaction may benefit the advertiser-agency relationship and thereby decrease the risk of failing to anticipate emerging crisis with the advertiser (Doyle et al., 1980). The fourth research question is formulated:

RQ4: How does advertiser-agency cooperation influence media selection?

5.2 Method

5.2.1 Data collection

The target sample comprises marketing managers belonging to the top media buyers in Sweden. In the attempt of creating a sample for the interviews that consists of marketing managers or marketing managers with similar titles, representing a wide variety of industries and different types of media expenditure, a cluster analysis was conducted based on secondary data. The secondary data originated from SIFO (a Swedish research institute) which comprised the total yearly media mix expenditure of top media buyers in Sweden. The results of the cluster analysis revealed eight clusters and showed correspondence with type of industry. A total of eight interviews were conducted. The respondents were promised anonymity and thus their names and respective companies cannot be specifically mentioned in this study. A more detailed discussion of the sample design is presented in Chapter 3.

The interview guide[41] (see Appendix B) was developed based on extant literature on the research topics discussed previously as well as through observations in practice and current debates in the media. The main topics of the interview guide are 1) green thinking with media selection, 2) marketing communication planning and media selection, 3) the economic recession and its influence on media selection, and 4) advertiser-agency cooperation and its influence on media selection. Table 1 gives an overview of the topics to be explored in this chapter.

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[41] To maximize the reliability of the interviews the interview guide was pre-tested and adjustments were made in regards to certain formulations and re-wording of the questions.

Table 1: Overview of Chapter 5 – exploring green thought in media selection

Topic	RQ	Unit of Analysis	Method
Green thought in media selection?	RQ1	Marketing managers	Interviews
What guides marketing communication planning/media selection?	RQ2		
The economic recession and its influence on media selection	RQ3		
Advertiser-agency cooperation and its influence on media selection	RQ4		

5.3 Analysis and Results

5.3.1 The green environmental aspect in media selection

The first research question was:

> RQ1: Are green environmental aspects considered when marketing managers select advertising media?

Although the respondents reported to be aware of environmental issues in general, considering the natural environment is something that is being executed somewhere else in the organization. The respondents reported that they do not consider environmental aspects when selecting advertising media (see Table 2). To the question whether companies have green environmental policies, some respondents responded that Corporate Social Responsibility (CSR) issues, including a documented environmental policy, are usually stated on their company's web page. Some respondents argue for the fact that they are "just a company" and thus cannot make a difference on this big issue. The respondents were also of the opinion that considering green environmental issues seem to

be more of a trend and/or political issue that needs to be worked on and solved on that level instead. Surprisingly, some respondents expressed strong negative private opinions with regard to considering the green environment in their daily work. One respondent even had very strong private opinions that were stated "off the record". Examples of respondents' answers to the respective questions were as follow:

Does your company have a documented green   environmental policy?

"Yes, we have, it is stated on our webpage."

"Yes. We are actively focusing on the environment. We recycle as much as we can."

"Yes, I think so…we should have one."

"Yes!"

 "Yes, we do."

Are environmental aspects playing a role when choosing the specific advertising media?

"No."

"No, I wouldn't know how…."

"Hmm… that's a good question… I don't think I think about these kind of things…"

"No. It is a bigger issue for politics. A small organization such as ours cannot affect these issues."

"No. We are worst in working with CSR including the environment. The brand prioritizes first. Our brand is the weakest on the market at the moment and so we are working on our brand first."

"May I ask why you are asking this question? Is it something you have to include in your study in order to be political correct? I think it's more of a trend that comes and goes .We have a separate department that deals with these types of questions. Not just with environmental issues. I have nothing to do with these issues… my focus is on X (brand name) and that it is surviving and growing."

 "I am not considering this; I don't get paid to solve these issues. Shall we step outside then I can tell you what I really think of this? Can I speak off the record…?"

Table 2: Environmental aspects

Environmental considerations	Responses
Yes, we have an environmental policy	5
Environmental aspects are not playing a role when selecting media	7
Considering the environment is not my responsibility	2
Considering the environment is more of a trend that comes and goes	1
Considering the environment is more an issue for politics	1

5.3.2 Marketing communication planning and media selection

The second research question was:

RQ2: Which factors guide marketing communication planning and media selection?

Marketing communication planning

According to the respondents, year-based plans are commonly used for marketing communication planning. These plans are usually preliminary planned and are adjusted throughout the year. The findings indicate that the main factors that guide respondents in their marketing communication strategy are consumers' needs, brand values, sales, objectives, a fixed media focus and budget. Interestingly, none of the respondents mentioned any models or environmental policies as a guide for their marketing communication strategy, not even when the interviewer was probing for possible other factors that guide their work with marketing communication planning. Table 3 and 4 give an overview of these findings. Examples of respondents' answers to the respective questions were as follow:

> ***What are the factors that guide you when you are working with marketing communication planning?***
>
> "Normally, we work according to a one-year plan. This year and from August 2008 <u>everything</u> is ad-hoc!"
>
> "We work according to a one-year plan, 20 per cent of this is usually adjusted."
>
> "We are working according to a three-year marketing plan. 45 per cent of the budget is spent on fixed channels while the remaining 55 per cent is flexible."
>
> "Some things are fixed, 20 per cent happens ad hoc and some part according to the marketing plan."

The senior agency-consultant added to this:

> "Often companies work with year-based plans that are preliminary planned and adjusted throughout the year."

What guides the company's marketing communication?

"Our core values of our brand. We work according to a three to five year brand strategy plan."

"The objective, to support sales and our brand."

"Consumers' needs. For example, customers want more and more to steer their own time. Our job is to find out which are the underlying trends."

"Our main focus is on advertising and mainly on TV."

"New consumers' needs, new product needs. …the better the sales the more money there is for marketing."

"Customer data, consumers' needs"

Table 3: Marketing communication planning: time and budget aspects

Planning	Aa-hoc	Fixed	During recession	Responses
One-year plan	20% of budget	80% of budget	Budget reduction	2
Three-year plan	When sales figures are not reached		More adjustments	1
Three-year plan	55% of budget	45% of budget	More adjustments and more ad-hoc	1
One-year plan	20% of budget	80% of budget	100% is ad-hoc	1
One-year plan	20% of budget	80% of budget	More ad-hoc	2

Table 4: Factors guiding marketing communication

Factor guiding Marketing Communication	Responses
Consumers' Needs/Customer data	3
Strengthen brand values	3
Increase sales	2
Objective	2
Fixed focus	1
Budget	2
Models	0
Environmental considerations	0

Media selection

As to factors guiding media selection, the interviews revealed that the respondents seem to be much guided and influenced by their previous experience when they select media for ad campaigns. Because of their previous experience the respondents claim to usually 'know' which advertising media works best and seem to use rules of thumb. Other factors that respondents mentioned to influence the media selection are the budget, costs, suitability of the medium, reach, target market and special offers. Comparing to earlier studies on factors influencing media selection it appears that special offers could be added to these earlier studies.

Neither considering environmental issues nor the use of (strategic) models were mentioned among factors guiding media selection, not even when further probing the respondents for possible other factors that could guide the marketing manager in media selection. Table 5 below presents an overview of these findings. Examples of the respondents' answers to the following question were as follow:

> **When you are working with ad campaigns, what guides the media selection?**

"Experience, that's what counts."

"Most often the media selection is not scientifically chosen but more based upon experience."

"It depends on the objectives. If we want to increase sales then we go for DM in various forms, targeted or mass."

"I have fairly good knowledge about what works. I have more than twenty years of experience within marketing. I know that TV works. Our main focus is on advertising and mainly on TV."

"It can happen on who contacts me. The other day, someone called me, I got a really good offer and I went for that."

"Tradition (experience), a good idea that strengthens our brand and suits best in a particular medium, how do we reach our target group best? costs: is there a cheaper alternative, special offers…"

The senior agency-consultant stated:

"Budget + what did we last year + needs = model for today. The budget steers the possibilities to communicate."

Table 5: Factors guiding media selection for ad campaigns

Factor guiding media selection	Responses
Previous experience	5
Rules of thumb	3
Target market	2
Costs	2
Suitability of the medium	2
Budget	2
Reach	1
Special offers	2
Models	0
Environmental considerations/issues	0

5.3.3 The economic recession

The third research question was:

> RQ3: How does an economic recession affect marketing communication planning in general and media selection in particular?

The respondents report that the economic recession at the time of this study is affecting media expenditure in the sense that their companies have cut down on media investments. Respondents find that it is also a better negotiation situation during an economic recession with regard to price and agency cooperation. For example, respondents experience better prices of media offers and argue that agencies need clients and are therefore more flexible. Some respondents experienced that agencies in times of recession are more flexible and willing to listen to their clients. As a consequence, the respondents perceive agencies to act more in accordance to clients' wishes during an economic recession.

According to the respondents, during an economic recession there is also a stronger need to be flexible and to adjust marketing (communication) plans more often. This is in line with previous findings that managers tend to make adaptations to the marketing mix and/or changes of target market(s) during an economic recession. Furthermore, this study may expand these previous findings in the sense that media selection also seems to be much influenced by special offers during an economic recession. Examples of respondents' answers to the respective questions were as follow:

> ***How has the economic recession affected your company's marketing communication efforts?***
>
> "Normally, we work according to a one-year plan, this year and from August 2008 <u>everything</u> is ad hoc!"

"We are getting a lot of ad hoc offers from various media. It is a better negotiation situation for us at the moment. This 20% of change in the year plan is usually spent on these types of offers."

"We are more price focused, budget cuts… I don't want to comment more on this."

How has the economic recession affected the choice of advertising media?

"We get a lot of special offers. We are in a better negotiation situation right now."

"In this recession PR and internet are cheaper now… so we invest a lot in these…"

"We are using more of our own media channels such as digital TV screens because it is free."

"It is a better negotiation situation for us now. Agencies need clients so they have to listen to what I tell them."

"These times are great negotiation times for us. They need us."

5.3.4 Advertiser-agency cooperation

The fourth research question was:

RQ4: How does advertiser-agency cooperation influence media selection?

Types of cooperating agencies

The respondents reported that they recruit various external agencies and that they are mainly having collaborations with advertising, media, and

PR agencies. In addition, the respondents reported that they also collaborate with web, design, production, and market research agencies. An overview of the findings is presented in Table 6. Examples of respondents' answers to the respective question were as follow:

Which types of external agencies is your company cooperating with?

"Advertising agency, media agency and PR agency. But we also work with X (a market research agency) and a web agency."

"With an advertising agency, media agency, PR agency, web agency, production agency and various market research agencies."

"…advertising agency, media agency, market research agency and web agency."

"A media agency, two ad-agencies; a tactical and a strategic one, a market research agency and different PR agencies."

"…an advertising agency, media agency, different PR agencies, web agency, an in-house agency in London and a market research agency. Besides these partners we are using various other tactical agencies… too many… I would gladly like to decrease the amount of agency collaborations."

The senior agency-consultant added further:

"Bigger companies have bigger budgets and have a greater need to communicate. This in turn creates a greater need for partners. There is a boom of digital or web agencies after 2001. These agencies play a greater role today and it's increasing. These actors are high on the list of trusting partners."

Table 6: Types of cooperating agencies

Type of agency	Responses
Advertising-	7
Media-	7
PR-	7
Market research-	5
Web-	4
Digital-	2
Production-	2
Online marketing-	1
In-house-	1
Design-	1

Main agency appointment

Most respondents reported that they usually appoint a main agency from their agency network. According to the respondents, the agency that is appointed as the main agency is most often the advertising agency. Working with various agencies requires coordination, which is not always perceived as an easy task by the respondents. It was reported that much prestige exists among the agencies which could create difficulties and tensions in the advertiser-agency cooperation. This is in line with previous research in the sense that a consequence of working with a network of influential parties and various types of communication agencies adds complexity and fragmentation.

To the question *"Do you usually appoint a main agency among your agencies during the production of an ad campaign?"* most of the respondents answered that they did. Upon the question *"Which type of agency is usually appointed as the main agency among your agencies?"* the respondents gave answers such as the following:

"Our advertising agency is usually appointed as the main agency."

"I usually meet with all the agencies and tell what I want. Then the main agency's job is to coordinate the project and to see to it that the cooperation works between the other agencies. The main agency reports to me directly."

The senior agency-consultant added the following:

"Usually the company chooses one strategic partner from the various partners and appoints thereby this partner to become the main agency which is most often the advertising agency. The main agency plays a leading role and is responsible for the entire project and is also the main link between the marketing manager and the rest of the agency network. It also has to see to it that the cooperation between the other partners is functioning well. The main agency is considered being the company's strategic partner and the closest contact."

Agency cooperation issues

Personality, trust and personal chemistry are seen as crucial factors for a good collaboration. Despite the acknowledgement that it takes quite some time to get to know the other partner, respondents mentioned a lack of personal chemistry to be a major reason for terminating agency cooperation. With the exception of one respondent, strategically motives such as price levels or disappointing agency performance evaluations were not mentioned as reasons for a change of agency. Table 7 presents an overview of these findings. Examples of respondents' answers to the respective question were as follow:

> ***How does the cooperation function between your company and the agencies?***

> "There is a lot of prestige among the agencies."

> "There is prestige among agencies but I just demand that they cooperate. They need customers during these times so they have to listen to the customer."

"Relationships and trust are crucial."

"…because of lack of personal chemistry we were forced to change our advertising agency. Because many of us didn't want to or could not work with them any longer."

"Personal chemistry is crucial for a partnership to work."

"…it came to a point where she couldn't stand the guy. That's when we thought it was time to change agencies. Personal chemistry is important… but we also wanted to change our branding strategy, so that's why we also changed agencies…"

The senior agency-consultant stated the following:

"Advertising agencies usually want to own the idea. They want to steer too much. Everyone is fighting to own the project… PR agencies have gained strategic importance. This creates even more competition among the agencies which in turn creates difficulties to cooperate. PR Agencies and Advertising Agencies have the most strategic competence and skills. Therefore they are rivals and strong competitors nowadays. And thus it is hard for them to cooperate. They are fighting for the role of main agency that the company appoints. Making sure that the cooperation between the partners works out well… this is a hard thing to do but a deciding factor in order to have a successful result of communicating ideas and campaigns. Good relations are everything… It takes about one to one and a half year to get to know the other partner, the organization's culture etc."

Table 7: Agency cooperation issues

Agency cooperation issues	Responses
Usually appoint a main agency	7
Main agency is usually the advertising agency	6
A lot of prestige exists among agencies	5
Personal chemistry and trust are crucial factors for good collaboration	5
Termination of agency collaboration because of lack of personal chemistry	2
Agencies are competing for the role of main agency	1

Agency involvement in media selection

While the respondents stated that they, to a certain extent, involve their agencies in the media selection, some stated to have good knowledge about media selection themselves and are thus not leaving this decision to the agencies. Respondents seem to involve ad agencies to a larger extent than other types of agencies when selecting media. All respondents said to have the final voice among the agencies in every decision to be made (see Table 8). Examples of respondents' answers to the respective question were:

To what extent are the agencies involved in the media selection?

"Hmm, I would say that the agencies influence the choice of media as follow… our ad agency 10 per cent, our media agency 5 per cent, our PR agency 5 per cent and our web agency 5 per cent. So, we decide for 75 per cent."

"We first tell what we want… then the ad-agency presents the media mix in the creative brief. This has to be approved by us and the media agency. The brief sets the ground for the concrete objectives of the ad-campaign…"

"45 per cent of our budget is spent on fixed media channels… the other 55 per cent is flexible. For this, we invite our colleagues from within the company, agencies and other experts to, what we call a jamming-session to come up with new ideas to reach consumers."

"We decide on the media mix with some advice from our media agency."

"No external agencies are involved in this decision."

"Since I have worked for a media agency before I have good knowledge myself. I simply tell the agencies what I want and they have to listen to me."

As to the question *"Who makes the final decision with media selection?"* all respondents said to have the final voice. This was based on answers such as:

"Me."

"I make all final decisions"

"I do"

"I have the last voice"

Table 8: Agency involvement in media selection

Agency involvement in media selection	Responses
No agencies are involved	2
25% Agencies, 75% Advertiser	1
Agencies and other partners somewhat involved	3
Media agency somewhat involved	2
The marketing manager makes the final decision	7

5.3.5 Today's headache of the marketer

As a concluding question respondents were asked a concluding rather open question. This concluding question revealed that the respondents seem to experience that the role of the marketer is too broad and the responsibility for marketing communication effects high. They also stated that advertising investments are difficult to measure which makes motivating advertising investments hard to do. This in turn creates extra pressure from within the organization. Therefore, many of the respondents feel that it is hard to live up to the demands of today's role of the marketer. Examples of respondents' answers to the concluding question were:

In your opinion, what is today's headache of the marketer?

"Our role has become too broad and the responsibility for marketing communication effects is high."

"Measuring advertising effects is a big problem."

"Effective measurements of advertising investments. This would help me argue better within the organization. One has such a great budget responsibility."

"Communication is difficult to judge up front. Will this work out or not?

"The biggest headache today is measurements of advertising effects."

5.4 Conclusions and Discussion

The purpose of this chapter was to answer the thesis' second main research question:

MainRQ2: Do marketing managers take the green environmental aspect into consideration when selecting media for marketing communication?

In this chapter I explored whether or not marketing managers are taking the green environmental aspect into account (i.e. thinking green[42]) with media selection for marketing communication purposes. Doing so, opened up for exploring some factors that can influence marketing managers with marketing communication planning general and green media selection in particular. Investigating this area in an exploratory fashion also allowed for an insight in the complexity that marketing managers are dealing with in practice. Investigating green environmental issues, the economic recession, agency-cooperation and its' influence on (green) media selection has brought about some further understanding on marketing managers' work in practice. In the sections that follow, I discuss the main findings of the study presented in this chapter. The chapter concludes with a discussion on some of the factors that may hinder green media selection among marketing managers.

5.4.1 The green environmental aspect and its influence on media selection

While companies seem to have documented green environmental policies, the findings indicate that environmental issues are not particularly considered among the interviewed marketing managers

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[42] Green thought or thinking green refers to "being aware of our interconnectedness with the world and reflecting on the unintended damage we cause nature in the daily course of our lives" (The Environmental Action Alliance, 2004, p.1).

when they select media for ad campaigns. Dealing with environmental issues is perceived as merely "a trend that comes and goes" which is dealt with elsewhere in the organization. Documented green environmental policies hence do not seem to lead to taking the green environmental aspect into account when the marketing managers select advertising media.

It could be argued that at the same time as public debate can be observed with regard to the green environmental aspect in relation to advertising media[43], the studied marketing managers do not seem to be picking up and/or considering such changes in consumer media attitudes. Hence, the marketing managers may miss out on being on the forefront of consumer media attitudes and thereby risk posing a competitive disadvantage.

5.4.2 Marketing communication planning and media selection

The findings indicate that year-based plans are used for marketing communication planning. These plans are usually preliminary planned and are adjusted throughout the year. The results indicate that the main factors that guide the marketing managers in their marketing communication strategy are consumers' needs, brand values, sales, objectives, a fixed media focus and budget. In line with previous studies on the limited use of academic theory in practice in general, the present study may add to this knowledge by indicating that this may also be the case for marketing managers and their work with marketing communication in general and advertising media selection in particular. In addition, the media mix selected is usually not scientifically grounded and the marketing managers did not mention at all the use of models as a factor for selecting media.

The findings also indicated that the non-use of models in practice may not be due to merely time pressures as was found in previous

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[43] See the introductory chapter as well as Chapter 2.

studies, but also due to 1) the marketing managers' perception of their roles as sometimes being too broad, 2) the marketing managers' increasing responsibility for marketing communication investments and 3) the complexity of measuring advertising effects. When marketing managers have the increasing responsibility to report advertising effects, and thereby media investments, the risk may exist that the media selection is dominated by media that can be more easily measured while media that are more difficult to measure, but are more effective for the communication objective, are overlooked.

The marketing managers claim to be often guided by their previous experience when selecting media and are therefore applying rules of thumb. When grounding media selection on mostly previous experience and rules of thumb the risk may exist to distribute resources that are not in accordance to current trends and quick changes in consumers' media behavior. Consequently, much too often the main focus will be on conventional media. According to Pickton (2005), marketing plans will not function effectively when not being adjusted to the changed technical environment of consumers.

Some other factors that influence the media selection, found in previous studies, are the budget, costs, suitability of the medium, reach and target market. This study indicates that special offers could be added to these factors. The marketing managers reported to count on receiving special offers and are even including certain flexibility for these types of offers in their marketing communication plans. Receiving special offers on for example advertising space gives way for ad-hoc media decisions.

5.4.3 The economic recession and its influence on media selection

It was found that an economic recession may affect media selection in the sense that it creates a situation where much more ad hoc decisions are being made. The findings indicate that this is caused by cuts in the marketing budget and/or an increase in competitive special offers from

various media suppliers. Furthermore, it was found that during times of economic recession, a main focus is on keeping media costs as low as possible whereby cheaper advertising media are to a greater extent opted for such as a company's own media channels, i.e. web page and in-store TV and radio.

Most of the marketing managers in this study stated that during an economic recession marketing communication plans are adjusted to a much greater extent than during a stable economy and are in some cases even totally adjusted. This is in line with previous studies on marketing strategies under economic downturn. Under stable economic conditions, the marketing managers usually count on a 20 to 25 per cent adjustment of the marketing communication plan. This flexibility in their plans is necessary to be able to make ad hoc modifications to, for example, support and boost certain product(s) sales during a specific period. During times of economic downturn the marketing managers in this study claim to increase the use of PR because of the low costs[44] involved.

This study indicates that an economic recession may also provide better negotiation opportunities for the marketing managers with media suppliers. Receiving special offers from media suppliers seem to be popular among the marketing managers in this study especially during times of economic recession which can lead to adjustments of the marketing communication plan and to more ad hoc media decisions. Additionally, an economic recession was found to affect advertising agency cooperation and the selection of advertising media. The marketing managers in this study claim to experience a better cooperation with their agencies during economic recession, whereby agencies seem to be more agreeable because of the fear of losing them as clients.

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[44] When comparing to advertising and thereby buying media space.

5.4.4 Advertiser-agency cooperation and its influence on media selection

While some of the marketing managers stated not to involve agencies at all in the media selection process, others stated that they do involve their agencies albeit to some extent. This indicates that it is primarily the marketing manager that seems to be involved in the selection of media and that the agencies' role is to give additional secondary input on the matter. This finding is considered crucial as it points out that investigating the green environmental aspect with media selection from the perspective of marketing managers, is important.

The interviewed marketing managers perceive that their role has become broad and their responsibility for marketing communication effects has increased much. In addition, they have to make sure that external agencies are delivering and cooperating well both with the company and within the agency network. There also seems to be much prestige among the agencies which could create tensions at times.

Many of the interviewed marketing managers perceive the number of collaborating agencies as being too many and wish for dealing with a less number of agencies in their agency network. This may thus be the reason why marketing managers appoint a main agency within their agency network. The main agency takes on a leading role within the agency network and is responsible for the entire project. It also has to ensure that the cooperation between the agencies is functioning well. The main agency, most often an advertising agency, is considered being the company's closest contact. Appointing a main agency creates a hierarchical structure in the network of agencies which may cause a barrier between the other agencies and the client whereby they may not be fully willing to share crucial knowledge that could benefit the client. This may include critical input on the media selection.

Rather than primarily agency performance evaluations, the findings of this study suggest that personal chemistry is a key element for good collaboration between advertisers and agencies. Compared to earlier

studies on developing advertiser-agency relationships, the findings indicate that the respondents in this study may be more similar to American than to Dutch marketing managers in the sense that they put social bonding before agency performance evaluations.

The findings also indicate that the marketing managers spend a great amount of time on selecting and building relationships with new agencies. Based on the interviews, it takes about one to one and a half year to get to know a new agency. Considering that Swedish agency collaborations last about two to three years, a great part of the total collaboration time is spent on getting to know the agency. Main reasons given for switching agencies were primarily the lack of personal chemistry (tensions) and secondary a change of brand strategy. In long-term relationships all parties have clear expectations of each other. For example when a company has decided to change its brand strategy, switching agencies may not be an optimal solution. Selecting and building relationships with new agencies demands a lot of time and other resources. Long-term agency collaborations would to a greater extent benefit the task at hand (in this case a change of brand strategy), including media selection.

5.4.5 Hinders for green media selection

By exploring the factors that influence and guide media selection for marketing communication, this study has at the same time indicated some factors that may hinder the marketing managers from more green thinking with media selection.

First, documented green environmental policies do not seem to be used for guiding marketing communication decisions such as media decisions. Companies keen on committing to care for the green environment should consider using their green policies such that it affects all the different departments of the organization in their decision making including media decisions for marketing communication purposes.

Second, the marketing managers seem to have strong personal beliefs about taking into account the green environmental aspect in their

working tasks. When green environmental issues are seen by marketing managers as merely a trend that comes and goes, marketing managers may overlook changes in consumer media attitudes and behavior as a consequence of consumers' increasing care for the green environmental. As such, the marketing managers may risk not being on the forefront of media consumption habits and thereby risk posing a competitive disadvantage

Third, the marketing managers seem to have already predisposed ideas on which media to use based on mostly their previous experience. This phenomenon can make it more difficult for the marketing managers to adapt the media selection to changes in consumer media attitudes, such as eco-harmful media perceptions. When marketing managers base media selection primarily on their previous experience, the cooperating agencies may have more difficulty to influence or advise the marketing managers with media decisions, such as the importance of taking into account the green environmental aspect of advertising media.

Fourth, the non-use of models with media selection may hinder more effective media selection in general and green media selection in particular. Selecting media based on mostly previous experience and/or rules of thumb may create a barrier for implementing integrated marketing communication (IMC) since the marketing managers may not primarily adjust and integrate the selection of media to today's rapidly changing media environment. The risk may exist that the media mix will consist of primarily conventional media whereby new types of popular and/or creative media can be overlooked and/or that the media selection will not be fully adjusted to consumers' changing media habits and media preferences for ad placements, because of for example eco-harmful media perceptions.

Fifth, the appointment of a main agency can create a number of obstacles for selecting more effective media in general and green media in particular. Namely, appointing a main agency can form a hierarchical structure in the agency network which in turn could create a barrier between the marketing manager and the other agencies. This barrier may block the other agencies from directly providing the marketing

manager with updated information on advertising media as well as on current trends in media consumption, such as eco-harmful media perceptions. As a consequence, the marketing manager might be missing out on crucial information regarding (green) media selection. When marketing managers appoint a main agency (most often the ad-agency) for their marketing communication efforts, one could also question whether the media selection will not be biased towards advertising whereby the choice of media may be chosen from a dominant advertising starting point. This may also create a barrier for implementing effective IMC and (green) media selection.

Sixth, in order to create more productive and solid collaborations the marketing managers may consider shifting their focus from short-term to long-term partnerships with their agencies by prioritizing measurement of agency performance evaluations over social bonding. By doing so, the marketing managers will not have to spend a great deal of time on selecting and building relationships with new agencies. Rather, the time saved on these types of activities could be spent on gaining updated knowledge on for example changes in consumer media habits because of continuous technical advances and consumers' increasing concern for the green environment.

The contribution of the study presented in this chapter is mainly exploratory and its primary purpose was to gain insights into the proposed research problems among Swedish marketing managers. Whether the consequences suggested in the discussion above is a general problem or not, remains thus to be settled. As such, in the following chapter (Chapter 6) I further investigate to what extent factors such as companies' documented green environmental policies, personal green beliefs and the use of media selection models, are influencing 'green thinking' among marketing managers when they make media decisions. Furthermore, in Chapter 7, I investigate to what extent marketing managers have knowledge about consumers' eco-harmful media perceptions.
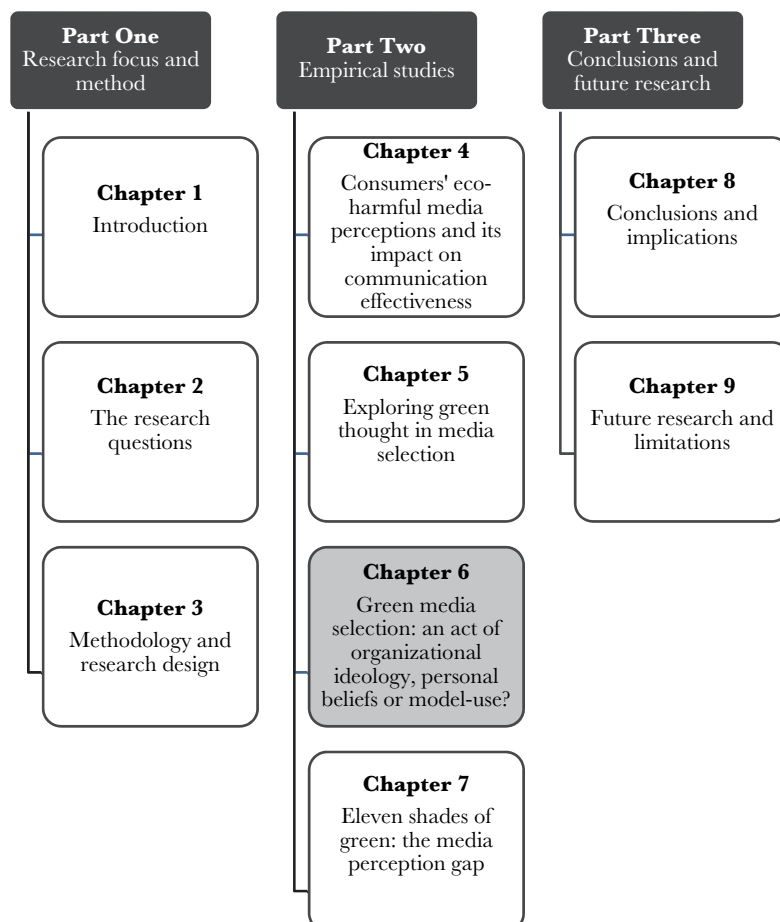
Table 9 presents a summary of the main findings of this chapter.

Table 9: Summary of the findings – Chapter 5

Topic	Finding	Guiding factors
Green thought in media selection?	No green thinking, despite documented green environmental policies. The marketing managers seem to have strong personal beliefs and opinions on green thinking. Green thinking does not seem to be particularly applied in their daily marketing tasks including media selection. Green thinking appears to be seen as a trend that comes and goes and that it is more of an issue for politicians.	Previous experience, rules of thumb, habitual media decisions.
What guides marketing communication planning?	No green thinking in marketing communication planning, despite documented green environmental policies.	Customer data, communication objective(s).
The economic recession and its influence on media selection	Even less green thinking among the marketing managers with media selection during an economic recession. A main focus is on keeping media costs as low as possible. As a result, companies' own media channels such as in-store TV and radio and its own web site are more opted for. Special offers made by media suppliers are popular during an economic recession whereby more ad-hoc media decisions are made. Economic recessions are perceived as better negotiation times with media suppliers and agencies.	Budget cuts, special offers, ad-hoc media decisions.
Advertiser-agency cooperation and its influence on media selection	The marketing managers have a leading role and make key decisions with media selection whereas the agencies' role is more secondary on this matter. It is found to be common for the marketing managers to appoint a main agency, which is often the ad agency, among their network of cooperating agencies. Mainly personal chemistry is considered crucial for good collaboration with agencies rather than agency performance evaluations. As a result, short-term versus long-term agency cooperation.	Main agency appointment creates a hierarchical structure in the advertiser-agency network which may hinder crucial input from the other agencies to the marketing manager about updated consumer media attitudes such as the importance of eco-harmful media perceptions.

Chapter 6

Green Media Selection:
An Act of Organizational Ideology,
Personal Beliefs or Model-use?

Part One Research focus and method	**Part Two** Empirical studies	**Part Three** Conclusions and future research
Chapter 1 Introduction	**Chapter 4** Consumers' eco-harmful media perceptions and its impact on communication effectiveness	**Chapter 8** Conclusions and implications
Chapter 2 The research questions	**Chapter 5** Exploring green thought in media selection	**Chapter 9** Future research and limitations
Chapter 3 Methodology and research design	**Chapter 6** Green media selection: an act of organizational ideology, personal beliefs or model-use?	
	Chapter 7 Eleven shades of green: the media perception gap	

6.1 Background

Since the 1970's, acting responsibly towards the green environment has become increasingly important for consumers such that it affects lifestyles and consumption patterns (Alwitt and Pitts, 1996; Dubey, 2008; D'Souza, 2004; Emery, 2012; Loureiro et al., 2001). Consumers' increasing care for our planet also expresses itself in consumers' increasing demands of companies to produce and market its products in more green sustainable ways (Vaccaro, 2009). Chapter 4 of the thesis showed that consumers' concern for the green environment can affect ad and brand evaluations depending on how eco-harmful a company's choice of advertising media is perceived by consumers. Because of such rather strong changes of societal value, and thereby consumer preferences, that are taking place in the market, it should also be important for marketing managers to take into account the green environmental aspect when making marketing decisions such as advertising media decisions.

An important factor for companies to be able to react on changes in the market should be the confidence that change can be handled by and within the organization's existing ideologies, procedures and actions. When such existing ideologies, procedures and actions fail to handle change, new sets of rules are necessary before new action can be undertaken because the existing behavior of the organized individuals needs to be redefined. Inflexible organizations not interested in adapting to market change often fail to react to strong changes of societal value and consumer preferences. As a consequence, such organizations can risk losing its legitimacy and resources which may eventually lead to bankruptcy (Brunsson, 2000).

The findings of the exploratory study presented in Chapter 5 pointed out that despite working at companies with green environmental policies, the green environmental aspect with media selection may not be taken into consideration with media decisions by the studied marketing managers and that they seem to have strong personal opinions about

taking into account the green environmental aspect in their daily tasks. Furthermore, the exploratory study revealed that media selection does not seem to be guided by media selection models among the interviewed marketing managers. The ambition of the present chapter is to look further into these findings and answer the third main research question of the thesis:

MainRQ3: Which are the factors that guide green media selection among marketing managers?

This chapter investigates some potential factors for guiding green media selection among marketing managers. More specifically, it will be studied to what extent the green environmental aspect is taken into account when marketing managers make media decisions. The study presented in this chapter does so by examining three central factors that may influence green thinking[45] among marketing managers.

First, this chapter investigates and compares to what extent the green environmental aspect is taken into account among marketing managers who work at companies with and without documented green environmental policies (green organizational ideology). It is considered crucial to study whether and to what extent the existing use of companies' documented green environmental policies leads to taking into account the green environmental aspect with media decisions. Doing so may reveal whether or not an adjustment in the use of such green policies is needed to enable companies to adapt better to changes in the market such as consumers' increasing demand for green marketing practices including green advertising media selection.

Second, it is examined to what extent the green environmental aspect is taken into account among marketing managers with different personal beliefs about caring for the green environment, i.e. with different green

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[45] Thinking green refers to "being aware of our interconnectedness with the world and reflecting on the unintended damage we cause nature in the daily course of our lives" (The Environmental Action Alliance, 2004, p. 1).

environmental responsibility attitudes (GERA). It is considered important to study whether marketing managers' personal beliefs about the green environment signify a predisposition to respond when it comes to media decisions.

Third, to obtain a further understanding of how marketing managers select advertising media, possible differences in media selection are investigated between those who use models for media selection (users) and those who do not use models (non-users). In particular, it is investigated and compared to what extent the green environmental aspect is taken into account with media selection among the users and non-users. Investigating possible differences between the users and non-users is considered crucial in order to discover whether or not an adjustment in the (use of) models for media selection is called for.

When reviewing the literature, no empirical study was found that investigated the determinants of green media selection or that investigates to what extent the green environmental aspect is taken into consideration when marketing managers select advertising media. However, a few empirical studies could be found that explored the factors guiding media selection among marketing managers. Among these few, Grønhaug (1972) showed that one of the factors influencing advertising media selection is the degree of determination of the marketing manager when grounding media selection on mostly previous experience of industry, which may lead to routine based decisions. Nowak et al. (1993) found that audience reach and targeting are the main determinants of media selection among marketing managers in the United States. A study conducted among Swedish marketing managers, advertising and media agencies showed that the factors that influence media selection were product type, target group, a medium's communication characteristics, the type of ad campaign, geographical focus, budget, season and availability of media space (Sandén-Håkansson, 1994).

6.1.1 Green organizational ideology versus action

According to the Environmental Performance Index (2006; 2008; 2010; 2012) Sweden belongs to the top ten most sustainable countries in the world in terms of its environmental performance based on its environmental policies (World Economic Forum, 2012)[46]. Furthermore, according to the Sustainable Competitiveness Index (SCI) Sweden is among the top three ranked countries indicating that it has "very stringent and well-enforced environmental policies, which are leading to positive outcomes" (World Economic Forum, 2012, p. 62)[47]. However, the exploratory study presented in Chapter 5 indicated that despite documented green environmental policies, green environmental aspects seem not much considered by marketing managers when they make media decisions. Accordingly, there are reasons to believe that inconsistencies between companies' green environmental policies and its actions such as advertising media selection seem to exist.

As organizations comprise of individuals with their own interpretations and opinions leading to the potential to generate great varieties of behavior, the main goal of *organization* is to achieve joint action by reducing this variety in behavior and/or potential behavior of organization members. Examples of ways for organizations to do so are to design rules to restrict behavior in a stringent way, to assign roles to provide a broader frame in which organization members can act and/or to influence organization members to perceive, interpret and evaluate events. Hence, *organizational action* is created by coordinated individual actions (Brunsson, 2000). A documented environmental policy could be seen as an example of an organization's aspiration to influence, guide

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[46] The ranking is based on 25 indicators covering environmental public health and eco-system vitality among 163 countries.

[47] Sustainable competitiveness is defined as "the set of institutions, policies, and factors that determine the level of productivity of a country while ensuring the ability of future generations to meet their own needs". The Sustainable Competitive Index (SCI) "accounts for the elements required to make competitiveness sustainable over the longer run, in economic, social, and environmental terms (World Economic Forum, 2012, p. 54).

and restrict behavior of organization members in relation to its ideology on not harming the green environment.

According to Brunsson (1993) actions are guided and controlled by an individual's set of relatively stable preferences or ideas and his/her view of the situation at hand. Thereby consistency is attained between an individual's ideas and actions. Achieving consistency and control between ideas and actions can be quite difficult for both individuals and groups. Inconsistency between ideas and actions is caused by discrepancies in 1) what can be said and what can be done, 2) requirements for idea-producing and action-producing systems, and 3) the rate at which ideas and actions are produced (Brunsson, ibid). Given this, inconsistencies between an organization's green policy and its actions such as advertising media selection could be due to the unclear facts that are available today about how harmful for the green environment various media products are during its different stages of their life cycles[48].

Problems with consistency can be solved by *justification* while problems with control can be solved by *hypocrisy*, albeit to a certain extent. Justification requires flexible ideas and actions as ideas are adjusted to action. When decision makers fail to control action, a discrepancy arises between decision and action, i.e. hypocrisy (Brunsson, ibid; March, 1978). According to March (1978) hypocrisy takes up a higher moral position as opposed to justification as "everyone is arguing for the right idea" (hypocrisy) instead of "some people defending bad actions" (justification)[49]. Hypocrisy can solve inconsistency by "what can and should be said is said, not only by ordinary people but also by important people such as executives and actors, but without the talk leading to the corresponding action" (Brunsson, 1993, p. 502). Consequently, the executive's talk and decisions can be controlled by the

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[48] Despite various findings of the environmental impact of media, researchers state that assessing, comparing and communicating the environmental impact of different media types, such as printed versus various electronic media, is still a challenging task because of the difficulty in defining its implications and that further studies are necessary (Achachlouei and Moberg, 2012). See also the introductory chapter of the thesis for a more detailed discussion on this matter.

[49] Brunsson's (1993) description of March's (1978) explanation of hypocrisy versus justification.

ideas of the public whereby consistency between ideas, talk and decisions is reached. Especially for larger organizations, it is not uncommon that executives whose role is to talk and decide are remote from the actors whose actions are evaluated. When executives are appreciated for what they say and actors' actions are evaluated a gap may appear between an organization's ideas and actions. Furthermore, executives tend to reinforce interpretations that talk and decisions are supposed to lead to action. It is therefore not uncommon for companies to formulate their talk and decisions as goals and visions for the future. This type of hypocrisy is a way for an organization to solve the discrepancy between ideas and goals. By doing so, today's actions of an organization are excused and instead its ideas are referring to *the future*. For example "The only chance of getting pollution accepted today may be to claim that the goal or plan is to reduce or stop in the future" (Brunsson, ibid, p. 502).

Based on the above discussion and on the findings of the exploratory study (Chapter 5) that indicated that the green environmental aspect does not seem to be taken into account by marketing managers with media selection – *despite companies' having green environmental policies* – I hypothesize that inconsistency exists between organizational ideas (documented green environmental policies) and its actions (selection of advertising media). Hence, the following hypotheses are to be tested:

> H1a: When selecting advertising media, there is no difference in the extent to which a medium's green characteristics are taken into account between marketing managers working at companies with green environmental policies and those working at companies without such policies.

> H1b: There is no difference in the extent to which marketing managers, working at companies with green environmental policies and those working at companies without such policies, believe that consumers care about how harmful for the environment a medium is.

6.1.2 Green personal beliefs

Green environmental responsibility attitude (GERA)

With regard to theory of marketing ethics, it is postulated that an *employee's* personal ethical beliefs influence ethical decision-making, besides his or her professional and organizational environment (Hunt and Vitell, 1986; 1993; Chiou and Pan, 2008). According to Stiff and Mongeau (2003) attitudes are reflected in a set of beliefs about an object or situation and signify a predisposition to respond. An established predisposition directs behavior when similar attitude objects are being met. For example, when a person has a negative attitude towards smoking, it is likely that he or she would refuse a cigarette offered by a friend. Should this attitude be extremely negative, he or she would even be motivated in joining an anti-smoking movement to promote smoking resistance among teenagers.

The findings presented in Chapter 4 showed that advertising media that consumers perceive as more eco-harmful can negatively impact ad and brand evaluations. As mentioned in Chapter 4, a plausible explanation for why consumers' eco-harmful media perceptions can affect ad and brand evaluations may be due to consumers feeling personal responsible for caring for the green environment such that, in their role as consumers, they avoid or even boycott specific types of advertising media and/or brands that are associated with harming the green environment. Consumers are thereby indirectly demanding of companies to act more responsible towards the green environment by for example making use of, what consumers perceive as less eco-harmful advertising media. It could thus be inferred that consumers' attitudes toward green environmental responsibility can affect their perceptions of advertising media. In a similar fashion, it can be assumed that marketing managers' personal beliefs and attitudes toward green environmental responsibility can influence their marketing decisions such as media decisions.

When reviewing the literature on green environmental responsibility attitudes (henceforward termed GERA) it was found that it is closely linked to theory on socially responsible consumption behavior. Socially responsible consumption is defined as "those consumer behaviors and purchase decisions which are related to environmental and resource-related problems and are motivated not only by a desire to satisfy personal needs, but also by a concern for the welfare of society in general (Antil, 1984, p. 35; Antil and Bennett, 1979, pp. 64-65).

Based on the above discussion, the following hypotheses are to be tested:

H2a: When selecting advertising media, marketing managers with high GERA scores take a medium's green characteristics more into account than marketing managers with low GERA scores.

H2b: Marketing managers with high GERA scores believe to a larger extent than marketing managers with low GERA scores that consumers care about how harmful for the green environment a medium is.

6.1.3 The use and non-use of models for media selection

Solving problems and making choices are most often presented as central management tasks. The purpose of tools such as models is to help managers in making choices between alternatives and thereby in finding the right solutions (Brunsson, 1993). Marketing managers and other practitioners are the ultimate intended users of theories and models that have come forth from scientific research in marketing. Scientific knowledge seeks to give explanation, prediction and comprehension of phenomena. The purpose of marketing theory and models is thus to advance marketing knowledge by helping practitioners in understanding

core issues and guiding key decisions in practice (Hanssens et al., 2005; Otteson and Grønhaug, 2004). However, studies have found that managers in practice dedicate little time on tasks such as decision-making, problem-solving and making choices. The findings from the exploratory study in Chapter 5 pointed out that the use of models do not seem to be considered by marketing managers with their task of selecting advertising media. This seems to be in line with prior studies stating that the actual use of academic theory such as models by intended user groups is limited (e.g. Ankers and Brennan, 2002; Caplan et al., 1975; Gabriel et al., 2006; Grønhaug and Haukedal, 1997; Hambrick, 1994; Knorr, 1977; Lee et al., 1987). When further reviewing the literature on media selection among practitioners, it was argued that there is an increasing concern about the accuracy and usefulness of media selection models and that there is a need for change in the methods of media planning and effective implementation (Leckenby and Kim, 1993; Jenkinson, 2006).

Chapter 5 further indicated that the studied marketing managers tend to base media selection on their previous experience and rules of thumb, however not on tools such as models, when selecting media for ad campaigns. According to Ellison and Fudenberg (1993) rules of thumb are simplistic strategies that are applied for making decisions and that have worked well in the past. Because of the success factor in past decisions, such rules of thumb become popular as they are believed to be able to lead to better decisions. Decisions based on rules of thumb can hence be better explained. Simon (1997) brings forward the use of *intuition* or *gut feeling* as one of the premises for decision-making and explains that a large part of the decision-making process is spent on intuition or gut feeling and even on guessing. Decisions are thereby adapted to the situation and the limited resources available.

The literature review revealed that no previous study has examined the use or non-use of media selection models among *marketing managers*. However, prior studies on the use or non-use of models among *advertising agencies* were found. For example, a study on the non-use of models in practice by Gabriel, Kottasz and Bennett (2006) investigated the extent

to which advertising models are used in practice among advertising agencies. They found that there is substantial lack of knowledge of formal models and that more than one third of the sample avoided models altogether. The non-adoption of formal models was explained by limited knowledge dissemination and resource constraints such as time pressures, and the lack of employees with the necessary knowledge. Cohen and Levinthal (1990) found additional reasons for not using models in practice, i.e. practicians find the knowledge of no use or do usually not understand how to use the models based on research information.

Current marketing models do not seem to give way for taking into account the green environmental aspect in media selection. For example, according to the basic media planning model (see Chapter 2 for a detailed discussion) a crucial task of media planning is a careful assessment of the media habits of the target audience (De Pelsmacker et al., 2007). However it does not include assessing consumer media attitudes as a consequence of attitude changes that are of societal value such as consumers' eco-harmful media perceptions. Furthermore, basic advertising models such as Kotler's Five M's (see Chapter 2 for a detailed discussion) does not include taking into account the social responsibility aspect with regard to media decisions such as taking into account the green characteristics of a medium. Given this, it is reasonable to assume that the use of current media selection models may lead to inflexibility and thereby in risking to overlook the green environmental aspect with media selection. Similarly, the non-use of media selection models may lead to more flexibility and thus to more "outside the box' thinking with media decisions. As such it is assumed that the use of models with media selection may lead to taking the green environmental aspect less into account than the non-users of models.

> H3a: When selecting advertising media, the users take a medium's green characteristics less into account than the non-users.

H3b: The users believe to a less extent than the non-users that consumers care about how harmful for the green environment a medium is.

6.2 Method

The target sample comprised 499 members[50] of the Association for Swedish Advertisers (ASA). The response rate was 39 per cent (193 respondents). In Chapter 3 the data collection and sample characteristics of this study are presented in further detail. An overview of the present study is presented in Table 1 at the end of this section.

6.2.1 Measures

The dependent variables

Taking into account a medium's green characteristics with media selection

To measure to what extent a medium's green characteristics are taken into consideration with media selection, the respondents were asked to rank 10 factors that would guide them with media selection in order of importance. This was based on the question "When you are selecting media for an ad campaign, what is mostly guiding your choice? Please rank the following factors where 1 = guides the most and 10 = guides the least[51]. The factors to be ranked were, the medium's measurability, reach/frequency/impact, product type, target group, the communication objective, the medium's green characteristics, the medium's communicating characteristics, consumers' media attitudes, availability of media space and budget/cost related criteria. These

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[50] The members of ASA are most often marketing managers or managers with similar titles.

[51] For the purpose of providing a more clear and consistent illustration of the results, when conducting the t-test the original values were reversed in SPSS so that 1 = guides the least and 10 = guides the most.

factors were based on Sandén-Håkansson's (1994) findings as well as on the findings from the exploratory study presented in Chapter 5 when exploring the factors guiding (green) media selection among marketing managers.

Beliefs of consumers' concern about a medium's green characteristics

The respondents' *beliefs about how much consumers care about a medium's green characteristics* were measured with the following question: "To what extent do you believe that consumers care about how harmful for the environment a medium is?" (Scale: 0 = not at all, 10 = to a very great extent).

The use and non-use of models for media selection

To measure *the use of models for media selection* among the respondents, the following question was posed: "To what extent do you base media selection for ad campaigns on models?" (Scale: 0 = not at all, 10 = to a very great extent). This was followed by a second question: "If one or more models are used when selecting media for an ad campaign, what are these models called?". The two response options were: 1 = I never use models and 2 = I use the following models. The latter was followed by a [TEXT] area. It was found that 43 per cent of the respondents who stated in the first question that they use models for media selection stated in the subsequent second question that they never use models. Upon observing this response behavior in the data, it was decided to disregard the first question. Thereby the focus was on analyzing the second question for measuring the use of models for media selection among the respondents. In the present study, the use of models is a variable to study whether or not the use of current models lead to taking the green environmental aspect more (or less) into account than the non-use of models. Its purpose is to identify general properties that are taking into account when marketing managers are using current models for media selection. Its purpose is hence not to investigate for example, which types of media selection models are more efficient than other alternative media selection models. As such, all of the respondents who reported to make

use of media selection models, regardless of their subsequent response to specific models used, including those who at the time of the survey could not recall the exact model names, were treated as users of media selection models.

To assess *the extent to which the respondents base media selection on other factors than models such as previous experience, rules of thumb and gut feeling*, the following questions were posed: "To what extent do you base media selection for ad campaigns on your previous experience?" (Scale: 0 = not at all, 10 = to a very great extent), "To what extent do you base media selection for ad campaigns on your gut feeling?" (Scale: 0 = not at all, 10 = to a very great extent), and "To what extent do you base media selection for ad campaigns on rules of thumb?" (Scale: 0 = not at all, 10 = to a very great extent).

The independent variables

Documented green environmental policies

To measure *the extent to which the respondents work for companies with and without documented environmental policies* respectively, the following question was posed "Does the company you work for have a documented environmental policy?" (Scale: 1 = yes, 2 = no, 3 = I don't know). Respondents answering with 'I don't know' will be analyzed on the same level as those working at companies without documented green environmental policies as they are unaware of having such policy even if the company they work at would have one.

Green environmental responsibility attitude (GERA)

The following 10 items were used to measure *green environmental responsibility attitude* (inspired by Antil and Bennett, 1979 and Antil, 1984): "I am very concerned about the environmental situation of today", "I do everything I can in my everyday life in order not to contribute to harm the environment", "In order to preserve the environment I print out paper as little as possible", "I will stop buying products from companies

that are guilty of harming the environment even if it would create discomfort for me", "I am very precise with paper being sorted and recycled", "I don't think that there are any serious environmental problems today", "Companies have a big responsibility not to harm the environment", "Companies should do everything they can not to harm the environment", "To care for the environment is the responsibility of the government and the parliament" and "The parliament should impose stricter laws for harming the environment" (Scale: 0 = completely disagree, 10 = completely agree).

To compose an index, these 10 items were first subjected to principal component analysis (PCA) to check whether one or more factors were to be formed. Prior to performing the PCA, suitability of data for factor analysis was assessed. Inspection of the correlation matrix revealed the presence of many coefficients of .3 and above. The Kaiser-Meyer-Olkin value was .85, exceeding the recommended value of .6 (Kaiser, 1970, 1974) and Bartlett's Test of Sphericity (Bartlett, 1954) reached statistical significance, supporting the factorability of the correlation matrix. Principal component analysis revealed the presence of two components. However, the results of the PCA showed the items loadings on the two components with eight loadings on Component 1 and only two loadings on Component 2. It was then decided to retain the ten items and thereby the composition of one index. To improve the Cronbach alpha coefficient, reliability analysis among the ten items suggested one item to be deleted, i.e. *"I don't think that there are any serious environmental problems today"*. Green environmental responsibility attitude was then measured with the nine remaining items. Responses were averaged to form the index named GERA. The Cronbach alpha coefficient of GERA was .80.

To measure *the impact of different personal beliefs about caring for the green environment on taking the green environmental aspect into account with media decisions*, a new categorical variable was created by way of visual binning in SPSS from the GERA-index. This new categorical variable uses the integer values 1 or 2 to represent Low GERA (< 6) and High GERA (≥ 6). Accordingly, GERA was divided into two groups whereby Low GERA represents the group of those who to some extent are committed

to caring about the green environment and High GERA represents those who to a great extent are committed to caring about the green environment. The cut point for 'Low GERA' was set at < 6 as the subjects' responses were found to be rather skewed to the right, resulting in insufficient subjects ($n < 30$) ending up in the 'Low GERA' group should a lower cut point be used.

Table 1: Overview of Chapter 6 – green media selection among marketing managers

Factors	Focus	H	Unit of analysis	Statistical analysis
Green organizational ideology	- Taking into account a medium's green characteristics with media selection	H1	Green environmental policy vs. no policy	- Independent samples t-tests - PCA
Green personal beliefs	- Taking into account consumers' concern about a medium's green characteristics with media selection	H2	Low vs. High GERA	
Model-use		H3	Users vs. non-users	

6.3 Analysis and Results

To test H1 – H3, independent samples t-tests were conducted to compare to what extent the green environmental aspect is considered with media selection among the respondents who 1) work at companies with and without documented environmental policies, 2) have low and high GERA scores and 3) use and do not use media selection models.

6.3.1 Green organizational ideology

Green environmental policies

The hypotheses to be tested were:

> H1a: When selecting advertising media, there is no difference in the extent to which a medium's green characteristics are taken into account between marketing managers working at companies with green environmental policies and those working at companies without such policies.

> H1b: There is no difference in the extent to which marketing managers, working at companies with green environmental policies and those working at companies without such policies, believe that consumers care about how harmful for the green environment a medium is.

An overall assessment showed that 79.4 per cent of the respondents work at companies with documented green environmental policies while 16.8 per cent stated to work at companies without such green policies. A large majority of the respondents thus work at companies with such policies. Among the respondents 3.7 per cent reported not to know whether their companies have green environmental policies.

The results of the independent samples t-tests showed no significant difference in the extent to which a medium's green characteristics are taken into account between the respondents working at companies with green environmental policies ($M = 2.27$, $SD = 1.58$) and those working at companies without such policies ($M = 2.00$, $SD = 1.70$; $t (105) = .824$, $p = .412$, two-tailed). Thus, the results support H1a.

A general assessment showed that the respondents, those working at companies with *and* without environmental policies, believe to some extent that consumers care about how harmful for the green environment a medium is ($M = 4.52$, $SD = 2.42$). However, no

significant difference was found for the extent to which the respondents believe that consumers care about how harmful for the green environment a medium is between those who work at companies with documented green environmental policies (M = 4.67, SD = 2.39) and those who work at companies without such green policies (M = 3.95, SD = 2.50; t (105) = 1.24, p = .217, two-tailed). Thus, H1b is supported.

These findings point out that a company's documented green environmental policy does not significantly affect the respondents with regard to 1) taking into account a medium's green characteristics with media selection and, 2) the extent to which they believe that consumers care about how harmful for the green environment a medium is. The rather small mean values suggest that the green environmental aspect is to the same little extent taken into account by the respondents working at companies with and without documented green environmental policies.

Table 2 below presents an overview of these findings.

Table 2: Results for H1 – Green environmental policies and green media selection

Green considerations	Yes green policy n=85 M (SD)	No green policy n=22 M (SD)	t	P	η^2
Taking a medium's green characteristics into consideration with media selection	2.27 (1.58)	2.00 (1.70)		n.s.	
To what extent do you think consumers care about how harmful for the green environment a medium is?	4.67 (2.39)	3.95 (2.50)		n.s.	

Note: Scale: 0 = not at all, 10 = to a very great extent

6.3.2 Green personal beliefs

Green environmental responsibility attitude (GERA)

The hypotheses to be tested next were:

> H2a: When selecting advertising media, marketing managers with high GERA scores take a medium's green characteristics more into account than marketing managers with low GERA scores.

> H2b: Marketing managers with high GERA scores believe to a larger extent than marketing managers with low GERA scores that consumers care about how harmful for the green environment a medium is.

An overall assessment revealed that 70.8 per cent ($n = 75$) of the respondents scored high on GERA whereas 29.2 per cent ($n = 31$) scored low on GERA. These results thus suggest that the majority of the respondents seem to have strong personal belief to care for the green environment.

The results showed a rather weak significant difference ($p < .10$) for taking a medium's green characteristics into consideration between the respondents with Low GERA scores ($M = 1.90$, $SD = 1.16$) and High GERA scores ($M = 2.35$, $SD = 1.74$; $t(83) = -1.53$, $p = .065$, one-tailed). Thus, H2a is supported at $p < .10$). The rather small mean values point out that a medium's green characteristics are only somewhat taken into account when the respondents select media, but the difference as to the scale used can be called rather small. The results showed significant differences in the beliefs of consumers' concern about a medium's green characteristics between the respondents with low GERA scores ($M = 3.68$, $SD = 2.21$) and high GERA scores ($M = 4.48$, $SD = 2.43$, $t(61) = -2.39$, $p = .010$, one-tailed). These findings show that the respondents with high GERA scores believe to a larger extent than those

with low GERA scores that consumers care about a medium's green characteristics. Thus, the results support H2b.

See Table 3 below for an overview of these findings.

Table 3: Results for H2 – GERA and green media selection

Green considerations	Low GERA n=31 M (SD)	High GERA n=75 M (SD)	t	p	η^2
Taking a medium's green characteristics into consideration with media selection	1.90* (1.16)	2.35 (1.74)	-1.53	.065	.02
To what extent do you think consumers care about how harmful for the environment a medium is?	3.68** (2.21)	4.84 (2.43)	-2.39	.010	.05

Note: **) $p < .01$; *) $p < .10$; Scale: 0 = not at all, 10 = to a very great extent

6.3.3 The Use and Non-use of Models for Media Selection

The hypotheses to be tested next were:

H3a: When selecting advertising media, the users take a medium's green characteristics less into account than the non-users.

H3b: The users believe to a less extent than the non-users that consumers care about how harmful for the green environment a medium is.

An overall assessment showed that only 36 per cent ($n = $ 69) of the respondents reported to use media selection models (users) while 64 per cent ($n = $ 124) stated to never use any model when selecting advertising media (non-users). Accordingly, these results indicate that the majority of the respondents do not make use of models with media selection. Based on this finding it can be inferred that whereas prior studies found that practitioners working at *advertising agencies* tend to avoid using models altogether and that a substantial lack of knowledge of formal models exists among them (Cohen and Levinthal, 1990; Gabriel et al., 2006), the present study expands these prior findings by showing that such seems to be the case also among *marketing managers* when they work with media selection.

When asking about the explicit names of the media selection models used, the users mentioned either the specific media selection models they use, that they use models developed by their own organizations or by their cooperating agencies, that they use models in combination with statistics on media consumption or that they cannot recall the specific names of the media selection models.

A further assessment of basing media selection on previous experience, rules of thumb and gut feeling showed that the respondents to a rather great extent make use of their previous experience when selecting advertising media ($M = $ 6.33, $SD = $ 1.87, $n = $ 191). This supports the findings of the exploratory study on factors guiding (green) media selection presented in Chapter 5 that indicated that such seems to be the case among the marketing managers studied. The results also showed that the respondents make quite some use of their gut feeling when selecting media ($M = $ 4.14, $SD = $ 2.24, $n = $ 191) as well as of rules of thumb ($M = $ 4.17, $SD = $ 2.41, $n = $ 188).

To compare basing media selection on previous experience, rules of thumb and gut feeling among the users and non-users, the results of the independent samples t-tests showed significant differences. Significant differences ($p < $ .05) were found for basing media selection on previous experience between the users ($M = $ 6.80, $SD = $ 1.62) and non-users ($M = $ 6.13, $SD = $ 1.95; t (176) = -2.32, $p = $ .011). Based on these results it

can be inferred that the users to a larger extent than the non-users tend to base media selection on their previous experience with making media decisions.

The results showed also significant differences (p < .05) for basing media selection on rules of thumb between the users (M = 4.56, SD = 2.48) and the non-users (M = 3.83, SD = 2.40; t (176) = -1.92, p = .028). These findings indicate that the users base media selection to a greater extent than the non-users on rules of thumb.

A rather weak significant difference (p < .10) was found as to basing media selection on the use of gut feeling between the users (M = 3.73, SD = 2.18) and the non-users (M = 4.25, SD = 2.22; t (176) = 1.51, p = .067. This suggests that the non-users base media selection to some extent more than the users on their gut feeling. Table 4 below presents an overview of these findings.

Table 4: The use of experience, gut feeling and rules of thumb with media selection

	Users n=64 M (SD)	Non-users n=114 M (SD)	t	p	η^2
Previous experience	6.80** (1.62)	6.13 (1.95)	-2.32	.011	.03
Rules of thumb	4.56** (2.48)	3.83 (2.40)	-1.92	.028	.02
Gut feeling	3.73* (2.18)	4.25 (2.22)	1.51	.067	.01

Note: **) $p \le$ .05; *: $p \le$ .10; Scale: 0 = not at all, 10 = to a very great extent

To test H3, the results of the independent samples t-test showed some significant findings ($p < .05$) between the users and non-users. A medium's green characteristics was found to be taken *less* into account by the users ($M = 1.88$, $SD = 1.22$) than the non-users ($M = 2.47$, $SD = 1.71$; t (153) $= 2.54$, $p = .006$, one-tailed). Thus, support was found for H3a. However, the difference as to the scale used is rather small, which suggests that a medium's green characteristics are very little taken into account by both the users and non-users when they select media.

With regard to the belief about how much consumers care about a medium's harmfulness to the green environment, no significant difference was found between the users ($M = 4.48$, $SD = 2.45$) and the non-users ($M = 4.55$, $SD = 2.41$, t (105) $= .16$, $p = .437$, one-tailed). Thus, the results did not support H3b. An observation of the mean values suggests that the users and the non-users alike believe to a rather small extent that consumers care about how harmful for the green environment a medium is.

An overview of the findings is presented in Table 5 below.

Table 5: Results for H3 – model use and green media selection

Green considerations	Users n=59-67 M (SD)	Non-users n=40-105 M (SD)	t	P	η^2
Taking a medium's green characteristics into consideration with media selection	.88** (1.22)	2.47 (1.71)	2.54	.006	.04
To what extent do you think consumers care about how harmful for the environment a medium is?	4.48 (2.45)	4.55 (2.41)		n.s.	

Note: **) p < .05; Scale: 0 = not at all, 10 = to a very great extent

Further assessment of the factors that guide marketing managers with media selection revealed that a medium's green characteristics are

among the two last factors considered when the respondents select advertising media (see Table 6).

Table 6: Factors guiding media selection in rank order

Users [n = 59]	Non-users [n = 105]
1. Communication objective of the ad campaign	1. Target group
2. Target group	2. Communication objective of the ad campaign
3. Reach, frequency, impact	3. Reach, frequency, impact
4. Budget, media and production costs, time	4. Budget, media and production costs, time
5. The medium's communicating characteristics	5. The medium's measurability
6. Consumers' media attitudes	6. The medium's communicating characteristics
7. The medium's measurability	7. Product type
8. Product type	8. Consumers' media attitudes
9. Availability of media space	9. The medium's green characteristics
10. The medium's green characteristics	10. Availability of media space

Note: 1 = factor guiding media selection the most, 10 = factor guiding media selection the least

It was also revealed that taking into account consumers' media attitudes showed to be a more important factor[52] for the users (M = 5.03, SD = 2.04) than for the non-users (M = 4.24, SD = 2.20; t (162) = -2.28, p = .024, two-tailed). These findings suggest that compared to the non-users, the users take consumers' media attitudes more into consideration with media selection, at the same time as the users do not consider consumers' eco-attitudes with media selection. Product type tend to be a more important factor for the non-users (M = 5.28, SD = 2.36) than for the users (M = 4.34, SD = 2.46; t = 2.41, p = .017, two-tailed).

Some weaker differences were also found (at $p \leq$ .10). The medium's measurability seems to be somewhat more important for the non-users

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[52] For this part of the analysis the original scale was reversed.

(M = 5.60, SD = 2.25) than for the users (M = 4.93, SD = 2.16; t = 1.85, p = .066, two-tailed). On the other hand, the communication objective of the ad campaign was found to be somewhat more important for the users (M = 8.85, SD = 1.49) than for the non-users (M = 8.35, SD = 1.72; t = 1.86, p = .065, two-tailed).

See Table 7 for an overview of these findings.

Table 7: Factors guiding media selection among the users and non-users

Factors guiding media selection	Users n = 59 M (SD)	Non Users n = 105 M (SD)	t (df)	p	η^2
Communication objective of the ad campaign	8.85* (1.49)	8.35 (1.72)	-1.86 (162)	.065	.02
Target group	8.64 (1.36)	8.59 (1.78)		n.s.	
Reach, frequency, impact	7.31 (1.55)	7.25 (1.98)		n.s.	
Budget, media and production costs, time etc.	5.80 (2.16)	5.72 (2.42)		n.s.	
The medium's communicating characteristics	5.73 (2.27)	5.32 (2.05)		n.s.	
Consumer media attitudes	5.03** (2.04)	4.24 (2.20)	-2.28 (162)	.024	.03
The medium's measurability	4.93* (2.16)	5.60 (2.25)	1.85 (162)	.066	
Product type	4.34** (2.46)	5.28 (2.36)	2.41 (162)	.017	.04
Availability of media space	2.49 (1.38)	2.18 (1.31)		n.s.	
The medium's green characteristics	1.88** (1.22)	2.47 (1.71)	2.54 (153)	.006	.04

Note: **) $p \le$ .05; *) $p \le$ .10; Scale: 1 = guides the least, 10 = guides the most

6.4 Conclusions

The purpose of this chapter was to answer the third main research
question of the thesis:

*MainRQ3: Which are the factors that guide green media selection among marketing
managers?*

This chapter investigated some factors for guiding green media selection
among marketing managers that have come forth from the findings of
the exploratory study in Chapter 5. It was studied whether and to what
extent some central factors can impact the extent to which marketing
managers take the green environmental aspect into consideration when
making media decisions. The chapter has done so by examining green
thinking[53] with media selection among marketing managers who 1) work
at companies with and without documented green environmental
policies (green organizational ideology), 2) have different personal beliefs
about committing to care for the green environment, i.e. green
environmental responsibility attitudes (GERA), and 3) use or do not use
models for media selection (users or non-users).

6.4.1 Green organizational ideologies

Despite that nearly 80 per cent of the studied marketing managers was
found to work at companies *with* documented green environmental
policies, this chapter showed that the green environmental aspect is
among the factors that are the *least* taken into account when marketing
managers   make   media   decisions.   Thus,   documented   green

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[53] Green thinking refers to "being aware of our interconnectedness with the world and reflecting on the
unintended damage we cause nature in the daily course of our lives" (The Environmental Action
Alliance, 2004, p. 1). In this thesis green thinking refers to taking into account the green
environmental aspect with decisions such as in this case media decisions.

environmental policies do not necessarily lead to marketing managers taking the green environmental aspect more into account with marketing decisions, such as media decisions, compared to those working at companies *without* such green policies. This chapter thus showed that problems with consistency seem to exist between organizational ideologies (such as green environmental policies) and action (such as media selection).

In addition, the marketing managers believe only somewhat that consumers care about how harmful for the green environment an advertising medium is, whether or not they work at companies with green environmental policies. This finding points out that marketing managers do not seem to be aware of the fact that consumers' eco-harmful media perceptions can impact ad and brand evaluations, as was shown in Chapter 4. However, the results from this chapter support the findings from the exploratory study presented in Chapter 5 where it was pointed out that such inconsistency at companies may exist. When considering that consumers are adapting their preferences as a consequence of their increasing concern for contributing to societal value, such as caring for the green environment, they may also put stronger demands on companies' ideologies whereby inconsistent actions of these companies are monitored, identified and exposed to the public. As a result, companies need to employ justification or hypocrisy to solve such inconsistencies[54]. To prevent the need for justification or hypocrisy, companies should make adjustments regarding the way in which these types of green policies are used in practice within their organizations. To maintain consistency between green organizational ideologies and action, it is suggested to use green policies as guidelines when taking all types of decisions throughout the organization, including media decisions.

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[54] Problems with consistency between organizational ideology and action can be solved by justification and hypocrisy whereby everybody in the organization is arguing for the right idea, i.e. hypocrisy or whereby people are defending bad actions, i.e. justification (Brunsson, 2000; March, 1978). See also the background of this chapter.

6.4.2 Green personal beliefs

It was also investigated to what extent marketing managers' personal beliefs about caring for the green environment impact green thinking with media selection among marketing managers, i.e. green environmental responsibility attitudes (GERA). It was found that a majority (70.8 per cent) of the marketing managers are to a great extent committed to caring for the green environment (High GERA) whereas a minority (29.2 per cent) is only to some extent committed (Low GERA).

Marketing managers with a high GERA believe to a larger extent that consumers care about how harmful for the green environment an advertising medium is compared to those with a low GERA. In addition, marketing managers with a high GERA also tend to take a medium's green characteristics rather more into consideration than those with a low GERA, when selecting advertising media.

This chapter has shown that marketing managers with strong green personal profiles (GERA) tend to take the green environmental aspect more into account when making marketing decisions such as media selection. As such, these findings contribute to the extensive literature on attitudes stating that beliefs on an object or situation signify a predisposition to respond (Stiff and Mongeau, 2003), in the sense that strong personal beliefs about caring for the green environment can affect decisions made within the organization the person is working at such as media decisions. For practice, these findings suggest that it can be to a company's advantage to recruit marketing managers with strong green environmental responsibility attitudes (GERA). In particular, companies that are committed to taking part in caring for the green environment and that wish to be associated as such through their (green) marketing communication decisions.

6.4.3 Model-use and the lack of green thought in existing models

It was found that 64 per cent of the studied marketing managers claim not to make use of models for media selection. The study presented in this chapter thereby contributes to prior studies on the non-use of models in practice (Ankers and Brennan, 2002; Caplan et al., 1975; Gabriel et al., 2006; Grønhaug and Haukedal, 1997; Hambrick, 1994; Hanssens et al., 2005; Lee et al., 1987; Otteson and Grønhaug, 2004). The findings of this chapter expand these prior studies by showing that the non-use of models also exists among *marketing managers* with *media selection*.

Both differences and commonalities were found between the marketing managers who use models (users) for media selection and those who never use any model (non-users). It was found that the non-users tend to take a medium's green characteristics *more* into account than the users when selecting media. Nonetheless, the green environmental aspect is considered to be one of the two least important factors for guiding media selection among the users and non-users (the other factor is availability of media space).

Interestingly, at the same time as it was found that the users consider consumers' general media attitudes to be a more important factor than the non-users, the users and non-users alike believe equally little that consumers care about how harmful for the green environment an advertising medium is.

An explanation for overlooking the green environmental aspect with media selection could be the lack of a green environmental responsibility review in the existing marketing models. This chapter has pointed out that there is a lack of green thought in existing model use with media selection. As a medium's green characteristics has shown to impact communication effectiveness (Chapter 4) and thereby that consumers care about how harmful for the green environment an advertising medium is, there is a need to adjust existing models for media selection whereby green thought should be included in the models. The findings

thus support the line of argument presented in Chapter 2 where it was argued that in the current (green/sustainable) marketing literature a major focus is on *message content* for communicating to consumers while there seems to be a lack of green focus on the medium itself that *carries* the message.

Flaws in current approaches to model use in practice

Based on the findings that have come forth from this chapter one could reason that the preferred green ideal profile for a marketing manager would be someone who never uses any model for marketing decisions (non-user) and who is strongly committed to taking care for the green environment (High GERA). However, before taking such hasty conclusions the way in which existing models are being used in practice should be evaluated.

According to the findings, marketing managers to a rather great extent base media selection on their *previous experience* when selecting media. This supports the findings of the exploratory study presented in Chapter 5 which indicated that such seems to be the case among marketing managers. The results from this chapter also showed that the marketing managers base media selection to quite some extent on *rules of thumb* as well as on *gut feeling*.

It was further found that the users to a larger extent than the non-users tend to base media selection on their previous experience and rules of thumb when making media decisions whereas the non-users base media selection to some extent more than the users on their gut feeling. It can be inferred that the current use of models for media selection by marketing managers may be too much influenced by previous experience and rules of thumb. Consequently, this may lead to routine based decisions and inflexibility whereby changes in the behavior/attitude of consumers, such as the increasing importance of a medium's green characteristics, are overlooked. The non-users, who make less use of previous experience and rules of thumb than the users, may be more open to observations of consumers' changing media behavior and

preferences. Hence, when using models the marketing manager should not allow his/her previous experience to influence the media selection to such an extent that when mapping the preferences of consumers, some crucial changes in consumers' behavior, such as consumers' increasing concern for the green environment, are unnoticed.

Based on the results it can be concluded that the users tend to restrict their decision-making by basing it on what is already known[55], i.e. past experience and rules of thumb. This may lead to the inflexibility to adapt to change. In contrast, the non-users seem to be more flexible, as there seem to be no such restriction. The lack of such restrictions facilitates the non-users to be more open (using their gut feeling) and also more susceptible to change. Marketing managers' current approaches to model-use for media selection do not seem to give way for adaptations to changing consumers perceptions as a consequence of consumers' increasing concern for the green environment. Therefore, in addition to the need of an adjustment in the existing models, as discussed above, a new approach to model use is suggested whereby the media selection should not be too much influenced by the marketing managers' previous experience and rules of thumb. Otherwise, the risk exists that new factors are overlooked, such as consumers' changing advertising media attitudes as a result of consumers' increasing concern for the green environment. Advertising media attitudes and in particular eco-harmful media perceptions, are central in the subsequent chapter of the thesis.

Table 13 below provides an overview of the findings of this chapter.

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[55] Marketing managers' existing knowledge within the framework of models, rules of thumb and previous experience when selecting advertising media. Knowledge outside this framework may not be actively sought after.
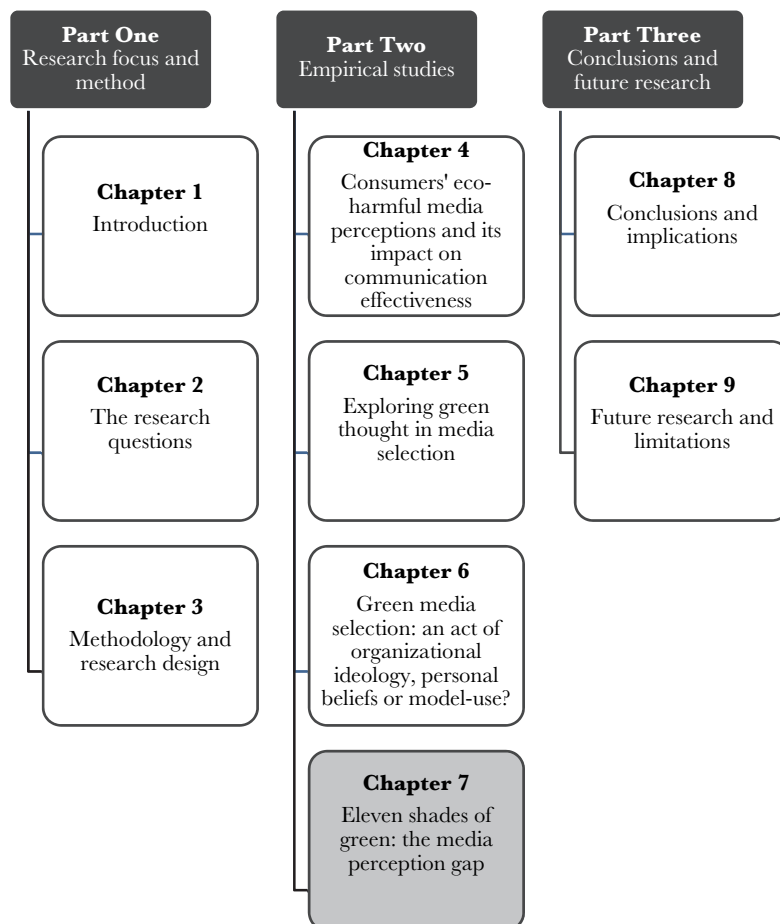
Table 13: Summary of the findings – Chapter 6

Media Selection	Green Policy		GERA		Model Use	
	Yes	No	High	Low	Yes	No
Taking into account a medium's green characteristics with media selection	0	0	+	–	–	+
To what extent do you think consumers care about how harmful for the environment a medium is?	0	0	+	–	0	0
Taking into account consumers' media attitudes with media selection	x	x	x	x	+	–
Basing media selection on previous experience	x	x	x	x	+	–
Basing media selection on rules of thumb	x	x	x	x	+	–
Basing media selection on gut feeling	x	x	x	x	–	+

Note: +) to a greater extent; –) to a less extent; 0) no difference; x) not studied

Chapter 7

Eleven Shades of Green:
The Media Perception Gap

Part One Research focus and method	Part Two Empirical studies	Part Three Conclusions and future research
Chapter 1 Introduction	**Chapter 4** Consumers' eco-harmful media perceptions and its impact on communication effectiveness	**Chapter 8** Conclusions and implications
Chapter 2 The research questions	**Chapter 5** Exploring green thought in media selection	**Chapter 9** Future research and limitations
Chapter 3 Methodology and research design	**Chapter 6** Green media selection: an act of organizational ideology, personal beliefs or model-use?	
	Chapter 7 Eleven shades of green: the media perception gap	

7.1 Background

Hitherto, the thesis has showed that consumers' eco-harmful media perceptions can impact communication effectiveness (Chapter 4). However, the thesis has also showed that marketing managers consider taking into account the green environmental aspect with media decisions to be trivial (Chapter 5 and 6). To obtain further knowledge about consumers' and marketing managers' attitudes toward green media this chapter investigates consumers' and marketing managers' attitudes toward green environmental responsibility (GERA) as well as consumers' advertising media perceptions, with a focus on eco-harmful media perception, and compares these to marketing managers' beliefs about consumers. The ambition of the chapter is to answer the fourth and concluding main research question of the thesis:

MainRQ4:To what extent are consumers' eco-harmful media perceptions consistent with marketing managers' beliefs about consumers?

Building on prior research on advertising media attitudes and marketing ethics, the main objective of the present study is to investigate whether marketing managers' beliefs about consumers are consistent with consumers' actual attitudes toward advertising media especially with regard to the green environmental aspect. This chapter does so by comparing 1) consumers' and marketing managers' green environmental responsibility attitudes (GERA), 2) consumers' eco-harmful media perceptions with marketing managers' beliefs about consumers, 3) marketing managers with different GERA and their beliefs about consumers' eco-harmful media perceptions, and 4) some other types of consumer media perception with marketing managers' beliefs about consumers.

First, investigating GERA may provide a better understanding of how consumers and marketing managers respectively think about protecting the green environment. Second, exploring whether and to what extent

consumers' eco-harmful media perceptions are consistent with marketing managers' beliefs about consumers may detect possible discrepancies with regard to marketing managers' over- and/or underestimation of consumers' eco-harmful media perceptions. Third, investigating marketing managers with different GERA may provide an insight on how different scores of GERA can influence marketing managers' beliefs about consumers' eco-harmful media perceptions. Fourth, investigating whether and to what extent marketing managers' beliefs about consumers, in terms of over- and/or under estimating consumers' media attitudes, are valid for other types of media perception, may further contribute to a deeper understanding of consumers' media perceptions and marketing managers' beliefs about consumers. Possible discrepancies found can aid marketing managers to select advertising media more effectively, i.e. more consistent with consumers' eco-harmful media perceptions as well as with some other media perceptions.

Whereas Chapter 4 investigated consumers' eco-harmful media perceptions of three different types of media, i.e. direct mail, city buses and websites, this chapter investigates consumers' media perceptions of 11 different types of media, and in a rather broader form, and compares it to marketing managers' beliefs about consumers. Considering the thesis' central theme, the green environmental aspect of advertising media is a main focus in this study. In addition, whereas Chapter 4 studied eco-harmful media perception as a dichotomous variable comprising only two levels of eco-harmful media perception (more versus less eco-harmful media perception), this chapter examines eco-harmful media perception as a continuous variable allowing for direct comparison of attitudes toward the 11 media studied between consumers' (eco-harmful) media perceptions and marketing managers' beliefs about such consumer media perceptions.

7.1.1 Green environmental responsibility attitude (GERA)

With regard to theory of marketing ethics, it is postulated that an *employee's* personal ethical beliefs influence ethical decision-making, besides his or her professional and organizational environment (Hunt and Vitell, 1986; 1993; Chiou and Pan, 2008). Correspondingly, studies have also postulated that a *consumer's* personal ethical beliefs influence the perception of an ethical situation (Ferrell and Gresham, 1985; Hunt and Vitell, 1986; 1993; Rallapalli et al., 1994).

The thesis has shown that a medium which is perceived as more harmful for the green environment impacts ad and brand evaluations more negatively than a medium which is perceived as less eco-harmful (Chapter 4). Moreover, advertising media that are perceived as harmful for the green environment may increase the tendency of consumers to avoid ads in such media (Andersson, 2011). Consumers' advertising media attitudes may in turn be affected by their attitude toward green environmental responsibility, both personally and what they expect from companies/organizations. In other words, avoiding certain types of advertising media could be seen as consumers taking personal responsibility to care for the environment. By doing so, consumers are in a way punishing the organization for acting irresponsible towards the environment by boycotting its advertising message that is carried by a medium that consumers perceive as more harmful for the green environment than other media alternatives. Thus, assessing both consumers' and marketing managers' attitudes toward green environmental responsibility ought to be measured in terms of their *personal* responsibility as well as their view on *companies'* responsibility to care for/not harm the green environment.

When examining the literature, it was found that green environmental responsibility attitude (GERA) is closely linked to theory on socially responsible consumption behavior. Socially responsible consumption is defined as "those consumer behaviors and purchase

decisions which are related to environmental and resource-related problems and are motivated not only by a desire to satisfy personal needs, but also by a concern for the welfare of society in general (Antil, 1984, p. 35; Antil and Bennett, 1979, pp. 64-65).

Based on the above discussion, the first research question is:

RQ1: To what extent are marketing managers' green environmental responsibility attitudes (GERA) consistent with that of consumers?

7.1.2 Media perceptions

Advertising media selection is becoming increasingly intricate as continuous technological developments has led to more media options being available and thereby changing media habits, attitudes and consumption (Percy and Elliot, 2005; Rademaker, 2011b; Turk and Katz, 1992). Marketing managers are thereby challenged by a highly competitive communication environment where message competition[56] exists in marketing communication (Rosengren, 2008). Consumers also tend to have negative attitudes toward advertising, which in turn may lead to ad avoidance (Dahlén and Edenius, 2007; Pham and Johar, 1997). Moreover, it is found that the extent to which an ad is consciously noticed by consumers depends on their attitudes toward the medium in which the ad is placed (Veloutsou and O'Donnell, 2005). According to Callius (2008), Preston (1967) and Preston and Scharbach (1971) a big share of advertising investments tends to be placed in less effective media. This could be seen as a waste of marketing resources as well as a contribution to consumers' increasing scepticism towards advertising. Because of continuous changes in the media landscape and our changing lifestyles, postulations about how effective each advertising medium and media mix is respectively, can be challenged. Callius (2008) states that 22

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[56] According to Creamer and Klaassen (2007), consumers can be exposed to a range of 254 and 5 000 advertising messages per day.

per cent of Swedes actively avoid advertising in all traditional media. He argues that this does not mean that advertising has no effect; however it requires higher demands of marketing managers. Advertising avoidance is in the literature referred to as "all actions by media users that differentially reduce their exposure to ad content" (Speck and Elliott, 1997, p. 61).

Marketing managers often cooperate with market research agencies to provide statistics on advertising media distribution, i.e. reach and frequency (Rademaker, 2011a; Rademaker et al., 2012). However, while such statistics can be helpful for the marketing manager to obtain an overall impression of the percentage of people in the target group that should be exposed to the company's message at least once (reach) and the number of times that the average person in the target group is exposed to the message in a specified period (frequency), it often does not provide information about consumers' actual perceptions of advertising in different media. By taking into account *actual* updated consumer media attitudes rather than on *assumptions* of consumer media attitudes when making media investments, companies may avoid enhancing consumers' negative attitudes towards advertising, and consequently minimize negative communication effectiveness.

Eco-harmful media perception

Chapter 4 has shown the importance of companies to have updated knowledge about consumers' eco-harmful media perceptions. Overlooking this type of information about consumers may lead to overestimating consumers' positive attitudes toward advertising in different media. In addition, it can be argued that having updated knowledge about consumers' eco-harmful media perceptions can also avoid *underestimating* consumers' positive attitudes toward specific media types.

Despite various findings of the environmental impact of media, researchers state that assessing, comparing and communicating the environmental impact of different media types, such as printed versus

various electronic media, is still a challenging task because of the difficulty in defining its implications and that further studies are necessary (Achachlouei and Moberg, 2012). Consequently, the indistinct scientific facts that are available today may cause confusion among the public with regard to how harmful for the green environment the different media in fact are. Adding to this confusion is the fact that "as science has become more accessible to the public, it has also become more exposed to criticism and contestation. As a result, however, scientific argumentation in the media allows for more diversity" (Duarte and Yagodin, 2012, p. 167).

As mentioned earlier in the introductory chapter, the complexity in assessing the green environmental impact of the total life cycles of different media types and unclear facts that are available today may cause inconsistent perceptions of how harmful for the green environment a medium in fact is. Given this, companies should obtain knowledge on consumers' eco-harmful media perceptions as it may have consequences for communication effectiveness. Especially, when taking into account consumers' increasing concern for the green environment.

Chapter 4 has shown that consumers' eco-harmful media perceptions can impact communication effectiveness. For the marketing manager it is thus important to have updated knowledge about such consumer media perceptions as it can have consequences for ad and brand evaluations. Knowledge about consumers' eco-harmful media perceptions is thus useful to guide marketing managers in selecting advertising media more effectively. In order to investigate whether and to what extent consumers' eco-harmful media perceptions are consistent with what marketing managers believe about consumers, the second research question is:

RQ2: To what extent are marketing managers' beliefs about consumers consistent with consumers' eco-harmful media perceptions?

Marketing managers with different GERA and their beliefs about consumers' eco-harmful media perceptions

As mentioned earlier, theory of marketing ethics postulate that an employee's personal ethical beliefs influence ethical decision-making, besides his or her professional and organizational environment (Hunt and Vitell, 1986; 1993; Chiou and Pan, 2008). Given this, it is of interest to investigate whether and to what extent marketing managers with different GERA differ in their beliefs about consumers' eco-harmful media perceptions. The third research question is:

RQ3: How do marketing managers with different GERA differ in their beliefs about consumers' eco-harmful media perceptions?

Eco-harmful media perception and its relation to other types of media perception

Considering the many different advertising media that are available and used today, consumers' association to advertising is multifaceted (Grusell, 2007). Studies have found that depending on which medium is used advertising can be perceived differently and can have different communication effects. This is the case even when the same advertisements are used towards the same target audience (Nilsson, 2006; Nowland et al, 1962; Politz, 1962). It is plausible to assume that consumers' eco-harmful media perceptions are related to other types of media perception. When reviewing the literature, some types of media perception that are commonly studied were found and are presented in the following sections.

Good

At the same time as advertising can bring pleasure and enjoyment, research has found that it can also evoke opposing feelings. Researchers have found that consumers tend to perceive advertising as something

"bad", and that they often associate advertising with negative aspects rather than with positive ones (Nordström, 2000; Sternvik, 2003; Larsson, 2004; Larsson, 2005). One reason given for this negativity is that advertising is usually perceived as aiming to influence consumers. As a result, advertising is viewed upon with scepticism. Consumers' negative attitudes toward advertising can create major challenges for marketing managers as consumers with negative attitudes toward advertising tend to make efforts and choices against it (Speck and Elliot, 1997). Of interest is to explore whether there is a negative relationship between eco-harmful media perception and media perception as to 'good', i.e. as the perception of a medium in terms of 'eco-harmful' *increases*, the perception of that medium in terms of 'good' *decreases*. The following hypothesis is to be tested:

> H1a: There is a negative relationship between eco-harmful media perception and media perception in terms of 'good'.

Irritating

Other researchers have found that advertising can evoke *irritation* among consumers (Coulter et al., 2001; Shavitt et al., 1998; Calfee and Ringold, 1994; Pollay and Mittal, 1993) and that irritation among consumers can be caused by being exposed to too many different types of advertising messages (e.g. Dunér and Jönsson, 2007; Ha, 1996). However, the level of irritation tends to be higher when media consumption is disrupted by advertising. For example, studies have shown that Swedes are more positive towards advertising in newspapers as opposed to advertising on TV where many as 18 ads can be included during one commercial break (Grusell, 2006; 2008). Of interest is to explore whether there is a positive relationship between eco-harmful media perception and media perception as to 'irritating', i.e. as the perception of a medium in terms of 'eco-harmful' *increases*, the perception of that medium in terms of 'irritating' also *increases*. The following hypothesis is to be tested:

H1b: There is a positive relationship between eco-harmful media perception and media perception in terms of 'irritating'.

Trustworthy

Edelman (2009) states that with consumers becoming less *trustful* of all sources of information about companies, trust in business has never been as low and continues to diminish, including trust in advertising. This is in line with prior research that showed that in general, consumers tend not to pay much attention to ads (Dahlén and Edenius, 2007; Pham and Johar, 1997). Moreover, "Trust is something many brands have lost for one reason or the other. Most often brands lose trust when they lose perspective on who their customers are" (Duncan, 2002, p. 3). Thus, in order to reach target markets marketing managers are continuously challenged to be on the forefront of consumers' (changing) advertising media attitudes. The time has passed when consumers can be easily identified based on merely general segmentation variables. Nor can merely traditional advertising media be used in order to reach and influence target markets (Bezjian-Avery et al., 1998). Of interest is to explore whether there is a negative relationship between eco-harmful media perception and media perception as to 'trustworthy', i.e. as the perception of a medium in terms of 'eco-harmful' *increases*, the perception of that medium in terms of 'trustworthy' *decreases*. The following hypothesis is to be tested:

H1c: There is a negative relationship between eco-harmful media perception and media perception in terms of 'trustworthy'.

Marketing managers' beliefs consistent with other types of consumer media perception?

It could be questioned whether and to what extent marketing managers' beliefs about consumers, in terms of possible over- and/or underestimating consumer media attitudes, are also valid for other types

of media perception besides eco-harmful media perception. Hence, of further interest is to examine whether there is a more general over- and/or underestimation of consumer attitudes toward advertising in different media. To investigate whether and to what extent marketing managers' beliefs about consumers are consistent with other types of consumer media perception, i.e. 'good', 'irritating' and 'trustworthy', the fourth and last research question is posed:

> RQ4: To what extent are marketing managers' beliefs about consumers consistent with consumers' media perceptions in terms of 'good', 'irritating' and 'trustworthy'?

7.2 Method

For the present study the consumer (n = 1928) and the marketing manager survey (n = 193) were used. As such, for a detailed description of the two samples and its data collection, see Chapter 3 – *Methodology and Research Design*.

7.2.1 Measures

In the following the dependent variables with the respective measures used are discussed. To measure consumers' and marketing managers' attitudes a sliding scale with the extreme points 0 and 10 were employed.

Green environmental responsibility attitude (GERA)

Similar to Chapter 6, GERA was measured based on the ten items inspired by Antil et al. (1979) and Antil (1984) using a ten-point sliding scale (0 = completely disagree, 10 = completely agree). However, whereas in Chapter 6 GERA was used to measure the extent to which marketing managers feel responsible to commit to caring for/not

harming the green environment in general, the study in this chapter divides GERA into two components, i.e. personal GERA and organizational GERA. *Personal GERA* measures the extent to which a person feels responsible to care for/not harm the green environment with regard to his/her personal behavior. *Organizational GERA* measures the extent to which a person holds organizations responsible to care for/not harm the green environment. By way of principal component analysis (PCA) two indexes were composed from the ten items measuring green environmental responsibility attitude (GERA), i.e. personal green environmental responsibility attitude (Personal GERA) and organizational green environmental responsibility attitude (Organizational GERA).

Personal GERA

The Personal GERA index was formed based on the following six items: "I am very concerned about the environmental situation of today", "I do everything I can in my everyday life in order not to contribute to harming the environment", "In order to sustain the environment I print out paper as little as possible", "I will stop buying products from companies that are guilty of harming the environment even if it would create discomfort for me", "I am very precise with paper being sorted and recycled", and "I don't think there are any serious environmental problems today". These six items were first subjected to principal component analysis (PCA) to check whether one or more indexes should be formed. Prior to performing the PCA, the suitability of data for factor analysis was assessed. Inspection of the correlation matrix revealed the presence of many coefficients of .3 and above. The Kaiser-Meyer-Olkin value was .83, exceeding the recommended value of .6 (Kaiser, 1970, 1974) and Bartlett's Test of Sphericity (Bartlett, 1954) reached statistical significance, supporting the factorability of the correlation matrix. PCA revealed the presence of one component for both samples. To improve the Cronbach alpha coefficient, reliability analysis among the six statements suggested one item to be deleted: "I don't think that there are

any serious environmental problems today". The personal green environmental responsibility attitude was then measured with the five remaining items. Responses were averaged to form an additive index: Personal GERA. The Cronbach alpha coefficient for the Personal GERA index was .809 for the consumers and .768 for the marketing managers. A special trait of the Personal GERA index is its focus on paper use and paper recycling in relation to green environmental responsibility.

To measure *marketing managers with different Personal GERA*, a new categorical variable was created by way of visual binning in SPSS from the Personal GERA index. This new categorical variable uses the integer values 1 or 2 to represent Low Personal GERA (<6) and High Personal GERA ($\geq$ 6). Accordingly, Personal GERA was divided into two groups whereby Low Personal GERA represents the group of those who to some extent are personally committed to care for/not harm the green environment and High Personal GERA represents those who to a great extent are personally committed to care for/not harm the green environment. The cut point for Low Personal GERA was set at < 6 as the subjects' responses were found to be rather skewed to the right, resulting in insufficient subjects (n < 30) ending up in the Low Personal GERA group should a lower cut point be used.

Organizational GERA

The Organizational GERA index was formed based on the following four items: "Companies have a big responsibility not to harm the environment", "Companies should do everything they can not to harm the environment", "The parliament should impose stricter laws against harming the environment", "To care for the environment is the responsibility of the government and the parliament". These four items were first subjected to principal component analysis (PCA) to check whether one or more indexes should be formed. PCA revealed the presence of one component for both samples. To improve the Cronbach alpha coefficient, reliability analysis suggested one item to be deleted

namely, "To care for the environment is the responsibility of the government and the parliament". Organizational green environmental responsibility attitude was then measured with the three remaining items. Responses were averaged to form an index: Organizational GERA. The Cronbach alpha coefficient for the Organizational GERA was .772 for the consumers and .748 for the marketing managers. A special trait of the Organizational GERA index is its focus on companies' responsibility to protect the green environment.

Media perceptions

Consumers' *eco-harmful media perceptions* were measured by the following question: "To what extent do you think that the following media are harmful for the environment?" (Scale: 0 = not at all harmful, 10 = very harmful).

Marketing managers' *beliefs about consumers' eco-harmful media perceptions* were measured by the following question: "In your opinion, to what extent do consumers perceive the following media to be harmful for the environment?" (Scale: 0 = not at all harmful, 10 = very harmful).

Consumers' *media perceptions as to 'good', 'irritating' and 'trustworthy'* were measured by the following questions: "To what extent do you think it is good or bad with advertising in the following media?" (Scale: 0 = very bad, 5 = neither bad nor good, 10 = very good), "To what extent do you think it is irritating with advertising in the following media?" (Scale: 0 = not at all irritating, 10 = very irritating) and "To what extent do you trust advertising in the following media?" (Scale: 0 = do not trust at all, 10 = trust a lot).

Marketing managers' *beliefs about consumers' media perceptions as to 'good', 'irritating' and 'trustworthy'* were measured by the following questions: "In your opinion, to what extent do consumers perceive it is good or bad with advertising in the following media?" (Scale: 0 = very bad, 5 = neither bad nor good, 10 = very good), "In your opinion, to what extent do consumers perceive it is irritating with advertising in the following media?" (Scale: 0 = not at all irritating, 10 = very irritating) and "In your

opinion, to what extent do consumers trust advertising in the following media?" (Scale: 0 = do not trust at all, 10 = trust a lot).

The 11 types of advertising media studied

The selection of advertising media was based on previous studies such as Grusell's (2007) with the exception of three media types that were added for the present study, namely city buses, catalogues and brochures, and in-store ads (posters). These three media in particular were added because of its' green environmental related characteristics, i.e. paper-based (catalogues, brochures and in-store posters) and engine-driven vehicles (city buses). Thus, for this study, the following 11 advertising media were selected to measure attitudes of advertising in different media: 1) newspapers and magazines, 2) mobile phones (SMS and MMS), 3) outdoor, 4) radio, 5) direct mail (delivered through home postal box), 6) TV, 7) catalogues and brochures, 8) city buses (the exterior of city buses), 9) cinema advertising, 10) internet (media using the internet) and 11) in-store (posters). See also Chapter 3 – *Methodology and Research Design* – for a more detailed description of the studied media.

To measure *marketing managers' beliefs about consumers' eco-harmful media perceptions of different categories of media* (RQ3), the 11 types of media were subjected to principal component analysis (PCA), with the purpose to reduce the amount of media types to a smaller set of factors or components. Initially, the results of the PCA showed the items loadings on two components with five loadings on Component 1 and five loadings on Component 2. One item, i.e. city buses stood out from the other media types as it appeared to load equally much on both components. Among the different media types, 'city buses' is the only type of medium that can be categorized as transport media. As such, it was decided that city buses would represent this category. PCA was further conducted with the remaining 10 items. Prior to performing PCA, the suitability of data for factor analysis was assessed. Inspection of the correlation matrix revealed the presence of many coefficients of .3 and above. The Kaisar-Meyer-Olkin value was .84, exceeding the recommended value of .6

(Kaiser 1970; 1974) and Bartlett's Test of Sphericity (Bartlett, 1954) reached statistical significance, supporting the factorability of the correlation matrix. PCA revealed the presence of two components with eigenvalues exceeding 1, explaining 44.4 per cent and 21 per cent of the variance respectively. It could be observed that Component 1 comprised electronic media types, i.e. radio, internet, TV, cinema and mobile phones whereas Component 2 comprised paper-based media types, i.e. catalogues and brochures, newspapers and magazines, direct mail, outdoor and in-store posters. It was decided to retain the two factors and thereby the composition of two indexes: electronic media and paper-based media. The Cronbach alpha coefficient of marketing managers' beliefs about consumers' eco-harmful media perceptions with regard to paper-based media was .65 and with regard to electronic media was .94. The 11 types of media could now be reduced to three categories of media types: electronic media, paper-based media and transport media.

To measure *consumers' eco-harmful media perceptions in relation to other types of media perceptions* (H1), the 11 types of media were subjected to principal component analysis (PCA) with the purpose to reduce the amount of media types to a smaller set of factors or components. Initially, the results of the PCA showed the items loadings on two components with five loadings on Component 1 and five loadings on Component 2. One item, i.e. city buses appeared to load equally much on both components. Among the different media types, 'city buses' is the only type of medium that can be categorized as transport media. As such, it was decided that city buses would represent this category. PCA was further conducted with the remaining 10 items. Prior to performing PCA, the suitability of data for factor analysis was assessed. Inspection of the correlation matrix revealed the presence of many coefficients of .3 and above. The Kaisar-Meyer-Olkin value was .88, exceeding the recommended value of .6 (Kaiser 1970; 1974) and Bartlett's Test of Sphericity (Bartlett, 1954) reached statistical significance, supporting the factorability of the correlation matrix. PCA revealed the presence of two components with eigenvalues exceeding 1, explaining 45.5 per cent and 26.1 per cent of the variance respectively. It could be observed that Component 1

comprised electronic media types, i.e. radio, internet, TV, cinema and mobile phones whereas Component 2 comprised paper-based media types, i.e. catalogues and brochures, newspapers and magazines, direct mail, outdoor and in-store posters. It was decided to retain the two factors and thereby the composition of two indexes: electronic media and paper-based media. The Cronbach alpha coefficient of electronic media was .92 and of paper-based media .86. The 11 types of media could now be reduced to three categories of media types: electronic media, paper-based media and transport media. Table 1 presents an overview of the present study.

Table 1: Overview of the study – Chapter 7

Topic	Focus	RQ/H	Unit of analysis	Statistical analysis
- Green environmental responsibility attitudes (GERA)	- Personal GERA - Organizational GERA	RQ1	Consumers vs. marketing managers	- Independent samples t-tests
- Media perceptions	- Eco-harmful media perceptions	RQ2	Consumers vs. marketing managers' beliefs about consumers	- Independent samples t-tests
	- Beliefs about consumers' eco-harmful media perceptions	RQ3	Marketing managers with different Personal GERA	- PCA - Independent samples t-tests
	- Eco-harmful media perception in relation to other media perceptions (good, irritating, trustworthy)	H1	Consumers	- PCA - Pearson correlation tests
	- Media perceptions: good, irritating, trustworthy	RQ4	Consumers vs. marketing managers' beliefs about consumers	- Independent samples t-tests

7.3 Analysis and Results

Independent samples t-tests were conducted to compare the scores of the consumers with that of the marketing managers.

7.3.1 Green environmental responsibility attitude (GERA)

The first research question was:

> RQ1: To what extent are marketing managers' green environmental responsibility attitudes (GERA) consistent with that of consumers?

The results of an independent samples t-test show a significant difference ($p < .001$) for the Personal GERA between the marketing managers ($M = 7.18$, $SD = 1.62$, $n = 106$) and the consumers ($M = 6.47$, $SD = 1.95$, $n = 1928$; $t = -4.40$, $p < .001$, two-tailed). This finding indicates that the marketing managers claim to feel more personal responsible towards the green environment than the consumers.

No significant difference was found for the Organizational GERA between the marketing managers ($M = 8.02$, $SD = 1.55$) and the consumers ($M = 7.80$, $SD = 1.83$). It can be observed that the mean values of both groups on this index are high. This finding indicates that consumers and managers alike seem to consider organizations to have a high responsibility for not harming the green environment.

Table 2 below presents an overview of these findings.

Table 2: Results for RQ1 – Personal and Organizational GERA

Items	Consumers n =1928 M (SD)	Managers n =106 M (SD)	t (df)	p	η^2
I am very concerned about the environmental situation of today	6.23 (2.58)	7.07 (2.30)			
I do everything I can in my everyday life in order not to contribute to harming the environment	6.22 (2.44)	6.53 (2.11)			
In order to sustain the environment I print out paper as little as possible	6.34 (2.76)	6.70 (2.56)			
I will stop buying products from companies that are guilty of harming the environment even if it would create discomfort for me.	5.51 (2.77)	6.90 (2.32)			
I am very precise with paper being sorted and recycled	8.03 (2.37)	8.74 (1.86)			
Personal GERA	6.47 (1.95)	7.18*** (1.62)	-4.40 (122)	<.001	.01
Companies have a big responsibility not to harm the environment	8.16 (1.97)	8.48 (1.77)			
Companies should do everything they can not to harm the environment	8.18 (2.10)	8.35 (1.77)			
The parliament should impose stricter laws against harming the environment.	7.06 (2.52)	7.23 (2.13)			
Organizational GERA	7.80 (1.83)	8.02 (1.55)		n.s.	

Note: ***) $p \le .001$; Scale: 0 = completely disagree, 10 = completely agree

7.3.2 Media perceptions

Eco-harmful media perception

The second research question was:

> RQ2: To what extent are marketing managers' beliefs about consumers consistent with consumers' eco-harmful media perceptions?

Significant differences ($p < .05$) were found between consumers' eco-harmful media perceptions and marketing managers' beliefs about such consumer perceptions. The results show that the consumers perceive advertising in the following media to be *more* harmful for the green environment compared to what the marketing managers believe about consumers:

- Newspapers and magazines (consumers: $M = 5.68$, $SD = 2.62$ vs. managers: $M = 4.97$, $SD = 2.38$; $t = 2.86$, $p = .004$)
- Mobile phones (consumers: $M = 2.49$, $SD = 2.66$ vs. managers: $M = 1.46$, $SD = 1.76$ (m); $t = 5.92$, $p < .001$)
- Outdoor (consumers: $M = 4.68$, $SD = 2.60$ vs. managers: $M = 4.26$, $SD = 2.16$; $t = 2.03$, $p = .045$)
- Radio (consumers: $M = 2.04$, $SD = 2.26$ vs. managers: $M = 1.53$, $SD = 1.91$; $t = 2.79$, $p = .006$)
- TV (consumers: $M = 2.58$, $SD = 2.47$ vs. managers: $M = 2.17$, $SD = 2.09$; $t = 2.01$, $p = .046$)
- Cinema (consumers: $M = 2.14$, $SD = 2.18$ vs. managers: $M = 1.71$, SD = 1.88; $t = 2.07$, $p = .038$)
- Internet (consumers: $M = 2.08$, $SD = 2.24$ vs. managers: $M = 1.54$, $SD = 1.95$, $t = 2.55$, $p = .011$)

The results also show that consumers perceive the following media to be *less* harmful for the green environment compared to marketing managers' beliefs about consumers:

- Direct mail (consumers: $M = 7.28$, $SD = 2.63$ vs. managers: $M = 7.99$, $SD = 1.91$; $t = -3.81$, $p < .001$)
- Catalogues and brochures (consumers: $M = 6.31$, $SD = 2.62$ vs. managers: $M = 6.91$, $SD = 2.07$; $t = -2.97$, $p = .004$)
- In-store posters (consumers: $M = 4.18$, $SD = 2.55$ vs. managers: $M = 4.81$, $SD = 2.27$; $t = -2.92$, $p = .004$)

These three latter listed media can be categorized as *paper-based* advertising media as this was clarified in the surveys. The results show that the consumers seem to consider these types of media *to a less extent* harmful for the green environment compared to what the marketing managers believe about consumers.

At a significance of $p < .10$, it was found that consumers perceive city buses to be more harmful for the green environment than what marketing managers believe about consumers (consumers: $M = 4.02$, $SD = 2.71$ vs. managers: $M = 3.62$, $SD = 2.33$; $t = 1.79$, p = .074*).*
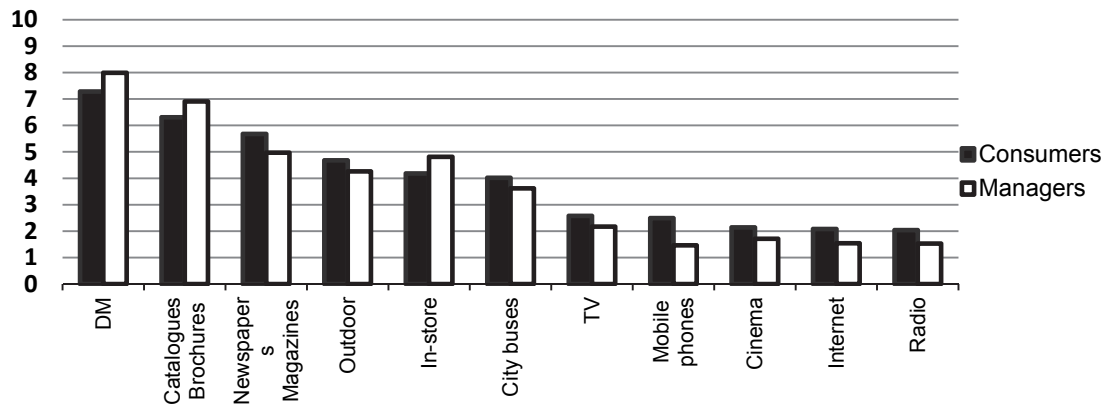
From Table 3 and Figure 1 below it can be observed that *direct mail* and, *catalogues and brochures* scored among the highest on this variable among both the consumers and the marketing managers' beliefs about consumers. Furthermore, *radio* obtained the lowest score on this variable among the consumers which does not seem to be consistent with marketing managers' beliefs about consumers.

Table 3: Results for RQ2 – eco-harmful media perception

Medium	Eco-harmful media perception		*t* (df)	*p*	*η²*
	consumers n =1928 M (SD)	manager n=117 M (SD)			
Direct mail	7.28 (2.63)	7.99*** (1.91)	-3.81 (144)	<.001	.01
Catalogues and brochures	6.31 (2.62)	6.91*** (2.07)	-2.97 (140)	.004	.01
Newspapers and magazines	5.68 (2.62)	4.97*** (2.38)	2.86 (2043)	.004	.01
Outdoor	4.68 (2.60)	4.26** (2.16)	2.03 (137)	.045	.01
In-store	4.18 (2.55)	4.81*** (2.27)	-2.92 (134)	.004	.01
City buses	4.02 (2.71)	3.62* (2.33)	1.79 (1.36)	.074	.01
TV	2.58 (2.47)	2.17** (2.09)	2.01 (137)	.046	.01
Mobile phones	2.49 (2.66)	1.46*** (1.76)	5.92 (150)	<.001	.02
Cinema	2.14 (2.18)	1.71** (1.88)	2.07 (2043)	.038	.01
Internet	2.08 (2.24)	1.54** (1.95)	2.55 (2043)	.011	.01
Radio	2.04 (2.26)	1.53*** (1.91)	2.79 (136)	.006	.01

Note: ***) $p \leq .01$; **) $p \leq .05$; *) $p \leq .10$; Scale: 0 = not at all harmful, 10 = very harmful

Figure 1: Eco-harmful media perception

Marketing managers with different Personal GERA and their beliefs about consumers' eco-harmful media perceptions

The third research question was:

> RQ3: How do marketing managers with different Personal GERA differ in their beliefs about consumers' eco-harmful media perceptions?

The results of the independent t-tests show significant differences between marketing managers with different Personal GERA.

The marketing managers with a high Personal GERA tend to believe that consumers perceive paper-based media to be more harmful for the green environment than those with a low Personal GERA (high: $M = 5.88$, $SD = 1.42$ vs. low: $M = 5.36$, $SD = 1.25$; $t = -1.80$, $p = .032$).

At a weaker significance level ($p < .10$) the results show that the marketing managers with a high Personal GERA tend to believe that consumers perceive electronic media to be less harmful for the green environment than those with a low Personal GERA (high: $M = 1.44$, $SD = 1.61$ vs. low: $M = 1.91$, $SD = 1.84$; $t = 1.36$, $p = .088$).

No significant difference was found between marketing managers with high Personal GERA ($M = 3.43$, $SD = 2.26$) and low Personal GERA

(M = 3.38, SD = 2.32, n = 34; t = -.10, p = .459*)* with regard to beliefs about consumers' eco-harmful media perception as to transport media.

Table 4 below presents an overview of these findings.

Table 4: Results for RQ3 – marketing managers' with different Personal GERA and their beliefs about consumers' eco-harmful media perceptions

Media type	Personal GERA				
	High	Low			
	n = 72	n = 34			
	M	M	t	p	η^2
	(SD)	(SD)	(df)		
Paper-based†	5.88	5.36	-1.80	.032**	.03
	(1.42)	(1.25)	(73)		
Electronic‡	1.44	1.91	1.36	.088*	.02
	(1.61)	(1.84)	(104)		
Transport^	3.43	3.38	-.10	n.s.	
	(2.26)	(2.32)	(104)		

Note: **) p < .05; *) P< .10; Scale: 0 = not at all harmful, 10 = very harmful;
†) newspapers and magazines, catalogues and brochures, outdoor, direct mail and indoor posters;
‡) mobile phones, TV, radio, cinema and internet; ^) city buses

Eco-harmful media perception and its relation to other types of media perception

The hypotheses to be tested next were:

H1a: There is a negative relationship between eco-harmful media perception and media perception in terms of 'good'.

H1b: There is a positive relationship between eco-harmful media perception and media perception in terms of 'irritating'.

H1c: There is a negative relationship between eco-harmful media perception and media perception in terms of 'trustworthy'.

The relationship between eco-harmful media perception and other types of media perception, i.e. good, irritating and trustworthy, among consumers (n = 1928) was investigated using Pearson product-moment correlation coefficient. Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity and homoscedasticity. In the analysis the three different media categories were used, namely paper-based media, electronic media and transport media (see also the method section of this chapter).

There are low, negative correlations between eco-harmful media perception and media perception as to 'good' for paper-based media (r = -.23), for electronic media (r = -.15) and transport media (r = -.17). This indicates that higher levels of eco-harmful media perception is associated with lower levels of media perception as to 'good'. Thus H1a is supported.

There are low[57], positive correlations between eco-harmful media perception and media perception as to 'irritating' for paper-based media (r = .29), electronic media (r = .17) and transport media (r = .23). This indicates that higher levels of eco-harmful media perception is associated with higher levels of media perception as to 'irritating'. Thus H1b is supported.

Furthermore, there are low, negative correlations between eco-harmful media perception and media perception as to 'trustworthy' for paper-based media (r = -.13), electronic media (r = -.07) and transport media (r = -.08). This indicates that higher levels of eco-harmful media perception is associated with lower levels of media perception as to 'trustworthy'. H1c is supported.

Tables 5, 6 and 7 below present an overview of these findings. These findings suggest however that there are only low correlations between eco-harmful media perception and the other types of media perceptions

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[57] See Cohen (1988, pp. 79-81).

studied. The importance of the findings from Chapter 4 that showed that consumers' eco-harmful media perceptions impact communication effectiveness is thereby even more underlined as eco-harmful media perception is only weakly correlated to the other types of media perception studied.

Further observations of the correlation coefficients revealed only high correlations between the irritating- and the good variable for all three types of advertising media (r ≥ .50).

Table 5: Results for H1a – Pearson product-moment correlations between measures of eco-harmful media perception and other types of media perception for paper-based media[†]

Media type	Eco-harmful	Good	Irritating	Trust
Eco-harmful	1	-.23***	.29***	-.13***
Good		1	-.61***	.41***
Irritating			1	-.28***
Trust				1

Note: [†]) newspapers, magazines, outdoor, direct mail, catalogues, brochures and in-store posters; ***) $p < .001$

Table 6: Results for H1b – Pearson product-moment correlations between measures of eco-harmful media perception and other types of media perception for electronic media[‡]

Media type	Eco-harmful	Good	Irritating	Trust
Eco-harmful	1	-.15***	.17***	-.07***
Good		1	-.61***	.44***
Irritating			1	-.30***
Trust				1

Note: [‡]) radio, TV, cinema and internet; ***) $p \leq .001$

Table 7: Results for H1c – Pearson product-moment correlations between measures of eco-harmful media perception and other types of media perception for transport media^

Media type	Eco-harmful	Good	Irritating	Trust
Eco-harmful	1	-.17***	.23***	-.08***
Good		1	-.50***	.28***
Irritating			1	-.16***
Trust				1

Note: ^) city buses; ***) $p \leq .001$

Marketing managers' beliefs about other types of consumer media perception

The fourth and last research question to be answered was:

> RQ4: To what extent are marketing managers' beliefs about consumers consistent with consumers' media perceptions as to 'good', 'irritating' and 'trustworthy'?

The results show some significant differences between consumers' media perceptions as to, good, irritating and trust, and marketing managers' beliefs about such consumer media perceptions. The findings are presented in the following sections.

Good

With regard to the good variable, the consumers do not seem to perceive advertising in the following media as good as what the marketing managers believe about consumers:

- Newspapers and magazines (consumers: $M = 6.05$, $SD = 2.18$ vs. managers: $M = 6.86$, $SD = 1.56$; $t = -5.54$, $p < .001$)
- Mobile phones (consumers: $M = 1.77$, $SD = 2.16$ vs. managers: $M = 3.39$, $SD = 2.41$; $t = -7.40$, $p < .001$)

- Outdoor (consumers: M = 5.82, SD = 2.23 vs. managers: 6.42, SD = 1.84; t = -3.54, p < .001)
- Radio (consumers: M = 3.48, SD = 2.44 vs. managers: M = 4.86, SD = 2.27; t = -6.23, p < .001)
- TV (consumers: M = 3.43, SD = 2.55 vs. managers: M = 5.16, SD = 2.01; t = -9.23, p < .001)
- Cinema (consumers: M = 5.70, SD = 2.46 vs. managers: M = 7.07, SD = 1.95; t = -7.57, p < .001)
- Internet (consumers: M = 4.50, SD = 2.42 vs. managers: M = 5.64, SD = 2.07; t = -5.98, p < .001)

These results indicate that the marketing managers believe incorrectly that consumers perceive advertising in these media to be better than consumers actually do. Worth mentioning, at a significance level of p < .10, the consumers perceive advertising through *direct mail* to some extent *better* compared to what the marketing managers believe about consumers (consumers: M = 4.76, SD = 3.04 vs. managers: M = 4.34, SD = 2.38; t = 1.91, p = .058, two-tailed). No significant difference between the two groups was found for media perceptions as to 'good' for *catalogues and brochures*, and *in-store*. This finding indicates that the marketing managers' beliefs about consumers are consistent with consumers' media perceptions for these types of media.
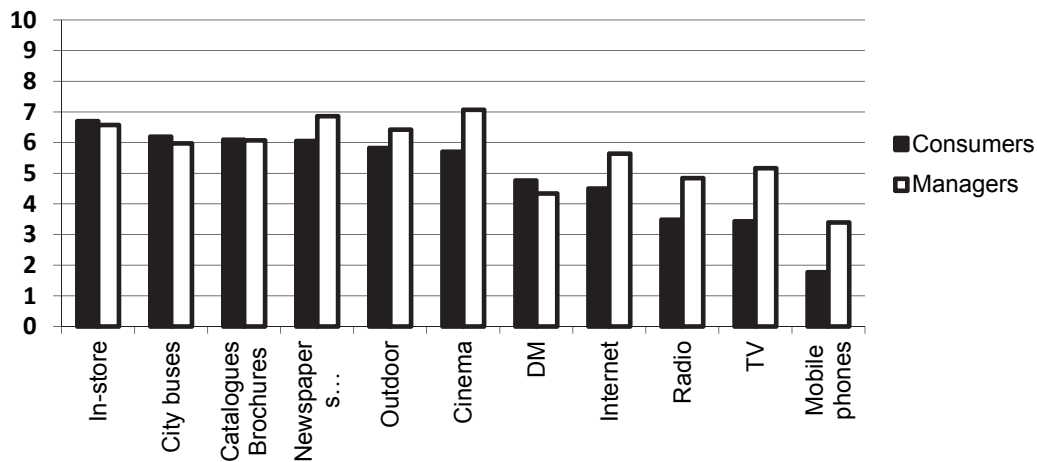
Cinema advertising scored the highest among marketing managers (M = 7.07, SD = 1.95) which is not consistent with the consumers' attitudes (M = 5.70, SD = 2.46). This hence indicates that the marketing managers believe that cinema advertising is perceived by consumers to be the best among the 11 media studied here whereas consumers perceive advertising in this medium not to be as good. Advertising through the *mobile phone* scored the lowest among both groups and thus seems to be the worst advertising medium as perceived by consumers (M = 1.77, SD = 2.16) and what marketing managers believe about consumers (M = 3.39, SD = 2.41). Table 8 and Figure 2 present an overview of these findings.

Table 8: Results for RQ3 – media perceptions

	Good				
	Consumers *n = 1928*	*Managers* *n = 128*			
Media	*M* *(SD)*	*M* *(SD)*	*t* *(df)*	*P*	*η²*
In-store	6.70 (2.15)	6.57 (2.31)		n.s.	
City buses	6.19 (2.37)	5.97 (1.75)		n.s.	
Catalogues and brochures	6.09 (2.28)	6.07 (1.99)		n.s.	
Newspapers and magazines	6.05 (2.18)	6.86*** (1.56)	-5.54 (162)	<.001	.02
Outdoor	5.82 (2.23)	6.42*** (1.84)	-3.54 (153)	.001	.01
Cinema	5.70 (2.46)	7.07*** (1.95)	-7.57 (155)	<.001	.03
Direct mail	4.76 (3.04)	4.34* (2.38)	1.91 (156)	.058	<.01
Internet	4.50 (2.42)	5.64*** (2.07)	-5.98 (151)	<.001	.02
Radio	3.48 (2.44)	4.86*** (2.27)	-6.23 (2054)	<.001	.02
TV	3.43 (2.55)	5.16*** (2.01)	-9.23 (155)	<.001	.04
Mobile phones	1.77 (2.16)	3.39*** (2.41)	-7.40 (141)	<.001	.03

Note: ***) $p \leq .01$; *) $p \leq .10$; Scale: 0= very bad, 5= neither bad nor good, 10= very good

Figure 2: Media perceptions – good

Irritating

Significant differences (p < .05) were found between the consumers'
perceptions and the marketing managers' beliefs about consumers on the
irritating variable. The results indicate that consumers perceive
advertising in the following media to be *more* irritating compared to what
marketing managers believe about consumers:

- Newspapers and magazines (consumers: M = 3.52, SD = 2.33
  vs. marketers: M = 3.00, SD = 1.74; t = 3.18, p = .002)
- Mobile phones (consumers: M = 8.04, SD = 2.69 vs. managers:
  M = 7.36, SD = 2.30; t = 2.77, p = .006)
- Outdoor (consumers: M = 3.13, SD = 2.43 vs. managers:
  M = 2.78, SD = 1.81; t = 2.09, p = .038,)
- Radio (consumers: M = 6.74, SD = 2.71 vs. managers:
  M = 5.60, SD = 2.05; t = 5.92, p < .001)
- TV (consumers: M = 7.40, SD = 2.54 vs. managers: M = 6.30
  SD = 2.28; t = 5.21, p < .001)
- Cinema (consumers: M = 3.77, SD = 2.74 vs. managers:
  M = 2.84, SD = 2.31; t = 3.71, p < .001)

- Internet (consumers: *M* = 5.65, *SD* = 2.69 vs. managers: *M* = 5.08, *SD* = 2.13; *t* = 2.85, *p* = .005).

The findings also indicate that the consumers perceive advertising through *direct mail* to be *less* irritating (*M* = 4.78, *SD* = 3.23) compared to the marketing managers' beliefs about consumers (*M* = 5.80, *SD* = 2.15; *t* = -4.97, *p* < .001).

Figure 3 and Table 9 below give an illustration of these findings. It can be observed that advertising through the *mobile phone* scored the highest on the irritating variable among both groups. This finding thus indicates that marketing managers' beliefs about consumers are consistent with consumers' perception that advertising through mobile phones are most irritating among the 11 media studied here. However, marketing managers' beliefs do not seem to be consistent with the extent to which consumers view this medium as irritating. Among the media where significant differences were found between the two groups, *outdoor* scored the lowest and thus seems to be among the media that are perceived to be least irritating.

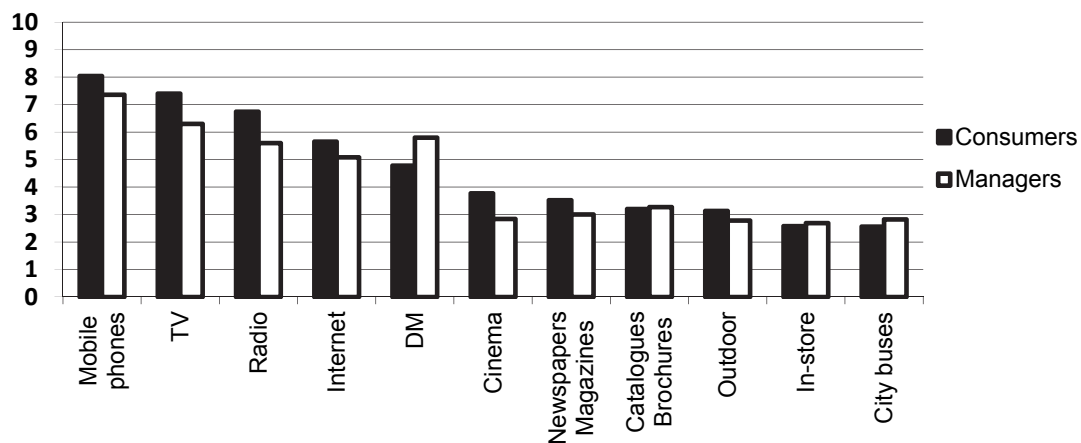Figure 3: Media perceptions – irritating

Table 9: Results for RQ3 – media perceptions

| Medium | Irritating | | | | |
	Consumers n=1928 M (SD)	Managers n=126 M (SD)	t (df)	p	η^2
Mobile phones	8.04 (2.69)	7.36*** (2.30)	2.77 (2052)	.006	<.01
TV	7.40 (2.54)	6.30*** (2.28)	5.21 (146)	<.001	.01
Radio	6.74 (2.71)	5.60*** (2.05)	5.92 (155)	<.001	.02
Internet	5.65 (2.69)	5.08*** (2.13)	2.85 (152)	.005	<.01
Direct mail	4.78 (3.23)	5.80*** (2.15)	-4.97 (164)	<.001	.01
Cinema	3.77 (2.74)	2.84*** (2.31)	3.71 (2052)	<.001	.01
Newspapers and magazines	3.52 (2.33)	3.00*** (1.74)	3.18 (156)	.002	.01
Catalogues and brochures	3.20 (2.30)	3.27 (1.99)		n.s.	
Outdoor	3.13 (2.43)	2.78** (1.81)	2.09 (156)	.039	<.01
In-store	2.58 (2.25)	2.69 (2.17)		n.s.	
City buses	2.56 (2.42)	2.82 (2.01)		n.s.	

Note: ***: p ≤ .01; **) $p ≤ .05$; Scale: 0 = not at all irritating, 10 = very irritating

Trustworthy

The findings show significant differences ($p < .05$) between the consumers' media perceptions and marketing managers' beliefs about consumers on the trust variable for all the 11 media studied. Regardless of the medium used, consumers do not trust advertising as much as marketing managers believe about consumers. The findings thus suggest that marketing managers tend to overestimate consumers' trust in all the media types studied. The following differences between consumers' perceptions and the marketing managers' beliefs about consumers on the trust variable were found:

- Newspapers and magazines (consumers: $M = 4.22$, $SD = 2.44$ vs. managers: $M = 6.22$, $SD = 1.80$; $t = -11.31$, $p < .001$)
- Mobile phones (consumers: $M = 2.35$, $SD = 2.31$ vs. managers: 3.63, $SD = 2.10$; $t = -6.32$, $p < .001$)
- Outdoor (consumers: $M = 3.87$, $SD = 2.33$ vs. managers: $M = 5.37$, $SD = 1.56$ (m); $t = -9.70$, $p < .001$)
- Radio (consumers: $M = 3.27$, $SD = 2.35$ vs. managers: $M = 4.54$, $SD = 1.67$; $t = -7.73$, $p < .001$)
- Direct mail (consumers: $M = 4.49$, $SD = 2.75$ vs. managers: $M = 5.13$, $SD = 2.10$; $t = -3.14$, $p = .002$)
- TV (consumers: $M = 3.50$, $SD = 2.38$ vs. managers: $M = 5.57$, $SD = 1.85$; $t = -11.43$, $p < .001$)
- Catalogues and brochures (consumers: $M = 4.18$, $SD = 2.39$ vs. managers: $M = 5.97$, $SD = 1.82$; $t = -10.04$, $p < .001$)
- City buses (consumers: $M = 3.89$, $SD = 2.37$ vs. managers: $M = 5.11$, $SD = 1.60$; $t = -7.73$, $p < .001$)
- Cinema (consumers: $M = 3.80$, $SD = 2.35$ vs. managers: $M = 5.62$, $SD = 1.64$; $t = -11.25$, $p < .001$)
- Internet (consumers: $M = 2.91$, $SD = 2.28$ vs. managers: $M = 4.93$, $SD = 1.95$; $t = -10.69$, $p < .001$)
- In-store (consumers: $M = 4.82$, $SD = 2.68$ vs. managers: $M = 6.53$, $SD = 1.99$; $t = -8.79$, $p < .001$).

From Figure 4 and Table 10 below it can be observed that in-store advertising scored the highest on the trust variable among both the consumers' attitudes and the marketing managers' beliefs about consumers. Another medium that scored among the highest by consumers is direct mail which was not found to be consistent with marketing managers' beliefs about consumers. In fact, marketing managers' overestimation of consumers' trust in ads in different media appears to be the smallest for direct mail. Furthermore, the mobile phone scored the lowest on this variable among both groups and thus seems to be the least trusted advertising medium among the 11 media studied.

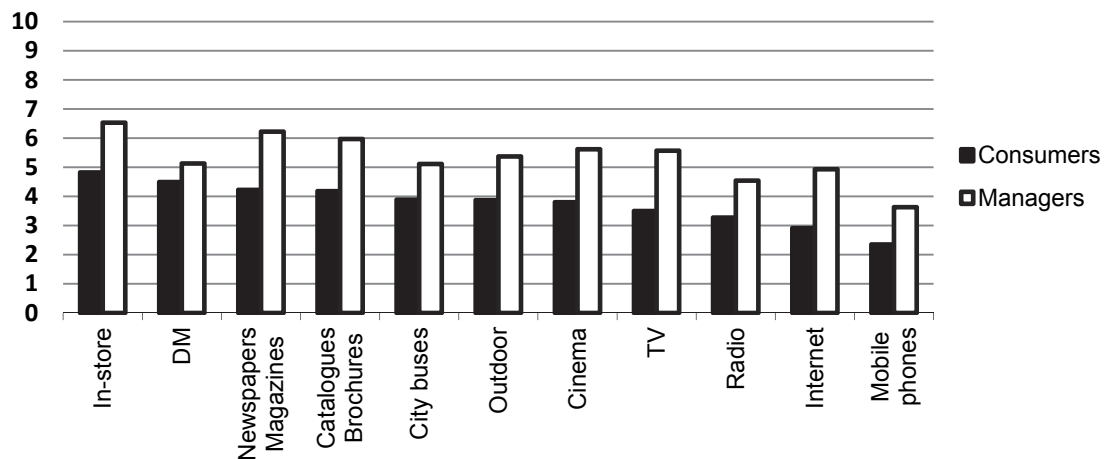Figure 4: Media perceptions - trustworthy

Table 10: Results for RQ3 – media perceptions

| Medium | *Trustworthy* | | | | |
	Consumers *n =1928* *M* *(SD)*	*Managers* *n =115* *M* *(SD)*	*t* *(df)*	*p*	*η²*
In-store	4.82 (2.68)	6.53*** (1.99)	-8.79 (140)	<.001	.04
Direct mail	4.49 (2.75)	5.13*** (2.10)	-3.14 (138)	.002	.01
Newspapers and magazines	4.22 (2.44)	6.22*** (1.80)	-11.31 (140)	<.001	.06
Catalogues and brochures	4.18 (2.39)	5.97*** (1.82)	-10.04 (138)	<.001	.05
City buses	3.89 (2.37)	5.11*** (1.60)	-7.73 (146)	<.001	.03
Outdoor	3.87 (2.33)	5.37*** (1.56)	-9.70 (146)	<.001	.04
Cinema	3.80 (2.35)	5.62*** (1.64)	-11.25 (144)	<.001	.06
TV	3.50 (2.38)	5.57*** (1.85)	-11.43 (138)	<.001	.06
Radio	3.27 (2.35)	4.54*** (1.67)	-7.73 (142)	<.001	.03
Internet	2.91 (2.28)	4.93*** (1.95)	-10.69 (133)	<.001	.05
Mobile phones	2.35 (2.31)	3.63*** (2.10)	-6.32 (131)	<.001	.02

Note: ***: $p \leq .01$; Scale: 0 = do not trust at all, 10 = trust a lot

7.4 Conclusions

The purpose of this chapter was to answer the fourth and last main research question of the thesis:

MainRQ4: To what extent are consumers' eco-harmful media perceptions consistent with marketing managers' beliefs about consumers?

This chapter investigated consumers' attitudes toward advertising media, with a main focus on the green environmental aspect, and marketing managers' beliefs about such consumer attitudes. The chapter has done so by comparing 1) consumers' and marketing managers' green environmental responsibility attitudes (GERA), 2) consumers' eco-harmful media perceptions with marketing managers' beliefs about consumers, 3) marketing managers with different GERA and their beliefs about consumers' eco-harmful media perceptions, and 4) some other types of consumer media perception with marketing managers' beliefs about consumers. An overview of the findings of the chapter is presented in Table 11 at the end of the chapter.

7.4.1 Green environmental responsibility attitude (GERA)

When comparing consumers' and marketing managers' green environmental responsibility attitudes (GERA) it was found that consumers and marketing managers alike perceive *companies* to be highly responsible for the green environment (Organizational GERA). However, it was found that marketing managers claim to feel a greater *personal* responsibility to care for the green environment (Personal GERA) than consumers claim. It can thus be inferred that marketing managers as well as consumers seem to have equally high demands and expectations of *companies/organizations* to act responsibly toward the green environment, however marketing managers claim to feel more personal

responsible toward protecting the green environment than consumers claim. This finding seems rather remarkable when considering the findings presented in Chapter 5 and 6 that showed that the green environmental aspect is among the factors that are the least considered when marketing managers work with marketing communication in general and advertising media selection in particular and that they believe that consumers only to some extent care about an advertising medium's green characteristics. An explanation for this contrasting finding could be the fact that marketing managers when answering questions about ethical beliefs, such as GERA, they may answer in their professional role. As a result, more social desirable answers among the marketing managers are generated. Another explanation could be the fact that marketing managers simply are not aware of consumers' eco-harmful media perceptions and its impact on communication effectiveness.

7.4.2 Media perceptions

When comparing consumers' attitudes toward 11 different advertising media with marketing managers' beliefs about consumers, the findings presented in this chapter revealed significant differences between the two groups.

Eco-harmful media perception

With the exception of some specific types of paper-based media, consumers perceive all of the studied media types to be *more* harmful for the green environment than what marketing managers believe about consumers. Remarkably, consumers perceive some specific types of *paper-based* media such as direct mail, catalogues and brochures and in-store posters to be *less* harmful for the green environment than what marketing managers believe about consumers. On the other hand, it was found that consumers perceive electronic/digital media such as mobile phones,

radio, internet and cinema to be *more* harmful for the green environment than what marketing managers believe about consumers. This incorrect view of marketing managers about consumers' eco-harmful media perceptions can have negative consequences for a company's communication effects. In particular, as this thesis (Chapter 4) has shown that media that are perceived as more eco-harmful can negatively impact a company's ad and brand evaluations.

As earlier mentioned, the marketing managers were found to have a stronger Personal GERA than the consumers. In addition, the marketing managers with a high Personal GERA tend to believe that consumers perceive paper-based media as more harmful for the green environment, and electronic media as less harmful, compared to marketing managers with a low Personal GERA. A special trait of the Personal GERA is its focus on paper use and paper recycling in relation to a person's green environmental responsibility. Given this, the findings contribute to the literature on marketing ethics in the sense that marketing managers' personal ethical beliefs such as Personal GERA can affect their beliefs about consumers with regard to eco-harmful media perceptions. Explicitly, marketing managers tend to estimate consumers' eco-harmful media perceptions consistent with their own personal attitudes toward green environmental responsibility (GERA).

Interestingly, direct mail, brochures and catalogues, and in-store posters were among the paper-based media that marketing managers believe are perceived as *more* ecologically harmful than what consumers perceive. On the other hand, marketing managers believe that other paper-based media such as newspapers and magazines, and outdoor are perceived as *less* eco-harmful than what consumers perceive. Why do marketing managers' beliefs about consumers with regard to some specific types of paper-based media, i.e. direct mail, brochures and catalogues, and in-store posters differ from the other paper-based media, i.e. newspapers and magazines, and outdoor[58]? An explanation could be that the three former mentioned types of paper-based media are viewed

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[58] Outdoor media is in this thesis categorized as paper-based media in accordance with the results of the PCA conducted. See Method section of this chapter.

by marketing managers as media that are used for the sole purpose to convey advertising messages. As such, marketing managers may view these specific types of paper-based media as *more* eco-harmful than newspapers and magazines: media that are used for more than just advertising. Outdoor media could also be seen as media that are used for the sole purpose to convey advertising messages. However, it can be argued that outdoor media can take other forms than merely paper-based such as electronic-based (for example digital billboards). Consequently, marketing managers may view outdoor media as less eco-harmful.

In order to avoid overestimating consumers' positive attitudes toward advertising and/or ads in different media it is of importance for marketing managers to have updated knowledge about consumers' attitudes toward advertising media in general and eco-harmful media perceptions in particular. To avoid expensive investments in less effective media, advertising media investments ought to be based on *actual* updated consumer media attitudes rather than on *assumptions* on consumer media attitudes (besides taking into account a medium's reach and frequency). Otherwise, the risk exists for companies to enhance consumers' negative attitudes toward advertising which in turn may lead to a negative impact on communication effectiveness, such as shown in Chapter 4. Furthermore, by keeping updated on consumers' attitudes toward advertising media, marketing managers will be able to quickly identify important changes in consumer media perceptions such as eco-harmful media perceptions.

Eco-harmful media perception and its relation to other types of media perception

In the attempt to explore whether eco-harmful media perception is related to other types of media perception such as 'good', 'irritating' and 'trustworthy', the results suggest that there are only small correlations between eco-harmful media perception and these other media perceptions. The importance of the findings from Chapter 4 that showed

that consumers' eco-harmful media perceptions impact communication effectiveness is thereby even more underlined as eco-harmful media perception is not much correlated with the other types of media perception studied.

Marketing managers and their beliefs about consumers' advertising media attitudes in a broader sense

In the attempt to investigate whether and to what extent marketing managers' beliefs about consumers, in terms of over- and/or underestimating consumers' media attitudes, are also valid for some other types of media perception, i.e. 'good', 'irritating' and 'trustworthy', significant differences were found. The results suggest that marketing managers' over- and/or underestimation of consumers' media attitudes concerns not only eco-harmful media perception but also other types of consumer media perception. As such, the findings suggest that marketing managers' beliefs about consumers appear to be inconsistent with consumers' advertising media attitudes in a broader sense.

The results show that consumers perceive advertising in all of the 11 studied media types *less* trustworthy than what marketing managers believe about them. In addition, a medium's trust level was found to vary for the different media among the consumers. When marketing managers are not aware of these discrepancies and are not considering that "the medium is the message" (McLuhan, 1964, p. 203), consumers' trust in the company's advertising message may be lower than expected. Some of the studied media types were found to stand out. They are discussed in the following.

TV

The greatest discrepancy was found to be related to ads on TV. Marketing managers seem to believe incorrectly that ads on TV are perceived as less eco-harmful and more trusted by consumers compared to consumers' actual perceptions. In addition, consumers perceive TV advertising to be worse and also more irritating than what marketing

managers believe about consumers. Considering the high costs that are involved with TV advertising, these findings suggest that when marketing managers distribute the media budget towards mainly TV the risk exists that advertising effects will not be most favorable as consumers may avoid the advertising messages and it may have a negative impact on communication effects, as shown in Chapter 4. It is therefore to a company's advantage to consider carefully other media options before deciding to invest in mainly expensive TV advertising (for example, as a rule of thumb).

Mobile (SMS, MMS)

The results show that consumers have a more negative attitude towards advertising through mobile phones compared to marketing managers' beliefs about consumers. It was found that consumers seem to consider the mobile phone to be more harmful for the green environment than what marketing managers believe about consumers. Advertising through the mobile phone is perceived by consumers as one of the worst, most irritating and least trusted among the 11 advertising media studied. This study investigated only mobile phone services such as SMS and MMS, thus not all the possible ways in which ads can reach consumers today through mobile phones are studied.

Direct mail

Although direct mail is yet considered most harmful for the green environment among the 11 media studied by consumers, direct mail is perceived by consumers as a media type that is less harmful for the green environment than what managers believe about consumers. Another interesting finding is that consumers perceive direct mail not as bad or irritating as what marketing managers tend to believe about consumers. In addition, among the 11 media types direct mail was found to be the second most trusted medium (after in-store posters) by consumers, whereas marketing managers tend to believe that direct mail is much less trusted by consumers. Consumers thus seem to have a more positive

attitude towards direct mail than what marketing managers believe about consumers.

7.4.3 Ambiguous eco-media information

One other plausible explanation for marketing managers to misjudge consumers eco-harmful media perceptions, may be their exposure to unclear and/or conflicting information found in for example mass media, on how harmful for the green environment a specific advertising medium in fact is. According to researchers assessing, comparing and communicating the environmental impact of different media, such as printed versus various electronic media, is still a challenging task for researchers, because of the difficulty in defining its implications and that further studies are necessary (Achachlouei and Moberg, 2012). Given this, it can be speculated that this confusion of unclear information could lead to marketing managers deciding to simply ignore the green environmental aspect in relation to media selection for marketing communication purposes. It could be further speculated that the lack of proper information and knowledge on how harmful for the green environment a specific advertising medium in fact is, could be a main reason for the discrepancies found among the marketing managers and consumers.

Table 11 shows a summary of the findings of this chapter.

This chapter is the last among the empirical studies presented in the thesis and thereby concludes Part Two. In the next two chapters – Part Three – I will discuss the thesis' overall conclusions and implications (Chapter 8) as well as its limitations and suggestions for future research (Chapter 9).

Table 11: Summary of the findings - Chapter 7

GERA	Consumers	Marketing Managers
Organizational GERA	O	O
Personal GERA	–	+

Marketing managers' beliefs about consumers' eco-harmful media perceptions		
Media type	High Personal GERA	Low Personal GERA
Paper-based†	+	–
Electronic‡	–	+
Transport*	O	O

Relations between eco-harmful media perception and other types of media perception			
Eco-harmful media perception	Good	Irritating	Trustworthy
Paper-based media†	Low neg	Low pos	Low neg
Electronic media‡	Low neg	Low pos	Low neg
Transport media*	Low neg	Low pos	Low neg

	Media perceptions							
	Eco-harmful		Good		Irritating		Trustworthy	
Media	C	M	C	M	C	M	C	M
Newspapers and magazines	+	–	–	+	+	–	–	+
Mobile phones	+	–	–	+	+	–	–	+
Outdoor	+	–	–	+	+	–	–	+
Radio	+	–	–	+	+	–	–	+
TV	+	–	–	+	+	–	–	+
Cinema	+	–	–	+	+	–	–	+
Internet	+	–	–	+	+	–	–	+
City buses	+	–	O	O	O	O	–	+
Direct mail	–	+	+	–	–	+	–	+
Catalogues and brochures	–	+	O	O	O	O	–	+
In-store	–	+	O	O	O	O	–	+

Note: C) consumers; M) marketing managers; +) more, –) less, O) no difference;

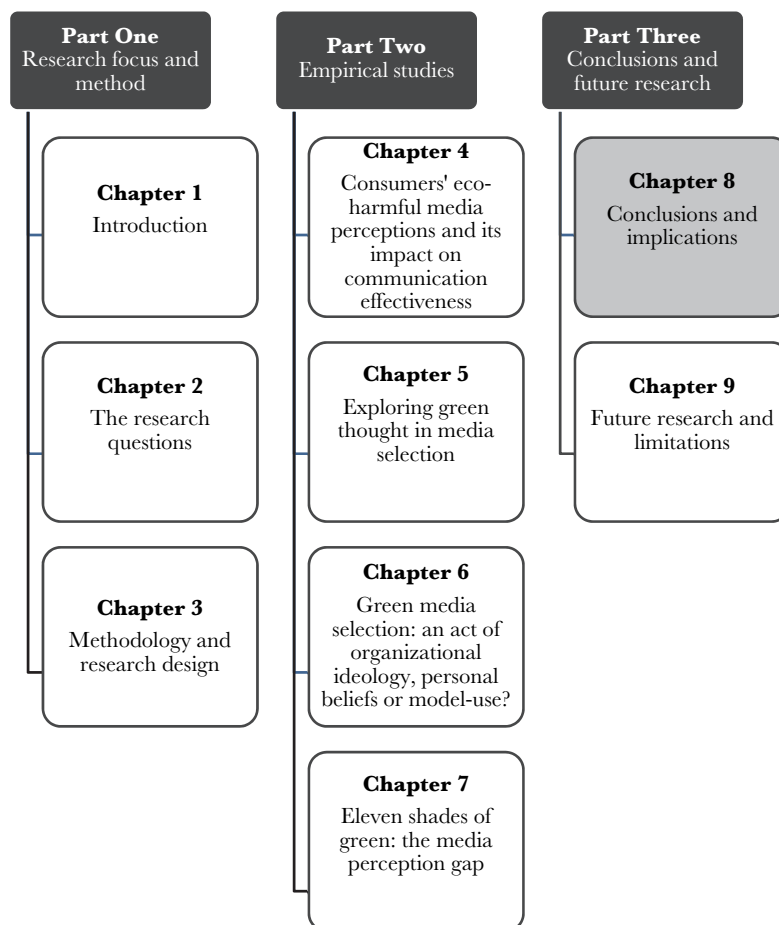†) newspapers, magazines, outdoor, direct mail, catalogues, brochures, in-store posters;

‡) radio, TV, cinema, internet; *) city buses; neg) negative; pos) positive

PART THREE

Conclusions and Future Research

Chapter 8

Conclusions and Implications

Part One Research focus and method	**Part Two** Empirical studies	**Part Three** Conclusions and future research

Chapter 1

Introduction

Chapter 4

Consumers' eco-harmful media perceptions and its impact on communication effectiveness

Chapter 8

Conclusions and implications

Chapter 2

The research questions

Chapter 5

Exploring green thought in media selection

Chapter 9

Future research and limitations

Chapter 3

Methodology and research design

Chapter 6

Green media selection: an act of organizational ideology, personal beliefs or model-use?

Chapter 7

Eleven shades of green: the media perception gap

We have now come to the third and last part of the thesis. In this chapter I discuss the overall conclusions that have come forth from the combined findings of each empirical study. In addition, I discuss the thesis' main *theoretical* contributions as well as its *practical* implications.

8.1 Conclusions and Theoretical Contributions

The thesis investigated the importance of the green environmental aspect with respect to advertising media among consumers and marketing managers. The ambition of the thesis was to answer the following four main research questions that have derived from a literature review presented in Chapter 2:

MainRQ1: Do consumers' eco-harmful media perceptions matter for communication effectiveness?

MainRQ2: Do marketing managers take the green environmental aspect into consideration when selecting media for marketing communication?

MainRQ3: Which are the factors that guide green media selection among marketing managers?

MainRQ4: To what extent are consumers' eco-harmful media perceptions consistent with marketing managers' beliefs about consumers?

The thesis has taken an initial step in demonstrating the impact of eco-harmful media perceptions, i.e. consumers' perceptions on how harmful for the green environment a medium is, on communication effectiveness. The thesis showed thereby the importance for companies to take into account consumers' eco-harmful media perceptions when selecting advertising media as it can have consequences for how companies and

their ads and brand(s) are evaluated by consumers. This is in particular valid for companies that are committed to act responsibly toward the green environment, by for example having documented green environmental policies, and thereby wish to be associated as such through their brands and marketing communication thereof.

The thesis has done so by showing that consumers' eco-harmful media perceptions affect communication effectiveness including eco-brand image, i.e. the extent to which the advertised brand is associated with a green environmentally responsible corporation (Chapter 4). The thesis also showed that marketing managers take a medium's green characteristics least into account when planning for marketing communication in general and selecting advertising media in particular (Chapter 5 and 6). Furthermore, the thesis showed discrepancies between consumers' advertising media perceptions of 11 types of media and marketing managers' beliefs about such consumer media perceptions. The thesis revealed that marketing managers tend to over- and/or underestimate not only specifically consumers' eco-harmful media perceptions however they also tend to do so with regard to other types of consumer media perception of the 11 media studied (Chapter 7). In the sections that follow, the thesis' main findings and implications are discussed.

8.1.1 The importance of green media to consumers – MainRQ1

The impact of eco-harmful media perception on communication effectiveness

The results of the thesis showed that consumers' perceptions on how harmful for the green environment an advertising medium is (eco-harmful media perception), can affect communication effectiveness. The use of an advertising medium was found to affect eco-brand image more positively when the medium is perceived as less eco-harmful than when the medium is perceived as more eco-harmful. More specifically, a brand

that is advertised through a medium that consumers perceive as less eco-harmful tends to be more associated with a brand/company that is responsible to protect the green environment, than when the brand is advertised through a medium that consumers perceive as more eco-harmful.

In addition, the thesis showed that the use of an advertising medium can affect ad attitude, brand attitude and to some extent also purchase intention *more positively* when the medium is perceived as less eco-harmful than when the medium is perceived as more eco-harmful. It can be inferred that advertising media that are perceived as less eco-harmful can *enhance* ad attitude, brand attitude and to some extent also purchase intention whereas advertising media that are perceived as more eco-harmful can *lower* ad attitude, brand attitude and to some extent purchase intention. The findings thereby extend and contribute to theories and previous findings on media context effects and media source-effects (for example Coulter, 1998; Dahlén, 2005; 2009; De Pelsmacker et al., 2002; 2007; Lord et al., 2001; Moorman et al., 2002), and research on cognitive priming effects (for example Yi, 1990a; 1990b; 1993; Dahlén, 2005). Hence, the findings suggest that the choice of an advertising medium should not only match a company's standpoint on its concern for the green environment, such as the company's green environmental policy, but more importantly it should match consumers' eco-harmful media perceptions. The findings thereby also support and expand previous research on match-up effects that are obtained between the media source and brand-related associations (Dahlén, 2005), in particular eco-brand related associations.

When exploring whether consumers' eco-harmful media perceptions are related to other types of media perception such as 'good', 'irritating' and 'trustworthy', the results suggest that there is only a low correlation between eco-harmful media perception and the other media perceptions studied (Chapter 7). The importance of the findings from Chapter 4 that showed that consumers' eco-harmful media perceptions impact communication effectiveness is thereby even more underlined as eco-

harmful media perception is not much correlated to the other types of media perception studied.

8.1.2 The importance of green media to marketing managers – MainRQ2 and MainRQ3

Inconsistency problems between organizational ideologies and action

When investigating the extent to which the green environmental aspect is taken into account with advertising media selection among marketing managers, the thesis found that despite a vast majority of companies claim to care for the green environment by having documented green environmental policies (79.4%), tasks such as marketing communication planning and advertising media selection tend not to be guided by green environmental concerns. In fact, taking into account a medium's green characteristics was found among the least considered factors when marketing managers select advertising media. Interestingly, the green environmental aspect with media selection is as little considered by marketing managers who work at companies *without* documented green environmental policies as by those who work at companies *with* such policy (Chapter 5 and 6).

This finding is in particular interesting considering that Sweden belongs to the top ten most sustainable countries in the world in terms of its environmental performance based on environmental policies[59]. In addition, according to the Sustainable Competitiveness Index (SCI) Sweden is among the top three ranked countries indicating that it has "very stringent and well-enforced environmental policies, which are leading to positive outcomes" (World Economic Forum, 2012, p. 62).

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[59] The ranking is based on 25 indicators covering environmental public health and eco-system vitality among 163 countries. Sustainable competitiveness is defined as "the set of institutions, policies, and factors that determine the level of productivity of a country while ensuring the ability of future generations to meet their own needs". The Sustainable Competitive Index (SCI) "accounts for the elements required to make competitiveness sustainable over the longer run, in economic, social, and environmental terms (World Economic Forum, 2012, p. 54).

The finding hence indicates that problems with consistency and control exist between organizational ideologies (documented environmental policies) and action (media selection). This in turn, may lead to the need for justification and/or hypocrisy in order for companies to solve such inconsistencies. Justification requires flexible ideas as ideas are adjusted to action whereas hypocrisy occurs when decision makers fail to control action whereby a discrepancy arises between idea and action (Chapter 6).

Green environmental responsibility attitude (GERA)

Differences were found among marketing managers with different green environmental responsibility attitudes (GERA). Marketing managers with strong attitudes toward protecting the green environment (high GERA), tend to take a medium's ecological properties more into consideration when selecting advertising media than those with weaker GERA attitudes (low GERA). Marketing managers with a high GERA also believe to a larger extent that consumers care about how harmful for the green environment an advertising medium is compared to those with a low GERA (Chapter 6). These findings contribute to the literature on marketing ethics stating that an employee's personal ethical beliefs influence decision-making besides his or her professional and organizational environment (Hunt and Vitell, 1986; 1993; Chiou and Pan, 2008).

Model-use with media selection: the users versus the non-users

Marketing managers and other practitioners are the ultimate intended users of theories of models that have come forth from scientific research in marketing (Hanssens et al., 2005; Otteson and Grønhaug, 2004). The thesis argues that the purpose of tools such as models is to help managers in making choices between alternatives and thereby in guiding key decisions (Chapter 6). It was found that the majority (64 per cent) of the studied marketing managers do not make use of models when selecting

advertising media. By showing that the non-use of models exists among *marketing managers* when *selecting advertising media,* the thesis adds to prior research on the non-use of models in practice (Ankers and Brennan, 2002; Caplan et al., 1975; Gabriel et al., 2006; Grønhaug and Haukedal, 1997: Hambrick, 1994; Hanssens et al., 2005; Lee et al., 1987; Otteson and Grønhaug, 2004).

The thesis has shown the lack of green thought when marketing managers use models for making advertising media decisions. When investigating the factors guiding green media selection between marketing managers who use models for media selection (users) and those who do not use any model (non-users) it was found that the users take a medium's green characteristics less into consideration than the non-users. On the other hand, taking into account a medium's ecological characteristics was found among the two factors that are the least considered when marketing managers select advertising media, among the users and non-users alike. In addition, marketing managers, users and non-users, believe that consumers only to some extent care about how harmful for the green environment an advertising medium is. These findings contribute to the current literature on advertising planning in both the conventional marketing literature as well as the *green/sustainable marketing literature,* that on the topic of advertising seem to put a major focus on *message content* and seem to overlook the importance of the carrier of the message, i.e. the *medium* itself and its green characteristics in the eyes of the consumer.

In the media planning literature it is argued that when old media plans are repeated, the risk exists that a main focus is on what "reach" the selected media have instead of on local consumer advertising media attitudes (Pickton, 2005, De Pelsmacker et al., 2007). This thesis extends the media planning literature by showing that marketing managers who use models for media selection also tend to make much use of their previous experience and rules of thumb, which can lead to habitual decision making. As a result, developments in consumer media attitudes including consumers' eco-harmful media perceptions may be overlooked.

8.1.3 Discrepancies between consumers' eco-harmful media perceptions and marketing managers' beliefs about consumers – Main *RQ4*

Eco-harmful media perception and green ethical beliefs

The results of the thesis showed that marketing managers tend to over- as well as underestimate consumers' eco-harmful media perceptions. This incorrect view of marketing managers about consumers' eco-harmful media perceptions can have negative consequences for a company's communication effectiveness. In particular, as the thesis (Chapter 4) has shown that advertising media that are perceived as more eco-harmful can negatively impact a company's ad and brand evaluations.

An explanation for these discrepancies can be due to both differences and commonalities found between consumers and marketing managers with regard to their green ethical beliefs, i.e. GERA. While both consumers and marketing managers feel strongly that companies have a big responsibility to protect the green environment (organizational GERA), it was found that marketing managers claim to feel a stronger personal responsibility to protect the green environment (personal GERA) compared to consumers. Differences were found between marketing managers with different personal GERA and their beliefs about consumers' eco-harmful media perceptions. Marketing managers with a high personal GERA tend to believe that consumers perceive many of the paper-based media as more harmful for the green environment, and electronic media to be less harmful, than those with a low Personal GERA. A special trait of the Personal GERA is its focus on paper use and paper recycling in relation to a person's green environmental responsibility. Given this, the findings contribute to the literature on marketing ethics (for example Hunt and Vitell, 1986; 1993; Chiou and Pan, 2008) in the sense that marketing managers' personal ethical beliefs such as Personal GERA can affect their beliefs about

consumers with regard to eco-harmful media perceptions. Explicitly, marketing managers tend to estimate consumers' eco-harmful media perceptions consistent with their personal attitudes toward green environmental responsibility (GERA) and because of lacking knowledge about consumers' eco-harmful media perceptions (Chapter 7).

Discrepancies not unique for eco-harmful media perception

When investigating whether and to what extent marketing managers' beliefs about consumers, in terms of over- and/or underestimating consumers' media attitudes, are also valid for other types of media perception such as 'good', 'irritating' and 'trustworthy', significant differences were found. These findings suggest that marketing managers' beliefs about consumers tend to be inconsistent not only with regard to consumers' eco-harmful media perceptions but also with regard to other types of consumer media perception. As such, the findings contribute to the literature on attitudes toward advertising media in a broader sense.

The results showed that consumers' trust levels in advertising vary among the 11 different media studied and that marketing managers' beliefs about consumers are not consistent with consumers' advertising media attitudes. Overlooking this phenomenon may have consequences for companies investing in less favorable media and thereby adding to consumers' increasing disbelief towards advertising. The latter finding thus contributes to earlier studies on consumers' diminishing trust in advertising because of a large portion of advertising investments are being placed in less favorable media (for example Callius, 2008). Among the 11 media types studied in the thesis, some media were found to stand out, i.e. TV, mobile phones and direct mail.

The greatest discrepancy was found to be related to ads on TV. Marketing managers seem to believe incorrectly that consumers have more positive attitudes toward this type of advertising medium. Marketing managers also seem to believe incorrectly that consumers have a more positive attitude toward mobile phone advertising. Compared to what marketing managers believe about consumers, the

mobile phone is perceived by consumers as more eco-harmful. In addition, consumers perceive the mobile phone as the worst, most irritating and least trusted among the 11 studied media types[60].

On the other hand, it was found that consumers have a more positive attitude towards direct mail than what marketing managers believe about consumers. The results showed that direct mail is perceived by consumers as less harmful for the green environment, less irritating, better and more trustworthy than what marketing managers believe about consumers. With regard to the latter, among the 11 media types studied, direct mail was found to be the second most trusted medium (after in-store posters) by consumers. Marketing managers thus believe incorrectly that consumers have a more negative attitude towards direct mail.

Based on the findings it can be inferred that marketing managers tend to overlook changes in consumer media attitudes such as consumers' eco-harmful media perceptions. When basing advertising media investments on *assumptions* of consumer media attitudes rather than on *actual* consumer attitudes, the risk exists for companies to enhance consumers' increasing negative attitudes toward advertising which in turn may lead to a negative impact on communication effectiveness. More importantly, when overlooking current changes in consumers' media attitudes, such as eco-harmful media perception, the risk exists for companies to select media that are perceived by consumers as more eco-harmful which in turn can affect the companies' ads and brands negatively.

8.1.4 The need for integrating consumers' green environmental attitudes in advertising planning

The thesis proposes the need for integrating consumers' green environmental attitudes when practitioners make advertising media

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[60] This study investigated only mobile phone services such as SMS and MMS, thus not all the possible ways in which ads can reach consumers today through mobile phones .
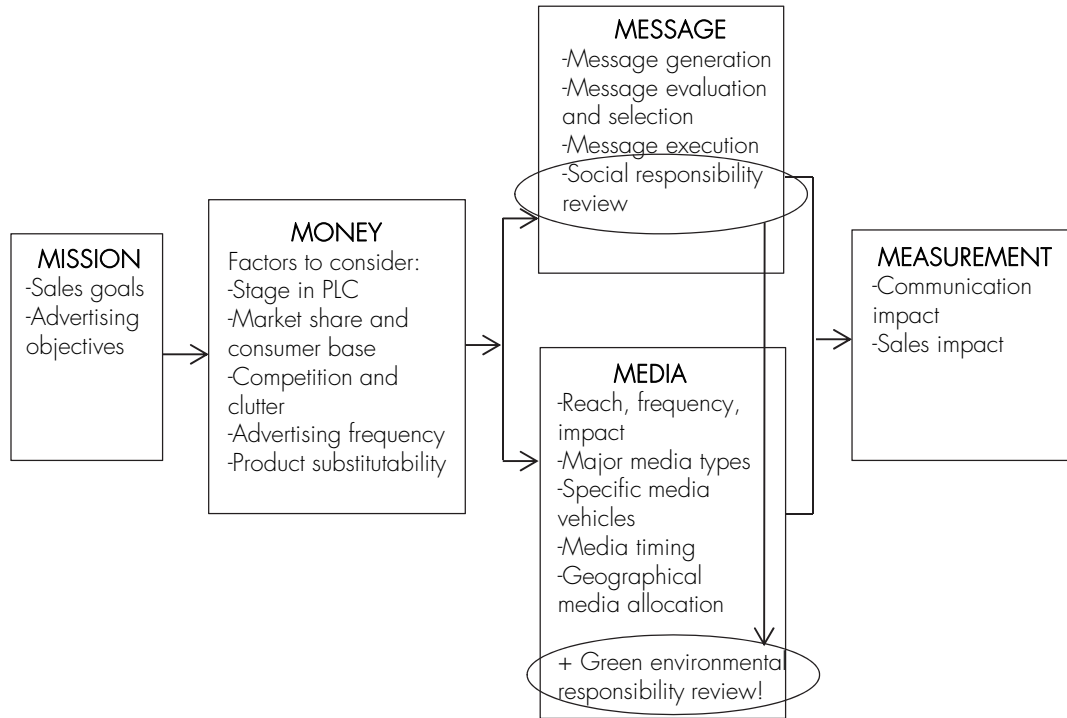
decisions. Based on the combined findings of the thesis this proposition is supported.

In Chapter 2 it is argued that whereas existing advertising planning models include a social responsibility review in terms of the message *content*, they do not include taking into account social responsibility issues, such as green environmental responsibility issues, in relation to the *medium itself* which carries the message. The thesis has shown the need to expand basic models for advertising planning such as Kotler's Five M's and suggests thereby that a green environmental responsibility review should be included in such models (Figure 1).

First, the thesis has done so by showing that consumers' eco-harmful media perceptions impact communication effectiveness as to eco-brand image, ad attitude, brand attitude and to some extent purchase intention. Hence, the findings of the thesis support the importance of including a review of a company's green environmental responsibility such as taking into account consumers' eco-harmful media perceptions, in advertising planning models.

Second, the thesis has found support for this proposal by showing that marketing managers who use models for making advertising media decisions take a medium's green characteristics the least into consideration. As such marketing managers currently tend to lack green thought when making advertising media decisions.

Figure 1: The need for integrating a green environmental responsibility review with media decisions for advertising (adapted from Kotler, 2000)

8.2 Practical Implications

Whereas previous research has shown that companies that are marketing products with green environmental characteristics will have a competitive advantage over companies that market non-environmentally responsible alternatives (Dubey, 2008), this thesis expands this notion by suggesting that this is also valid for companies' choice of advertising media with regard to its ecological characteristics. Based on the findings presented in the thesis it is suggested that the choice of an advertising medium should not only match a company's commitment to protect the green environment but more importantly it should match consumers' eco-harmful media perceptions. Companies using media that are

perceived as more eco-harmful can lead to more negative ad and brand evaluations, including eco-brand image whereas using media that are perceived as less eco-harmful can lead to more positive ad and brand evaluations. It is hence to a company's advantage to avoid selecting advertising media that consumers from their target market(s) perceive as more eco-harmful.

Implementing green thought with media planning and selection

When making advertising media decisions it is advantageous to companies to take into account the target market's green environmental attitudes as the thesis has proven its importance for communication effectiveness. It is essential for companies to have updated knowledge about consumer media attitudes in general and eco-harmful media perceptions in particular. This is important in order to avoid marketing managers over- and/or underestimating consumers' attitudes toward advertising in different media. By doing so, *actual* consumer media attitudes rather than *assumptions* on such consumer attitudes are taken into account by marketing managers while minimizing the risk to invest in expensive yet less favorable media. Companies may otherwise overlook changes in consumer media attitudes and thereby enhance consumers' negative attitudes toward advertising. This in turn can not only lead to ad avoidance but also to negative ad and brand evaluations. Regular updated data on consumers' eco-harmful media perceptions ought to be generated as eco-harmful media perceptions may change due to for example continuous new media alternatives being available and/or due to consumers' exposure to diverse information about the harmful impact of specific media on the green environment.

Based on the results, it is suggested that a new approach to model use is needed and that the media selection should not be too much influenced by the marketing managers' previous experience and rules of thumb. Otherwise, new factors may be overlooked such as consumers' increasing concern for the green environment in relation to consumer advertising media attitudes such that it can affect ad and brand

evaluations including eco-brand image. Referring to the discussion on the fundamentals of media planning and selection in Chapter 2, in the following some suggestions for practitioners are presented for implementing green thought at different stages when using basic models for media planning and selection.

- When conducting a *situational analysis* practitioners ought to take into account the target audience's attitudes toward the green environment in general and eco-harmful media perception in particular. Doing so, will enable companies to pick up on changes and/or new trends in such consumer attitudes whereby not only companies' products, packaging and/or production processes are adjusted but also the choice of advertising media. Companies having documented green environmental policies, should take the company's green environmental policy into account when formulating communication objectives in the marketing plan. This is especially valid for companies that wish to be associated with being green environmentally responsible, not only through its products, packaging, and/or production processes but also through their choice of advertising media.
- It is suggested that an *assessment of the communication environment* also includes the target audience's attitudes toward advertising in different media types. For example, the target audience may make use of various media types in their daily activities, but their attitudes toward advertising in some media types may be less favorable than in other types of media, due to the target audience's eco-harmful media perceptions. Given the increasing importance of environmentally responsible behavior, an assessment of consumers' eco-harmful media perceptions should be included during this stage as it may have consequences for ad and brand evaluations.
- When *selecting among IMC alternatives* an assessment of the target audience's eco-harmful media perceptions ought to be taken

into evaluation. Such an evaluation will have an impact on the distribution of the budget to the IMC alternatives.

- When *setting the media objectives*, especially with regard to impact, updated information about the target audience's eco-harmful media perceptions ought to be evaluated to calculate communication effectiveness. The indistinct information that is available today, about how harmful for the green environment different media in fact are, may necessitate regular assessments of consumers' eco-harmful media perceptions.

- When *buying media*, it is suggested that media suppliers are carefully selected with regard to their production processes as well as their distribution and recycling processes of the media that they are offering. In addition, information ought to be collected by companies from their media suppliers about these mentioned aspects in order to provide such information to their target audience. By committing to the latter, companies will act in accordance with United Nations Environment Programme on the crucial role and responsibilities of marketing practitioners[61] (UNEP, 2007).

Furthermore, it could be beneficial for companies, in particular those with a green environmental profile, to recruite marketing managers with strong attitudes toward green environmental responsibility (GERA). Marketing managers with such strong attitudes have shown to take the green environmental aspect more into account when making marketing decisions, such as when selecting advertising media, than those with a weaker GERA.

The thesis' suggested integration of consumers' green environmental attitudes in advertising media planning models is especially valid for companies committed to protect the green environment by for example

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[61] The United Nations Environmental Programme (UNEP) states that personnel responsible for sales and marketing have the crucial role to ensure that proper information is shared to and from customers. Consequently, marketing has the responsibility to spread information about the impact of products on the environment and society (Simula et al., 2009; UNEP, 2007).

having documented green environmental policies and thereby wish to be associated as such. The thesis suggests that green environmental policies should function as a guideline for organizational actions, including its function of marketing communication and hence advertising media selection. In doing so, problems with inconsistencies and control between companies' ideas and actions can be minimized.

8.3 Discussion

Given the findings of the thesis, it could be questioned why documented green environmental policies do not seem to be used as directives for media decisions for marketing communication purposes. It is somewhat contradicting to observe that the selection of an advertising medium, which is something very visible and communicative, does not seem to be guided by green environmental concerns, *despite* a company's documented green environmental policy. In spite of the fact that the majority of marketing managers work at companies with documented green environmental policies, have stronger personal beliefs about protecting the green environment than consumers, and take consumers' media habits into consideration with media selection, they tend to overlook a medium's green characteristics with advertising media decisions.

One explanation may be that marketing managers simply do not know about the fact that consumers' eco-harmful media perceptions can impact communication effectiveness. Another reason may be that taking into account a medium's green characteristics are neglected in current models for media selection. It could also be speculated that marketing managers may be relying too much on the current type of information about consumers' media attitudes from their network of cooperating agencies, for example market research agencies. When assessing consumers' media attitudes, the focus today may be too much on reach and frequency rather than on consumers' perceptions toward advertising

in different media. Making regular assessments of the latter could minimize the risk for overlooking changes in consumers' perceptions toward advertising media such as consumers' increasing concern for the green environment in relation to advertising media.

As previously mentioned, problems with consistency and control between a company's ideas (such as documented green environmental policy) and action (such as advertising media selection) can be reached, albeit to a certain extent, by way of hypocrisy. For example, by formulating green visions and goals *for the future* in green environmental policies, consistency is created whereby today's ecologically harmful actions of companies are excused by both organizational members and consumers (Brunsson, 1993). However, consumers are becoming increasingly committed and involved in protecting the green environment which has already led to an increase in consumers' criticism and actions against companies' harmful impact on nature. Furthermore, consumers are increasingly showing to take a stance on their views regarding companies' actions that harm our planet, including companies' choice of advertising media.[62] This development in consumer behavior has led to consequences for consumer media attitudes and thereby for communication effectiveness. Marketing managers and thereby companies overlooking these changes in consumer media attitudes may consequently pose a competitive disadvantage.

Ambiguous eco-media information

Another plausible explanation for marketing managers to somehow 1) overlook the green environmental aspect in media selection as well as 2) misjudge consumers eco-harmful media perceptions, may be their exposure to unclear and/or conflicting information on how harmful for the green environment a specific advertising medium in fact is, found in for example mass media. When taking into consideration the fact that assessing, comparing and communicating the green environmental

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[62] See also the introductory chapter for a discussion.

impact of different media, such as printed versus various electronic media, is still a challenging task for researchers because of the difficulty in defining its implications, and that further studies are considered necessary (Achachlouei and Moberg, 2012), it could be speculated that this confusion of unclear information could lead to marketing managers deciding to simply ignore the green environmental aspect in relation to media selection for marketing communication purposes.

Another plausible explanation for these discrepancies could be due to consumers' and marketing managers' exposure to and/or use of different sources of information regarding how harmful for the green environment a medium in fact is. For example, how harmful is it exactly to use paper-based media when paper is being recycled? Or, how harmful is it exactly when selecting city buses as advertising media when biofuel is used? Moreover, which is more harmful: the recycling of paper or electronic products' waste?

It could be speculated that ambiguous information and knowledge on how harmful for the green environment a specific advertising medium in fact is, could be a main reason for the discrepancies found among the marketing managers and consumers. The complexity in assessing the green environmental impact of the total life cycles of the various media types and thereby unclear facts that are available today may cause inconsistent eco-harmful media perceptions among consumers and marketing managers.

Integrating consumers' green attitudes in marketing communication planning

In Chapter 2 it was argued that there should not be a divide between companies adopting a *conventional* marketing and those adopting a *societal* marketing management orientation. Although the two marketing concepts have a strong focus on consumers' needs and wants the literature makes a divide between short-term consumer needs and wants (conventional marketing concept) and long-term consumer needs and

wants (societal marketing concept in for example Emery, 2012; Kotler and Armstrong, 2012).
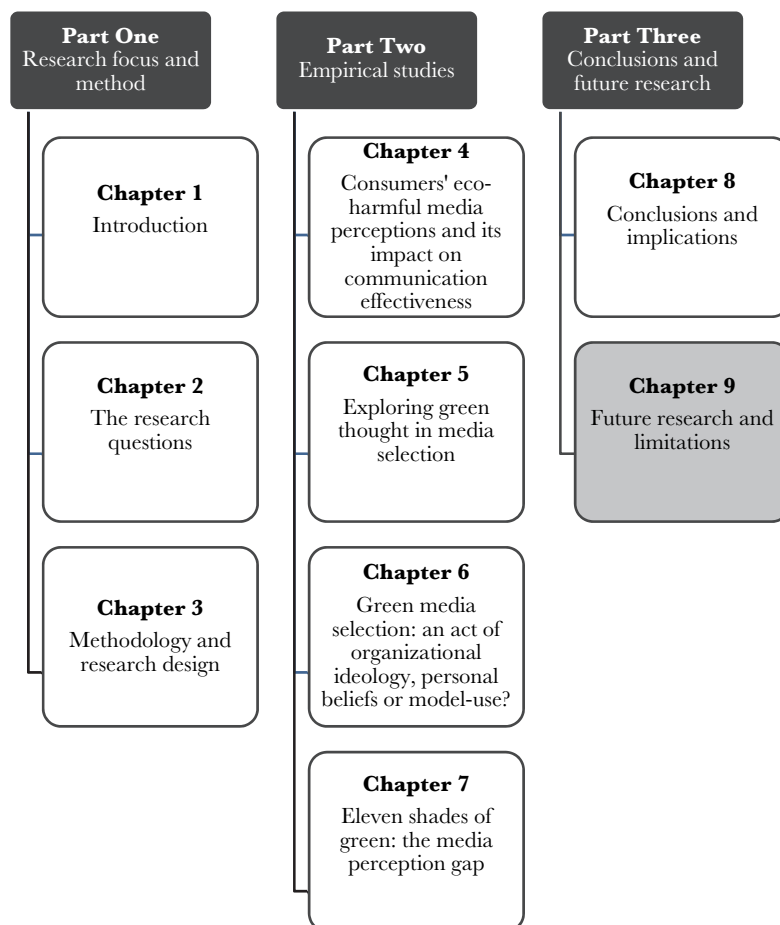
In addition, the current literature on green/sustainable marketing seem to put a major focus on the importance of the environmental impact of products, products' contents, product packaging and production processes. On the topic of marketing communication this latter mentioned streams of literature seem to put a central focus on *message content* and excludes thereby the choice of the *medium* itself and its ecological characteristics that carries the message.

The contribution of this thesis to the green/sustainable marketing literature lies in the sense that when companies commit to protecting the green environment and aim to be associated as such, their consideration should stretch beyond merely taking into account the ecological harmfulness of their products' contents, products' packaging and production processes: it is also essential to take into account an *advertising medium's* ecological characteristics, as it can have consequences for communication effectiveness. Furthermore, if acting responsible towards the green environment is essential for consumers such that it affects their lifestyles and thereby their consumption patterns, it should also be important to any marketing manager when making marketing decisions. Especially, as the core function of marketing is "satisfying consumers' needs and wants" (Kotler and Armstrong, 2012, p. 29). When reflecting on this core function of marketing there should in essence not be a divide between sustainable/green marketing and "conventional" marketing. Instead, there should be a parallel line that evolves in the same direction between how consumers evolve in terms of their green environmental attitudes and how marketing management identifies this and adjusts marketing strategies accordingly.

Based on the findings of the empirical studies presented in the thesis and in respect to future research there is a need to further investigate (effects of) the green environmental aspect in relation to advertising media. These, together with the thesis' limitations, are discussed in the chapter that follows.

Chapter 9

Limitations and Future Research

Part One Research focus and method	Part Two Empirical studies	Part Three Conclusions and future research
Chapter 1 Introduction	**Chapter 4** Consumers' eco-harmful media perceptions and its impact on communication effectiveness	**Chapter 8** Conclusions and implications
Chapter 2 The research questions	**Chapter 5** Exploring green thought in media selection	**Chapter 9** Future research and limitations
Chapter 3 Methodology and research design	**Chapter 6** Green media selection: an act of organizational ideology, personal beliefs or model-use?	
	Chapter 7 Eleven shades of green: the media perception gap	

As with most research, this thesis is not free from limitations. In the following sections I address the limitations and suggestions for future research with regard to each of the thesis' main research questions. I conclude the chapter with suggestions for future research that are beyond the thesis' main research questions.

9.1 Limitations and Suggestions for Future Research

MainRQ1: Do consumers' eco-harmful media perceptions matter for communication effectiveness?

To test the impact of consumers' eco-harmful media perceptions on communication effectiveness, an online experimental approach was opted for. Both effects of consumers' actual as well as their manipulated eco-harmful media perceptions have been tested and showed similar results. Confidence in the results of the experimental study, presented in Chapter 4, is limited with regard to its method used. Images rather than real media were opted for to simulate an actual setting in the experimental treatment, i.e. instead of placing real ads in direct mail or on the exterior of a city bus or on a web page in front of the subjects, they were shown an image of an ad placed in one of the three media and given a scenario whereby they were asked to think of a real life situation. A more realistic test would have been obtained with a field experiment and would increase the external validity of the findings of this study. Future research should therefore investigate further effects of ecologically harmful media choice in a real setting. As the main purpose of the thesis was to investigate and to shed light on the importance of the green environmental aspect with media selection, eco-harmful media perception was measured in the experimental study (Chapter 4) as a dichotomous variable consisting of only two levels, i.e. more versus less eco-harmful. In order to further address the research question and to provide an even better picture, future research should investigate more

variance in the levels of eco-harmful media perception and how these different levels may impact communication effectiveness. In addition, the η^2 values from the MANOVA results are rather small however, the effect sizes may increase when consumers would become more aware of the harmful effects of different media on the green environment[63]. This is especially valid when taking into account the current and increasing public debate on the importance and urgency of taking action to save and not harm the green environment. Sweden is a country whereby the green environment is a much debated issue. However, public debate about the green environmental issue in relation to advertising media has only just begun. As such, it is suggested for future studies to compare effects of eco-harmful media perception on communication effectiveness between countries whereby the green environmental issue are of different importance.

In Chapter 4, as part of the manipulation test, negative and positive eco-media information priming showed to impact consumers' actual eco-harmful media perceptions. As the experiment was based on the subjects' exposure to merely one exposure, measuring subjects exposed to repeated exposures of negative or positive eco-information is suggested for future studies.

MainRQ2: Do marketing managers take the green environmental aspect into consideration when selecting media for marketing communication?

To explore whether or not the green environmental aspect is taken into account when marketing managers select advertising media as well as the factors that guide and influence media selection, semi-structured interviews were opted for. The study's broad spectrum has served as an advantage in the sense that an understanding was gained of some key factors that can influence the marketing manager with media decisions.

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[63] For an example see the discussion in the introductory chapter on the environmental movement in Copenhagen regarding consumers urging other consumers to avoid eco-harmful advertising media and instead to make more use of eco-friendly media.

As the purpose of the exploratory study in the thesis was to explore the topic in a broader sense, future studies should narrow its focus on finding explanations behind the lack of green thinking with media selection among marketing managers.

Furthermore, addressing the research question by way of other forms of qualitative studies such as case studies could generate further explanations for why marketing managers do not tend to take the green environmental aspect into account with media decisions. Case studies may also generate a deeper understanding for why green policies are not used to guide media decisions in organizations.

MainRQ3: Which are the factors that guide green media selection among marketing managers?

To investigate some of the factors that can influence green media selection among marketing managers, an online survey was conducted. The factors studied have come forth from the preceding exploratory study among marketing managers. With regard to investigating documented green environmental policies as a guiding factor for green media selection, a limitation of the study lies in the fact that it merely addresses media decisions based on whether or not marketing managers work at companies with a documented green environmental policy. Green environmental policies with regard to its specific contents have not been addressed in the thesis. Hence, to address the research question even further, future studies should investigate different types of green policies with regard to its contents and compare green thinking with media decisions accordingly.

With regard to investigating the use of media selection models as a guiding factor for green media selection, a limitation of the study is that it merely addresses media decisions based on whether or not marketing managers use media selection models. Model-use with regard to its specific types and contents have not been addressed in the thesis. Hence, future studies should further investigate variances between the different

types of models used for media selection and explore which models in particular lead to more green media selection.

MainRQ4: To what extent are consumers' eco-harmful media perceptions consistent with marketing managers' beliefs about consumers?

To compare consumers' eco-harmful media perceptions with marketing managers' beliefs about such consumer perceptions online surveys were conducted. Discrepancies were found between consumers' and marketing managers' Personal GERA. Marketing managers were found to score higher on Personal GERA compared to consumers. This seems to contradict the overall finding of the thesis in the sense that green media matter more for consumers than for marketing managers. Hence, a limitation of the study could be that marketing managers may be somewhat biased in their responses with regard to what is expected from them in their professional role as opposed to their actual beliefs. As such, when answering questions about ethical beliefs such as GERA, more socially desirable answers are generated. Future studies should therefore study marketing managers' GERA by way of collecting data whereby the marketing managers are responding in their private role by for example surveys distributed through marketing managers' private household addresses or telephone numbers.

Future research beyond the thesis' main research questions

As the thesis has its central focus on the green environmental aspect of sustainability issues, future research should investigate other aspects of sustainability with regard to consumer media perception and its impact on communication effectiveness. For example, future studies should investigate consumers' perceptions on how harmful informal e-waste recycling is for the people involved and its impact on communication

effectiveness when consumers are exposed to an ad placed in electronic media versus other media types.

It is suggested for future research to investigate whether and to what extent positive eco-media information distributed by companies or other actors can counteract negative eco-media information that has been distributed by various news media.

Furthermore, future research should investigate whether and to what extent companies experience losses in stock market value when companies experience a decline in their eco-brand image, i.e. the association with a corporation that is ecologically responsible through the advertised brand, as a consequence of companies' eco-harmful media choices.

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APPENDIX A

Example of a Score-card plan (Starch, 1923, pp. 798 – 799)

SCALE OF POINTS

General:	**5**	
Appearance, stock, make-up, printing, color, illustrations, etc.		3.0
Age, financial soundness, general reputation, ethics		2.0
Appeal:	**40**	
Appeal to women consumers		30.0
Appeal to men consumers		4.0
Dealer influence		6.0
Circulation Distribution Territorial	**5**	
Per cent eastern		0.5
Per cent southern		2.0
Per cent central		1.0
Per cent mountain and coast		1.5
Circulation Distribution Community:	**5**	
Over 10,000 population		1.0
Under 10,000 population		4.0
Circulation Volume:	**10**	
Rate per line per thousand of net paid circulation		6.0
Proportion of market covered		4.0
Circulation Quality Editorial:	**5**	
Fiction, news, features		2.0
Service departments		3.0
Circulation Quality Investigations:	**5**	
Investigations among readers		5.0
Circulation Quality Subscription Methods:	**10**	
Price of subscription		2.0
Percentage of mail subscribers		2.0
Percentage of married women		1.0
Percentage of renewals		2.0
Percentage of arrears		0.5
Percentage of installment subscriptions		0.5
Percentage clubs with others		0.5
Percentage premiums with subscriptions		0.5
Percentage premiums for subscriptions		0.5
Percentage bulk circulation		0.5
Class of Advertising Carried:	**7**	
High-class mail order		2.0
High-class publicity		2.0
Long-term "repeats"		3.0
Special Considerations:	**8**	
Previous advertising		2.0
Inquiry costs		2.0
Acceptance of size space		4.0
Grand total	**100**	100.0

APPENDIX B

Interview guide – marketing managers

Date, place, company, interviewee's name, interviewee's title

Thank you for participating in this study. The purpose of the study is to explore how Swedish companies work with marketing communication in general and advertising media selection in particular. The results of this study will be presented in my PhD thesis and I will use the information for scientific purposes only. The conversation will be recorded. You have the possibility to be anonymous and I will treat all information confidentially.

A. Marketing communication

- At your company, do you plan for marketing communication or does it happen ad hoc?
- What guides the company's marketing communication?
- How has the economic recession affected your company's marketing communication efforts?

B. Media selection

- When you are working with ad campaigns, what guides the media mix selection?
- Are environmental aspects playing a role when choosing advertising media?
- How has the economic recession affected the choice of advertising media?
- To what extent are the agencies involved in the media selection?
- Who makes the final decision?
- Does your company have an environmental policy?

C. Advertiser-agency cooperation

- Which types of external agencies are your company cooperating with?
- How does the cooperation function between your company and the agencies?
- Do you usually appoint a main agency during the production of an ad campaign?
- Which type of agency is usually appointed as the main agency?

E. Miscellaneous

- In your opinion, what is the headache of today's marketer?
- Is there anything else that you would like to add to this interview?

APPENDIX C

Marketing manager survey – English version

Hello!
This questionnaire focuses on how marketers work with media selection for ad campaigns. Your answers will be completely anonymous. When you answer the questions, we want you to think about your current working situation when you are working with ad campaigns and the selection of advertising media.

1. To what extent do you agree with the following statement:
"Selecting media for ad campaigns is becoming more and more complicated"
0 = disagree, 10 = totally agree

2. To what extent do you base media selection for ad campaigns on your previous experience?
0 = not at all, 10 = to a very great extent

3. To what extent do you base media selection for ad campaigns on your gut feeling?
0 = not at all, 10 = to a very great extent

4. To what extent do you base media selection for ad campaigns on rules of thumb?
0 = not at all, 10 = to a very great extent

5. To what extent do you base media selection for ad campaigns on models?
0 = not at all, 10 = to a very great extent

6. If one or more models are used when selecting media for an ad campaign, what are these models called?
1 = I never use models, 2 = I use the following models
[TEXT]

7. When you are selecting media for an ad campaign, what is mostly guiding your choice? Please rank the following factors.
1 = guides the most, 10 = guides the least

- the medium's measurability
- reach/frequency/impact
- product type
- target group

- the communication objective
- the medium's ecological characteristics
- the medium's communication characteristics
- consumers' media attitudes
- availability of media space
- budget/cost related criteria

9. In your opinion, to what extent do consumers think it is good or bad with advertising in general?
0 = very bad, 5 = neither bad nor good, 10 = very good

10. In your opinion, to what extent do consumers think it is good or bad with advertising in the following media?
0 = very bad, 5 = neither bad nor good, 10 = very good
- Newspapers and magazines
- Mobile phones (SMS/MMS)
- Outdoor
- Radio
- Direct mail (door-to-door delivered through your home postal box)
- TV
- Catalogues and brochures
- Exterior of city buses
- Cinema
- Internet
- In-store posters

11. In your opinion, to what extent do consumers perceive it is irritating with advertising in the following media?
0 = not at all irritating, 10 very irritating
- Newspapers and magazines
- Mobile phones (SMS/MMS)
- Outdoor
- Radio
- Direct mail (door-to-door delivered through your home postal box)
- TV
- Catalogues and brochures
- Exterior of city buses
- Cinema
- Internet
- In-store posters

12. In your opinion, to what extent do consumers perceive the following media to be harmful for the natural environment?
0 = not at all harmful, 10 very harmful
- Newspapers and magazines
- Mobile phones (SMS/MMS)
- Outdoor
- Radio
- Direct mail (door-to-door delivered through your home postal box)
- TV
- Catalogues and brochures
- Exterior of city buses
- Cinema
- Internet
- In-store posters

13. In your opinion, to what extent do consumers trust advertising in the following media?
0 = do not trust at all, 10 = trust a lot
- Newspapers and magazines
- Mobile phones (SMS/MMS)
- Outdoor
- Radio
- Direct mail (door-to-door delivered through your home postal box)
- TV
- Catalogues and brochures
- Exterior of city buses
- Cinema
- Internet
- In-store posters

14. To what extent do you believe that consumers care about how harmful for the green environment an advertising medium is?
0 = not at all, 10 = to a very great extent

15. To what extent do you agree with the following statements?
0 = totally disagree, 10 = totally agree

    - I am very concerned about the environmental situation of today

- Companies should do everything they can not to harm the environment

- In order to preserve the environment I print out paper as little as possible

- To care for the environment is the responsibility of the government and the parliament

- I am very precise with paper being sorted and recycled

- Companies have a big responsibility not to harm the environment

- I will stop buying products from companies that are guilty of harming the environment even if it would create discomfort for me

- I don't think that there are any serious environmental problems today

- The parliament should impose stricter laws against harming the environment

- I do everything I can in my everyday life in order to not contribute to harming the environment

16. Does the company you work at have a documented green environmental policy?
1 = yes, 2 = no, 3 = I don't know

17. How many employees does the company you work at have?
- Up to 10
- 11-50
- 501-500
- 1001-5000
- 5001-10 000
- more than 10 000

18. How much does the company each year spend on buying advertising media?
- up to 2 million SEK
- up to 5 million SEK
- up to 10 million SEK
- up to 15 million SEK
- up to 20 million SEK
- up to 40 million SEK
- up to 70 million SEK
- more than 70 million SEK

19. To what extent are your clients consumers (B2C) or other companies/ organizations (B2B)?
0 = 100% consumers, 10 = 100% companies/organizations

20. How many years of working experience do you have with advertising media selection?
- up to 1 year
- 1 year
- 2 years
- 3 years
- 4 years
- 5 years
- 6 years
- 7 years
- 8 years
- 9 years
- 10 years
- more than 10 years

21. What year were you born?
[TEXT]

22. Gender
1 = female, 2 = male

Thank you for your participation!

APPENDIX D

Consumer survey – English version

Hello!
This questionnaire is part of a research project conducted at Stockholm School of Economics. We are interested about your views about advertising in different media. The questions are to be answered on a scale from 0 to 10. Please mark your answers accordingly.

1. To what extent do you think it is good or bad with advertising in the following media?
0 = very bad, 5 = neither bad nor good, 10 = very good
- Newspapers and magazines
- Mobile phones (SMS/MMS)
- Outdoor
- Radio
- Direct mail (door-to-door delivered through your home postal box)
- TV
- Catalogues and brochures
- Exterior of city buses
- Cinema
- Internet
- In-store posters

2. To what extent do you think it is irritating with advertising in the following media?
0 = not at all irritating, 10 very irritating
- Newspapers and magazines
- Mobile phones (SMS/MMS)
- Outdoor
- Radio
- Direct mail (door-to-door delivered through your home postal box)
- TV
- Catalogues and brochures
- Exterior of city buses
- Cinema
- Internet
- In-store posters

3. To what extent do you perceive the following media to be harmful for the natural environment?

0 = not at all harmful, 10 very harmful
- Newspapers and magazines
- Mobile phones (SMS/MMS)
- Outdoor
- Radio
- Direct mail (door-to-door delivered through your home postal box)
- TV
- Catalogues and brochures
- Exterior of city buses
- Cinema
- Internet
- In-store posters

4. To what extent do you trust advertising in the following media?
0 = do not trust at all, 10 = trust a lot
- Newspapers and magazines
- Mobile phones (SMS/MMS)
- Outdoor
- Radio
- Direct mail (door-to-door delivered through your home postal box)
- TV
- Catalogues and brochures
- Exterior of city buses
- Cinema
- Internet
- In-store posters

5. To what extent do you think it is good or bad with advertising in general?
0 = very bad, 5 = neither bad nor good, 10 = very good

6. To what extent do you agree with the following statements?
0 = totally disagree, 10 = totally agree

- I am very concerned about the environmental situation of today
- Companies should do everything they can not to harm the environment
- In order to preserve the environment I print out paper as little as possible
- To care for the environment is the responsibility of the government and the parliament

- I am very precise with paper being sorted and recycled
- Companies have a big responsibility not to harm the environment
- I will stop buying products from companies that are guilty of harming the environment even if it would create discomfort for me
- I don't think that there are any serious environmental problems today
- The parliament should impose stricter laws against harming the environment
- I do everything I can in my everyday life in order to not contribute to harming the environment

[Priming or Non-priming]
Group A1: Positive priming - Direct mail
Group A2: Negative priming - Direct mail
Group A0: No priming
Group B1: Positive priming – City buses
Group B2: Negative priming – City buses
Group B0: No priming
Group C1: Positive priming – Internet
Group C2: Negative priming – Internet
Group C0: No priming

[FILLER questions: all groups]

[Ad Exposure]
Group A1, A2, A0: Direct mail
Group B1, B2, B0: City bus
Group C1, C2, C0: Web page

Imagine that you are coming home. When you are opening the door you notice that you have received direct mail. You can see the ad on the image below. Please take a look at the image below and answer thereafter the questions that follow.
[AD – Direct mail]

Imagine that as you are walking on the street, you see an ad on the exterior of a city bus. You can see the ad on the image below. Please take a look at the image below and answer thereafter the questions that follow.
[AD – City bus]

Imagine that you are surfing on your computer. When you come to a web page you see an ad. You can see the ad on the image below. Please take a look at the image below and answer thereafter the questions that follow.

[AD – Web banner]

7. What do you think about the ad?
0 = very bad, 5 = neither bad nor good, 10 = very good
0 = very unpleasant, 10 = very pleasant
0 = very unfavorable, 10 very favorable

8. What do you think about Chokolé/Phoenix Printer?
0 = not at all appealing, 10 very appealing
0 = very bad, 5 = neither bad nor good, 10 = very good
0 = very negative, 5 neither negative nor positive, 10 = very positive

9. How well does Chokolé/Phoenix Printer represent the following statements?
0 = not at all, 10 = very much

- Good quality
- Swedish
- Trendy
- Acts responsibly towards the green environment
- Expensive
- Cool

10. To what extent would you like to try the advertised product?
0 = not at all, 10 = very much

11. To what extent would you like to buy the advertised product?
0 = not at all, 10 = very much

12. How harmful for the natural environment do you believe direct mail/city buses/internet is?
0 = not at all harmful, 10 = very harmful
13. To what extent to you think it is good or bad with advertising in door-to-door direct mail/on the exterior of city buses/using the internet?
0 = very bad, 5 = neither bad nor good, 10 = very good

14. What year were you born?
[TEXT]

15. Gender
1 = Female, 2 = Male

16. What is your highest level of education?
- Pre High School
- High School
- College/University < 3 years
- College/University > 3 years
- Doctoral Program

Thank you for your participation!