
Corporate Social Responsibility

*Effects of CSR in the introduction of
new products and services: the role of
communication channels*

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NHH

This thesis was written as a part of the Master of Science in Economics and Business Administration at NHH. Neither the institution, the advisor, nor the sensors are - through the approval of this thesis - responsible for neither the theories and methods used, nor results and conclusions drawn in this work.

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Effects of CSR in the introduction of new products and services: the role of communication channels

Master thesis,
Bergen, fall 2010

School: Norwegian School of Economics and Business Administration (NHH)
Major: Marketing and Brand Management
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Abstract

This paper identifies the variables to why the effectiveness of CSR when introducing new products and services is different based on choice of communication channels; PR and advertising. This study was achieved by means of a questionnaire of 119 students at Norwegian School of Economics and Business Administration.

Previous empirical studies have revealed that the choice of communication channel can present different effects to consumers, and it is established that PR has a stronger effect than advertising.

This research provides evidence of *why* PR has larger effects than advertising. Unlike advertising, PR evokes less perceived strategic motivation. Less strategic motivation increases company trustworthiness. More trust in a company results in higher intentions for consumers to search more information about the company, higher inclusion in consideration set, more likelihood to visit, and higher intentions to buy.

Keywords: *CSR, corporate communication, corporate associations, corporate image, public relations, advertising, consumer trust, persuasion knowledge.*

Relevance to Marketing: *This empirical study defines why PR has stronger effects compared to advertising when introducing new products and services by the use of CSR messages. The topic is important within Marketing because it provides knowledge on how to increase the effectiveness in communication strategies.*

Preface

This master thesis is in conjunction with the mandatory study path for the major in *Marketing and Brand Management* at Norwegian School of Economics and Business Administration (NHH), and accounts for 30 ECTS or *one* semester of the Master Program at NHH.

The purpose of this thesis is to allow the student to explore independently her study field and also contribute to the tutor's own scientific research. The topic of this master thesis, which was chosen through guidance from the tutor, is determining what aspects influence effectiveness of CSR communication and why it is so. CSR is a very interesting topic, and having more knowledge of how CSR communication can be more effective, is without doubt a valuable asset.

I would seize the opportunity to thank my tutor, Professor Magne Supphellen, for his constructive guidance, adequate feedbacks, and patience. In addition, he allowed me to use one of his lectures in the introductory course of Marketing to conduct my experiment, allowing me to collect more than 100 responses. Mr. Supphellen's support to this master thesis is the reason that I will work within the field of CSR after my studies. In addition, I would show my appreciation to Siv Skard, for her guidance to my statistical analysis and her inspirational inputs to this paper. Finally, I would like to show admiration to my fellow students and friends, who have given interesting feedback and support, and to the rich memories that we shared during my studies at NHH.

8 February 2011

Jane Xia

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1. Introduction

1.1. Background and research question

Corporate social responsibility (CSR) is defined as “what companies do to make a contribution to society above and beyond constitutes their legal obligations” (Davis, 1973). The concept of CSR captures the essence of the transformed relationship between state, market, and civil society and signals a new role for private actors’ in future national and global governance (Gjølberg, 2009). Many of the responsibilities companies have in their CSR efforts today were previously considered the sole responsibility of the state, like promoting efforts to alleviate toxic waste, protect human rights, and contributing support to the third world. Today, companies are expected to demonstrate social responsibility. In 2006, 52 % of the Global Fortune Top 250 companies issued CSR-reports (csrinternational.org), compared to 35 % in 1999 (Skard, 2010). In addition, 90 % of the Fortune 500 companies have explicit CSR initiatives (ibid.).

CSR is today known for its risk managing properties; 79% of global business executives believe that companies with strong corporate responsibility track records recover their reputations faster post-crisis than those with weaker records (csrinternational.org), and more than 50 % of business executives believe that a recognized commitment to corporate responsibility contributes “a lot” to a company’s overall reputation (Argenti, 2009). Many large and international companies, such as Nike, McDonald’s, and Starbuck’s have long branded for their CSR campaigns, in order to produce a strong reputation (Crane et. al, 2008). CSR is therefore considered as an important effort in improving corporate reputation (Skard, 2010). A distinguished quote about CSR is that “CSR is not merely the right thing to do, but also the smart thing to do” (Lou and Bhattacharya, 2006). The “right thing to do” is what appeals to consumers; consumers are acting on their personal values in terms of willingness to pay extra for “socially responsible products” (Skard, 2010).

Many qualities of CSR initiatives are already known, but this paper will set its focus on the topic that has a potential for being more investigated, which is the use of CSR when a company is introducing a new product or service. Previous research has settled on the fact that the effectiveness of communicating CSR is positive through *public relations* (PR) and not

through *advertising* (Kleffegård & Setrom, 2010; Berge, 2010). The purpose of this study is to investigate this topic a step further by providing empirical validation of *why* communication of CSR through PR has a more positive effect than through advertising. This knowledge gives contribution to the marketing literature by establishing new theory on the field of CSR communication, and the understanding of this information would therefore be valuable for companies that want to make the most of their CSR initiatives.

Based on the discussion above, the following research question is relevant:

Why has CSR a stronger effect for introduction of new products and services through PR than through advertising?

1.2. Structure

The structure of this paper is divided into seven chapters, excluding references and the appendix. The introduction is followed by a review of the relevant literature for this study, definitions, and concepts that will be used in the study. Hypotheses for the study are to be developed. The methodology chapter explains in what way the hypotheses are tested; research design, the making of the questionnaire and so on. The results of the hypotheses testing will be analyzed in the subsequent chapter, which is then followed by the discussion chapter. This chapter will entail discussion of the findings, and the theoretical implications in comparison to existing theories. The paper will conclude by two chapters on managerial implication, limitations and future research.

2. Theory

2.1. Corporate Social Responsibility

The concept and definition of corporate social responsibility (CSR) have evolutionary gone through an impressive record since the 1950s, which symbols the modern era of CSR. In the next twenty years, definitions proliferated, and in the 1980s, there were more empirical research and alternative themes began to mature (Carroll, 1999). By the late 1990s, the idea of CSR became almost universally sanctioned and promoted by all constituents in society from governments and corporations to non-governmental organizations and individual consumers. Most of the major international organizations such as the United Nations, World Bank, Organization of Economic Co-operation and Development and International Labor Organization not only endorse CSR, but they have also established guidelines and permanently staffed divisions to research and promote CSR (Lee, 2008).

There are many different definitions of CSR today. As mentioned in the introduction, Davis (1973) conceptualized CSR as “what companies do to make a contribution to society above and beyond constitutes their legal obligations”. A similar definition from a later decade explains that “CSR is the corporation’s moral responsibility to maximize its positive impact and minimize its negative impact on society” (Pride and Ferrell, 1997). A more recent and precise definition is “Corporate social responsibility is a commitment to improve community well-being through discretionary business practices and contributes of corporate resources (Kotler and Lee, 2005).

Given the broad conceptualization of CSR, the areas of socially responsible behavior are many and various. A comprehensive summarization of the different CSR actions is contained in *Socrates: The Corporate Social Ratings Monitor* (Kinder, Lydenberh, Domini & Co. Inc., 1999), which is a database that describes and rates more than 600 companies in terms of their CSR records. The six domains of socially responsible behavior that conceptualize CSR are: (1) community support (e.g. support of arts and health programs, educational initiatives), (2) diversity (e.g. sex-, race-, and religion initiatives), (3) employee support (e.g. job security, profit sharing, and employee involvement), (4) environment (e.g. environmental friendly products, and pollution control), (5) operations (e.g. operations in countries with human rights

violations), and (6) products (e.g. product safety, research and development, and innovation) (ibid.). Correspondingly, Carroll (1991) developed the pyramid of CSR which characterizes socially responsible behavior into (1) economic components (e.g. it is vital to perform in a manner consistent with maximizing earnings per share), (2) legal components (e.g. it is important to comply with various federal, state and local regulations), (3) ethical components (e.g. it is essential to recognize and respect new or evolving ethical/moral norms adopted by society), and (4) philanthropic components (e.g. it is important to perform in manner consistent with philanthropic and charitable expectations of society).

CSR has, during the last twenty years, become a widespread concept that is widely accepted in the business world, and there is a growing recognition of the positive effects of CSR (Davids, 1990; Sen & Bhattacharya, 2001). Porter and Kramer (2006) claims that “CSR is a strategy that if implemented thoughtfully and thoroughly, it can enhance a corporation’s competitiveness”. Similarly, Sen and Bhattacharya (2001) have in their study revealed that there is a positive relationship between CSR rating by investors and analysts, and market value of the company. Although this relationship is mediated by customer satisfaction, CSR rating has a direct effect on customer satisfaction.

From this knowledge, it is reasonable to assume that CSR initiative can to some point enhance and improve customer services. CSR efforts should be communicated both within the organization and outside the company. One important measure is to what degree the internal stakeholders are aligned with the company’s CSR actions. If the employees are proud of, and integrated in, their organization’s corporate responsibilities, it contributes to job satisfaction. The employees will aim to live up to the company’s expectations, and thereby increase their level of performance. For external purposes, CSR contributes to a company’s corporate image advertising. When recruiting, CSR initiatives are valued among future employees. The Universum Global study of 2008 found that 33 percent of the Swedish students think that ethics and moral are the most important influence factors when choosing an employer (e24.se). Responsibility issues are becoming more and more important for companies, as CSR – corporate social responsibility – nowadays is a part of many universities’ curricula. Implementing CSR in the daily work can strengthen the employer brand for companies.

As with all concepts, CSR is also a victim of criticism. The renowned economist, Milton Friedman, wrote in an article in the *New York Times Magazine* in 1970 that corporate social responsibility of business is purely to increase its profits. He claims businessmen in “social conscious” businesses are “unwitting puppets of the intellectual forces that have been undermining the basis of a free society”, and that only people have responsibilities (Friedman, 1970).

Further, Friedman explains that a company’s responsibility is to conduct the business in accordance to its desires, which generally is to make as much money as possible while conforming the basic rules of the society. In his book, *Capitalism and Freedom*, “social responsibility” is called a “fundamentally subversive doctrine” in a free society (Friedman, 1970). The author enlightens especially the rebellious behavior of businesses trying to make themselves socially conscious, but do it only to make more money.

If we return to what Porter and Kramer (2006) said: “CSR is a strategy that if implemented thoughtfully and thoroughly, it can enhance a corporation’s competitiveness”. Luo and Bhattacharya (2006) have in their study revealed that for CSR initiatives to be successful, the product-related abilities or product quality is important. CSR can in the contrary influence a company negatively if consumers perceive their products as low quality. Another aspect of consumer liking is that as a company’s innovation abilities are closely linked to consumer satisfaction, low innovation can lead to poorer consumer satisfaction, and thereby cause the company undesirable effects (Luo & Bhattacharya, 2006).

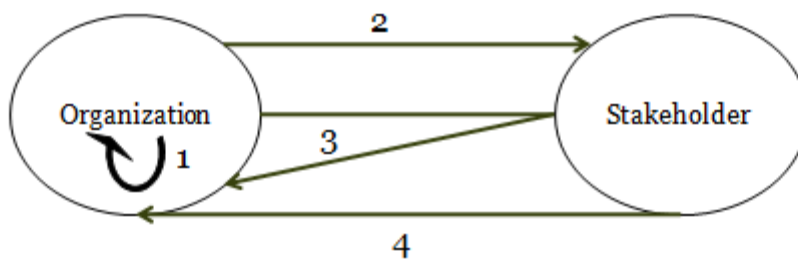
2.2. Corporate communication

Cornelissen (2008) defines corporate communication as “a management function that offers a framework for the effective coordination of all internal and external communication with the overall purpose of establishing and maintaining favorable reputations with stakeholder groups upon which the organization is dependent”. Corporate communication involves multiple communication channels and multiple stakeholder groups.

In this research, the most important stakeholder group is the customers, and a more precise definition for corporate communication to customers is *marketing communication*. Marketing communication is a subfield of marketing which involves personal selling, advertising,

publicity, public relations, reseller support – merchandising, product sampling, and packaging changes. These are all communication tools and the subfield is really an attempt to bring together several diverse parts of the marketing mix under one conceptual framework based on communication research and theory (Ray, 1973).

The intentions behind corporate communication are creating and strengthening intended corporate image, reputation and associations. Brown, Dacin, Pratt, and Whetten’s (2006) interdisciplinary framework for identity, image, and reputation has relevance in this topic.



1. Who are we as an organization?
2. What does the organization want others to think about the organization?
3. What does the organization believe others think about the organization?
4. What do stakeholders actually think of the organization?

Figure 1: Interdisciplinary framework for identity, image, and reputation (Brown et. al, 2006)

The figure above explains the four different viewpoints of identity, image, and reputation from different perspectives. In this paper, the focus will be on the fourth question; *what do stakeholders actually think of the organization?* Put more precisely, what do consumers think about the organization given the information they acquire about the company through different communication channels? Before elucidating the relevant communication channels for this paper, definitions of *associations*, *image*, and *reputation* will follow in the next subchapters. Theory regarding public relations (PR), advertising, and consumer trust will be pursued in the last sections.

2.2.1. Corporate Associations

Corporate associations are those particular thoughts and feelings that consumers have linked in memory with the organization (Shimp, 2010). Brand associations are the informational nodes linked to the brand node in memory and contain the meaning of the brand for consumers. These associations can be conceptualized in terms of *type*, *favorability*, *strength*, and *uniqueness* (Keller, 1993). Associations may also reflect characteristics of the product or aspects independent of the product (Keller, 2008).

The associative network memory model looks at memory as consisting of a network of nodes and connecting links. The nodes represent stored information or concepts, and the links represent the strength of association between the information and concepts. The information stored in the memory can be anything; it can be verbal, visual, abstract, or contextual (ibid.).

2.2.2. Corporate Image

Balmer and Gray (1998) define corporate image as “the mental picture of the company held by its audiences – what comes to mind when one sees or hears the corporate name or sees its logo”. A company name can also often represent the brand. Keller (1993) defines brand image as “consumers’ perceptions about a brand, as reflected by the brand associations held in consumer memory”. A strong corporate image is essential if a company wants to grow and expand to new markets and industries.

Corporate image advertising attempts to increase a firm’s name recognition, establish goodwill for the company and its products, or identify itself with some meaningful and socially acceptable activity (Shimp, 2010). Research has found that executives regard name identity and image building to be the two most important functions of corporate communication (Patti & McDonald, 1989) because such advertising aims to create favorable attitude toward the company among the target audiences (Shimp, 2010).

2.2.3. Corporate Reputation

Corporate reputation is the attributed values evoked from the person’s corporate image (Dowling, 2009). Corporate reputation evolves over time as a result of consistent performance (Gray & Balmer 1998). Reputations signal publics about how a firm’s products, strategies, and prospects are geared up compared to competing firms. Favorable reputations can as a

result generate excess returns for firms by reducing the mobility of rivals in an industry (Caves & Porter, 1977). Having a strong favorable reputation also has other potentially favorable outcomes. By indicating to consumers about product quality, favorable reputations may enable firms to charge premium prices (Klein & Leffler, 1981), enhance their access to capital markets, and attract investors (Milgrom & Roberts, 1986).

Referring to figure 1, the reputation that a company has is what stakeholders actually think of the organization. More precisely, a reputation is the sum of the stakeholders' perception and evaluation of the organization.

2.2.4. Communication channels

Prior studies have disclosed that the effectiveness of communicating CSR efforts is dependent on which communication channel that is chosen. The two major communication channels in this debate are advertising and public relations (PR), and are those channels that the research question aims to investigate in this study. The next two sections explain the theory behind these two concepts.

2.2.4.1 Advertising

It is stated that consumers are exposed to something like 3500 advertisements each day (Godin, 1999), but that number varies by what we classify as advertising. As this number origin from 1999, the number of advertisement exposures today is most likely higher. Richards and Curran (2002) define advertising as “a paid, mediated form of communication from an identifiable source, designed to persuade the receiver to take some action, now or in the future”. We understand from this definition that advertising promotes a product, service or event to its target audience, which is the portion of the general public that products, services or events were created for to fill a desire or need in the marketplace. The channels of advertising include Internet, print, broadcast, outdoor and point-of-purchase. The common denominator linking these different communication tools are that they are fully controlled by the company.

The recurring elements of all sorts of advertising are (1) paid, (2) non-personal, (3) identified sponsor, (4) mass media, and (5) persuade or influence (Richards & Curran, 2002). First, all types of advertising are remunerated; when a company wants to advertise through a TV

channel, they have to pay a price per second the duration of the commercial, likewise if the company wishes to include an advertisement in a magazine, newspaper or the like. Second, the audience of advertisements can be whoever that comes over them; they can be central, peripheral, or passive processing receivers (Tellis, 2004). The audiences are not forced to show interest or respond to the advertising, for the reason that this communication tool is a monologue, and not a dialogue with the audience.

Third, the source of the advertising is made very clear to the audience. Obviously, the sponsor of the advertising wants the audience to recognize their product, service, or event, and create brand awareness and top-of-mind among them. Fourth, as explained in the second point, advertisements are directed to all sorts of audiences; advertising through TV gains a large mass of receivers. However, it is possible to target audiences through different communication channels. Advertisements for sportswear can be channeled through sports magazines, and advertisements for a gourmet food chain can be directed in between cooking programs on the television.

Fifth, the intentions behind the advertisements are to signal that the company has products and services that can fill the target consumers' needs and that the consumers should therefore purchase it. The advertisements are convincing, and they use different modes of moods in order to reach their target audience.

Gerard Tellis (2004) argues the many positive forces advertising offers the society. Among them, he states that advertising is a major means of competition among firms. Different companies compete with each other for sales by offering consumers better quality, lower prices, or both. Brand names can represent a consistent level of quality at particular prices. For example, luxury goods need to stay at a relatively high price in order to reach those with the financial capital who want to demonstrate what they can afford in the society.

Advertising is also a means for companies to inform consumers about new and improved products, new technology, and new possibilities to a better everyday life. Over the last couple of centuries, the quality of life of consumers has improved significantly, first and foremost because of the advanced goods and service available to consumers. Advertising is also a huge industry, keeping a lot of industries alive. Internet newspapers are free, and their source of income is primarily from advertising.

2.2.4.2. PR

Grunig and Hunt (1984) define public relations as the “management of communication between an organization and its publics”. Public relations describe the overall planning, execution, and evaluation of an organization’s communication with both external and internal publics, groups that affect the ability of an organization to meet its goals (Grunig, 1992), trying to achieve goodwill between the company and its various publics (Shimp, 2010)

Marketing people are increasingly interested in incorporating publicity as a tool within the marketing mix (Kotler & Mindak, 1978). A marketing-oriented aspect of public relations is called *marketing public relations* and involves only the organization’s interactions with actual or potential customers (Shimp, 2010). PR messages are perceived as neutral from third party journalists with no hidden agenda and no vested interest to influence and change attitudes among consumers, whilst advertising is regarded as direct attempts to influence consumers into buying (ibid.). The credibility mantle that PR has, establishes trust in the communication, which again affects the company.

Compared to advertising, PR messages are less expensive than advertising for the reason that the newspaper, magazine, television station or the like cover the air time and space for presenting the organization. The benefit is though only gained if the publicity is positive.

Ries and Ries (2004) argue in their book “The Fall of Advertising & the Rise of PR” that new products can be introduced with little advertising and that a brand’s marketing communicators can get the job done with creative and powerful public relations. On the contrary, Engeseth (2009) disagree in his book “The Fall of PR and the Rise of Advertising” that the “PR industry has gone so far in response to a tougher media climate and the need to show quick results, that the messages have started to sound desperate and fake”. A quote from Professor Micael Dahlén at Stockholm School of Economics articulates that “we have empirical proof today’s smart consumer sees through hidden PR messages in the media”. Gladwell (2007) explains that most people do not need more than two seconds in order to decide what is real and what is fake, so the historically known argument for PR; credibility, is therefore no longer adequate. In addition, today’s technology allows 100 million bloggers, making the public relations one of many voices (Engeseth, 2009).

2.2.5. Consumer trust

Trust is defined as "a willingness to rely on an exchange partner in whom one has confidence" by Moorman, Zaltman, and Deshpandé (1992), and research has also initiated that consumer trust is critical in facilitating exchange relationships (ibid.). Consumer trust, that is "the expectations held by the consumer that the service provider is dependable and can be relied on to deliver on its promises" (Sirdeshmukh, Singh & Sabol, 2002), is an important aspect that should require attention when researching relationships because Spekman (1988) has observed that trust is the "cornerstone" of long-term relationships, correspondingly have conceptual and empirical studies revealed that trust is a determinant for relational commitment and which is essential in building strong customer relationships and sustainable market share (Nooteboom, Berger, & Noorderhaven, 1997; Garbarino & Johnson, 1999; Urban, Sultan & Qualls, 2000).

There are two views of trust. Some researchers vision trust as a belief, confidence, or expectation about an exchange partner's trustworthiness in which results from the partner's expertise, reliability, or intentionality (Anderson & Weitz, 1990; Dwyer, Schurr & Oh 1987). Other researchers view trust as a behavioral intention or behavior that reflects a reliance on a partner and involves vulnerability and uncertainty on the part of the trustor (Coleman 1990; Zand 1972).

Sirdeshmukh, Singh and Sabol (2002) describe antecedents of trust in which are dimensions of trustworthy behaviors and practices and their effects on trust; (1) operational competence, (2) operational benevolence, and (3) problem-solving orientation.

Operational competence is the expectation of consistently competent performance from an exchange partner, which can affect the level of trust a consumer has to a company. Sako (1992) claims that "competence trust is a prerequisite for the viability of any repeated transaction". Doney and Cannon (1997) find that salesperson expertise is a significant predictor of the buyer's trust in the salesperson.

Operational benevolence is defined as behaviors that reflect an underlying motivation to place the consumer's interest ahead of self-interest (Sirdeshmukh, Singh & Sabol, 2002)). The generous motivation must be operationalized in order to be sufficient. A benevolent partner

can be trusted to take initiatives in favor of the customer, so-called *goodwill trust* (Sako, 1992).

Problem-solving orientation is the consumer's evaluation of the frontline employee's behaviors and management motivations to foresee and pleasingly resolve problems that may arise during and after a service exchange. The approaches in which service providers handle problems are critical incidents that provide insight into the character of the service provider (Smith, Bolton & Wagner, 1999).

Trust is often linked to *credibility* (Blomqvist, 1997). When Herbig and Milewicz (1993) discuss the relationship between reputation and credibility on the one hand and on brand success on the other, they use the concept of "credibility" as the goodwill aspect of trust. According to these authors, "Credibility is the believability of an entity's intention at a particular time. That is, credibility is whether a company can be relied on to do what it says it will do" (Herbig & Milewicz, 1993). This definition is relatively similar to Sirdeshmukh, Singh, and Sabol's (2002) definition of *consumer trust*.

Notwithstanding the recognition of trust, more research is required on gaining knowledge of the link between trust evaluations and contextual evaluations. It is valuable to achieve understanding of what contextual situations that consumers value trust more than other circumstances.

2.2.6 Persuasion knowledge

Persuasion is defined as "the action or process of persuading someone or of being persuaded to do or believe something" by the Oxford Dictionary of English. Persuasion knowledge is an important concept because it tells people about situations where an intelligent purposeful outside agent is skillfully trying to alter their inner self (their beliefs, their emotions, their attitudes, their decisions, their thought processes) and thereby alter the course of their lives (Friestad & Wright, 1994). The authors developed a conceptual Persuasion Knowledge Model of a persuasion target's and persuasion agent's views of each other as each performs their tasks in a persuasion encounter (Friestad & Wright, 1994).

People learn about persuasion in many ways; they learn from own experiences, from family and friends, and through observing marketers. The magnitude of this learning is that people's persuasion knowledge shapes how they respond (Friestad & Wright, 1994).

The function of persuasion knowledge is to guide consumers' attention to aspects of an advertising campaign or sales presentation, providing inferences about possible background conditions that caused the agent to construct the attempt in that way, generating predictions about the attempt's likely effects on people, and evaluating its overall competence. In addition, persuasion coping knowledge also aims to direct one's attention to one's own response goals and response options. It supplies situational information relevant to selecting response tactics, predicts which strategy will best achieve one's goal(s), evaluates the adequacy of one's coping attempt, and retains useful information about how one interpreted and coped with this particular persuasion attempt (Friestad & Wright, 1994).

In advertising and selling campaigns, consumers may perceive that marketers can chase the following goals: (1) managing the long-term consumer-marketer relationship, (2) influencing beliefs about particular qualities of the marketer, (3) managing third party impressions (e.g. what regulators, rival companies, or unintended audience segments think), (4) managing the marketer's investment of effort, money, and time in the persuasion attempt, (5) managing self-image, (6) managing consumers' self-images (e.g., displaying whatever level of respect they believe consumers want), and (7) managing their own experiential benefits from the attempt (e.g., satisfying personal or creative needs in constructing an ad campaign or during customer interactions) (Friestad & Wright, 1994).

A consumer's trust in an advertising message may change over time based on their experience with previous coping of advertising messages. If a consumer perceived the marketer as only attempting to increase profitability and trick consumers into buying, then the next time similar advertising messages occur, the consumer would not believe it without reservation. On the contrary, if the advertising message is perceived as sincere and which desires to communicate to consumers of a product or service that is enviable to consumers, then the consumer will response more positively to future similar advertising messages.

3. Model and hypotheses

3.1. Research model

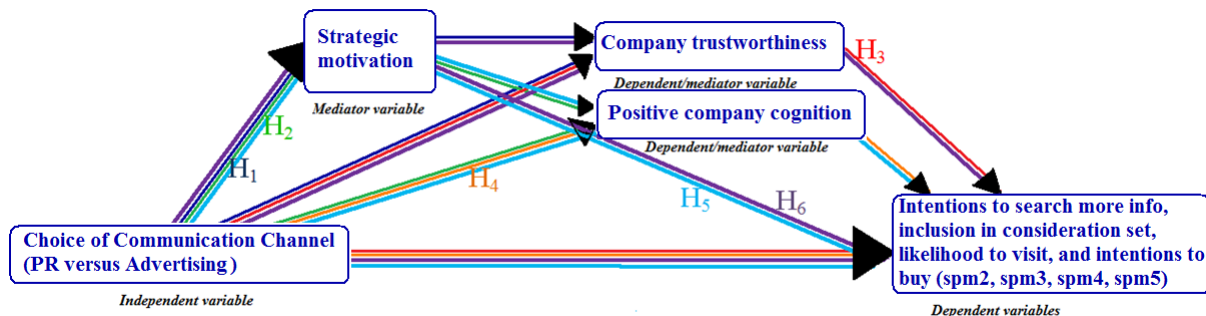


Figure 2: Research model

The research model illustrates the six hypotheses that will validate the research question; *why has CSR a stronger effect for introduction of new products and services through PR than through advertising?* The model also explains relations between the independent variables and the dependent variables. The mediation variables represent the addition of third and fourth variables to the existing relation. A mediation variable is a variable that is in a causal sequence between two variables (MacKinnon, Fairchild & Fritz, 2007).

The first two hypotheses’ objectives are to investigate if *strategic motivation* is a mediating variable between the independent variable, “Choice of communication channel (PR vs. advertising)”, and the dependent variables; *company trustworthiness* and *positive company cognition*. Further, the next two hypotheses state if *company trustworthiness* and *positive company cognition* are mediating variables for those who received information about CSR (Choice of communication channel (PR vs. advertising)) and their *intentions to search for more information* about the company, *inclusion in consideration set*, *likelihood to visit*, and *intentions to buy* goods and services from the company.

The last two hypotheses include two mediating variables, which require multiple-step mediation and bootstrapping method advocated by Hayes, Preacher and Myers (2009). The authors consider bootstrapping as the most appropriate method of assessment of indirect effects because it requires no assumptions regarding the shape of the sampling distribution of

the indirect effect. An indirect effect is considered significant if the 95% confidence interval for the coefficient estimate does not include zero.

The fifth hypothesis has *strategic motivation* and *positive company cognition* as mediating variables, while the sixth hypothesis has *strategic motivation* and *company trustworthiness* as mediating variables.

When multiple putative mediators are entertained in a multiple mediation model, the likelihood of parameter bias due to omitted variables is reduced.

The models below represent all six hypotheses that are developed in this paper.

Common to hypotheses 1 to 4, the simple mediation model has this structure:

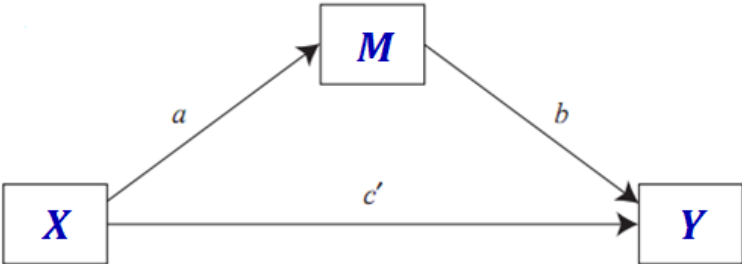


Figure 3: Simple mediation model

The multiple-step multiple mediator model with two proposed mediators is relevant to hypotheses 5 and 6:

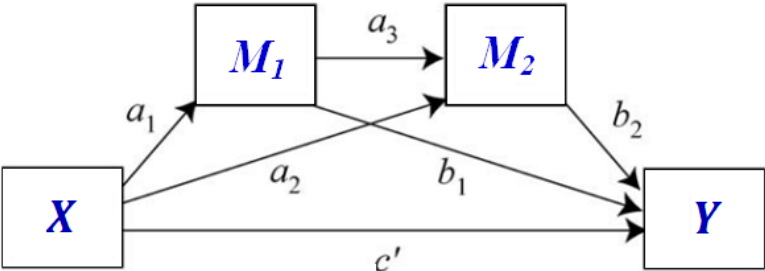


Figure 4: The multiple-step multiple mediator model with two proposed mediators

3.2. Hypothesis 1

As explained in the theory section, PR has historically been known for its credibility because PR messages are written by third party journalists who have no vested interest in tricking consumers into buying. On the contrary, some researchers claim that PR is not as effective as it was in the earlier days because of the mass of blogging and other forms of word-of-mouth, and that PR's hidden messages are easy to see through by today's consumers.

It is therefore interesting to uncover if PR has lost its status as a credible communication channel. PR is then going to be compared to advertising, given the same message of a company that has a CSR initiative. If PR still has its trustworthy position, then PR will likely evoke less strategic motivation to the trustworthiness of the company. Hence, we hypothesize:

H₁: The effect of PR versus advertising on Company Trustworthiness is mediated by perceived strategic motivation, in which PR evokes less suspicion on strategic motivation than advertising and therefore gains higher company trustworthiness.

3.3. Hypothesis 2

Similarly to the previous hypothesis, if PR is relatively a more credible source of communication compared to advertising, then PR will evoke less strategic motivation. It is then reasonable to assume that this condition can enhance the positive company cognition. Hence, we hypothesize:

H₂: The effect of PR versus advertising on Positive Company Cognition is mediated by perceived strategic motivation, in which PR evokes less suspicion on strategic motivation than advertising and therefore gains higher positive company cognition.

3.4. Hypothesis 3

As enlightened in the theory section, empirical studies have disclosed the facts that trust is essential for relational commitment and long-term relationships, resulting in a sustainable market share. It is reasonable to assume that consumer trust may differ between dependent on communication channels. Given that PR has larger credibility on consumers than advertising; it is therefore relevant to test if PR has a larger effect than advertising because of its construct of trust. Hence, we hypothesize:

H₃: The effect of PR versus advertising on intentions to search more info, inclusion in consideration set, likelihood to visit, and intentions to buy, is mediated by company trustworthiness, in which PR has larger effects than advertising.

3.5. Hypothesis 4

Positive cognition towards a company can enhance a company's reputation due to positive values evoked from the person's corporate image. Research has revealed that companies that have favorable reputations generate higher returns since they make it harder for competitors to enter their market.

When communicating CSR initiatives by using PR as a communication channel rather than advertising, the company may obtain added positive response and cognition. Hence, we hypothesize:

H₄: PR evokes more positive cognition towards the company than advertising, and therefore increases intentions to search more information, inclusion in consideration set, likelihood to visit, and intentions to buy.

3.6. Hypothesis 5

Multiple mediation methodology has historically been arcane to researchers, but is today a well-used method (Preacher & Hayes, 2008). This hypothesis investigates the two mediating factors; strategic motivation and positive company cognition and if the choice of communication channels can through these mediating variables respectively have an impact on the intentions to search more information, inclusion in consideration set, likelihood to visit, and intentions to buy. It is expected that the intentions to search more information, inclusion in consideration set, likelihood to visit, and intentions to buy is likely to increase if the communication message comes from PR which evokes less strategic motivation, and therefore enhances the positive company cognition. Consumers that like the company are more likely to have higher the intentions to search more information, inclusion in consideration set, likelihood to visit, and intentions to buy is likely to increase if the communication message comes from PR. Hence, we hypothesize:

H₅: The effects of communication channels on intentions to search more information, inclusion in consideration set, likelihood to visit, and intentions to buy, are mediated by strategic motivation and positive company cognition. Specifically, choice of communication channels influences strategic motivation, which in turn has impact on positive company cognition, which finally affects intentions to search more information, inclusion in consideration set, likelihood to visit, and intentions to buy.

3.7. Hypothesis 6

Similarly to the former hypothesis, this hypothesis examines the impact of intentions to search more information, inclusion in consideration set, likelihood to visit, and intentions to buy, based on the choice of communication channels through the mediating variables; strategic motivation and company trustworthiness respectively. It is assumed that the intentions to search more information, inclusion in consideration set, likelihood to visit, and intentions to buy is likely to increase if the communication message comes from PR, which in turn evokes low strategic motivation, and therefore increases company trustworthiness. A trustworthy company gets consumers who have added intentions to search more information, inclusion in consideration set, likelihood to visit, and intentions to buy. Hence, we hypothesize:

H₆: The effects of communication channels on intentions to search more information, inclusion in consideration set, likelihood to visit, and intentions to buy, are mediated by strategic motivation and company trustworthiness. Specifically, choice of communication channels influences strategic motivation, which in turn has impact on company trustworthiness, which finally affects intentions to search more information, inclusion in consideration set, likelihood to visit, and intentions to buy.

4. Method

4.1. Research Design

The purpose of this research is to study the established causal relationships between variables; CSR message receivers, strategic motivation, trustworthiness of company, positive cognition towards the company, and message receivers' intentions to search for more information, visit, and buy from the company. The research design is therefore characterized as *explanatory* (Saunders, Lewis & Thornhill, 2009). The emphasis in this study is the phenomenon of PR as a credible communication channel in order to explain which factors that make it trustworthy for message receivers and the message provider, which is a company. Theory suggests the relevance of the hypotheses, especially the role of PR which is a hot topic for both marketers and public relations.

The study's research design is an *experiment* since the intentions are to gain knowledge about the causal links; whether a change in one independent variable produces a change in another dependent variable (Hakim, 2000), and if a mediator variables have causal succession between the independent variable and the dependent variable (MacKinnon, Fairchild & Fritz, 2007).

4.2. Research Strategy

The experiment is classic (Saunders, Lewis & Thornhill, 2009) and has a Between Subjects Design in which two groups (choice of communication channel (PR vs. advertising)) will be asked to make judgments on numerical rating scales (from 1 to 7) (Birnbbaum, 1999) in a questionnaire. The company, Darius Design is a fictitious brand that is unknown, and is presented as making casual business clothes for the modern and young, and well-educated students who are going to begin in the consultancy industry (see Appendix, B.). It is considered thoroughly that the brand should be unknown to the respondents in order ensure that their answers will only include their unbiased perceptions of the brand and company, and only given the information from the questionnaire. Although the brand is new to the market, the goods that it provides are not unknown to the respondents.

Group 1 will be given messages about the company through PR; a newspapers article, and group 2 will be given basically the same message, but through an advertisement made by the

company. Both groups are exposed to the planned manipulation; DariusDesign's corporate social responsibility initiatives through *HelpWear* that gives winter clothes to poor children in the third world. The questionnaire is to be found in the Appendix, A. to E.

In order to strengthen internal validity, the respondents were selected for the groups randomly. Since the respondents were to be assigned randomly to the groups, changes could not be attributed to differences in the composition of the two groups. At last, the dependent variables were measured in the data analysis.

4.3. Data Collection

4.3.1. How the experiment was conducted

The experiment was conducted in the Introductory Marketing Class at the bachelor's level at Norwegian School of Economics and Business Administration (NHH), where almost the whole class was present. A number of 128 students participated in the research in exchange for partial course credits. As described in the research strategy section, the respondents needed to be assigned to both choice of communication channel (PR vs. advertising) randomly, and through systematically ordering the questionnaire forms by the group number, like 1, 2, 1, 2, 1, 2..., the randomization criteria was satisfactory.

Since the classroom was relatively crowded, half of the class was asked to leave the auditorium for 15 minutes while the other half conducted the experiment. In order to avoid cooperation between participants and the possibility for partakers to see what others had responded, every student was asked to let at least one empty seat next to them on each side.

Before the experiment started, information about the research was given. Information about not looking at the neighbor's answers and that they should not think too much about the questions before answering was emphasized in addition to the first page of the form (see Appendix, A.). It was important that the answers are their thoughts that first come to mind when they read the questions. The respondents had 15 minutes to finish the questionnaire, and those who finished earlier were asked to leave the classroom. Likewise, the same procedure followed for the last group.

4.3.2. The sample

Statistical significance is defined as “the likelihood of the pattern that is observed occurring by chance alone, if there really was no difference in the population from that which the sample was drawn” (Saunders, Lewis & Thornhill, 2009). This research received 128 responses; among them were 119 responses valid for further analysis. For both groups, a check question was asked before the questions concerning the CSR section came up. The check question asked simply what kind of CSR initiative the company had, in which the respondents had four different alternatives. The alternatives were noticeably dissimilar; against human trafficking, working for the handicapped, against child labor, and the correct question, which was dressing up children in the third world in the winter time. Nine persons gave the incorrect answer. Their responses were therefore rejected for further analysis.

Among the 119 responses, 50 came from females, and 69 came from males. Most respondents (N = 66) were between 18 and 21 years of age, secondly 49 respondents were between 22 and 25 years. Only four respondents were between 26 and 30 years.

4.3.3. The questionnaire

As described in the research strategy, two questionnaires were made with slightly dissimilarities. Group 1 received the information about DariusDesign and its CSR efforts through PR and the other group received basically the same information, but from another communication channel; advertising. Appendix C. and D. display the different information the two groups received.

The first page of the questionnaire explained the purpose of their participation, and instructions on how to respond; a measurement scale from 1 to 7, where 1 and 7 represent correspondingly *very unlikely* and *very likely*, or *strongly disagree* and *strongly agree*. Their valuable immediate reactions to the questions were stressed both on this page and vocally during the experiment.

The questionnaire strategy allows the research to collect quantitative data which can be analyzed quantitatively using descriptive statistics. The major drawback with using a questionnaire is the capacity to do it badly by respondents that are not interested in answering

the questionnaire correctly. The Likert-style rating with the seven-point numeric rating scale is a frequently used method (Saunders, Lewis & Thornhill, 2009).

Questions 13, 14 and 15 are in essence the same question, but question 13 is reversed compared to the questions 14 and 15 (Appendix, E.). Question 13 asked: “I believe that the company genuinely wants to create a better world” (Jeg tror at bedriften har et genuint ønske om å skape en bedre verden). Question 14 asked: “I believe that the company’s CSR initiative is simply strategically motivated (Jeg tror at denne bedriftens CSR-tiltak kun er strategisk motivert), while question 15 asked: “I believe that the intentions to the CSR initiative is to increase profitability (Jeg tror at hensikten med CSR-tiltaket er profitt- og lønnsomhetsbasert.). If a respondent answers “two” on question 13, he and she should answer “six” on questions 14 and 15. By including reversed questions in the questionnaire, the research is more likely to achieve a more precise reaction to what the respondents really thought of DariusDesign’s intentions behind their CSR initiative.

The questionnaire also performed one qualitative question, where the respondents were asked to write the six first words or sentences that they thought of when they read the informative stimuli. This question was the first question of the questionnaire. The following questions two to five asked about intentions to search for more information about DariusDesign, evaluate to visit the store, likelihood of visiting, and *intentions to buy*. Question six to nine referred to information about the respondent; age, class, relevance and the like. Question ten was as mentioned earlier the check question, and question eleven to fifteen asked questions about the company trustworthiness.

The CSR information was communicated through a newspapers article, which is PR. The article informed the readers about the new opening of DariusDesign, the visitor numbers, who they are and their percentage of sales that go directly to purchasing clothes to poor children in the winter (Appendix, C.). Similarly, the same stimulus was given through advertising (Appendix, D.); almost all the information was the same, but it came from an advertisement made by the company. This advertisement is likely to be found in fashion magazines, newspapers and the like.

4.4. Methods of analysis

This paper will focus on these following statistical tests:

One-Way ANOVA

One-Way ANOVA is an analysis of variance that compares means of two or more samples using the F-distribution; here in this paper, only two groups are going to be compared to one another; the group that received information through PR, and those from advertising.

OLS Regression

OLS, or Ordinary Least Squares is a method for estimating the parameters of a multiple linear regression model (Wooldridge, 2009). It is an approach to modeling the relationship between a dependent variable y and independent variable x . The values β and standard error (SE) are to be used further in the simple mediation analysis. The linear regressions are to be analyzed in SPSS.

The Sobel Test

The Sobel test (after Sobel, 1982) tests the significance of mediation by testing the null hypothesis that the population indirect effect is equal to zero. Rejection of the null hypothesis implies that there is an indirect effect of X on Y through a given mediator M (simple mediation structure).

The Sobel test requires parameters from the unstandardized coefficients; β and standard error from the two relations from the independent variable to the mediator variable, and from the mediator variable to the dependent variable. The parameters β and standard error derived from the OLS regressions will be further analyzed in the Sobel Test Calculator by Daniel Soper (2010). This calculator generates the Sobel Z-value, and the P-value. Only the one-tailed P-value will be used.

Preacher and Hayes' Multiple-Step Multiple Mediator Model

In order to conduct multiple-step mediation, the MEDTHREE macro and a formula is needed in the SPSS program (after Preacher & Hayes, 2008). The macro estimates the total, direct, and indirect effects of the independent variable “Choice of communication channel (PR vs. advertising)” on the dependent variables “Intentions to search more information (spm2)”,

“inclusion in consideration set (spm3)”, “likelihood to visit (spm4)”, and “intentions to buy (spm5)”, using a set of OLS regressions. For inference about the indirect effects, MEDTHREE generates percentile-based bootstrap confidence intervals (95 %) and bootstrap estimates of standard errors.

Bootstrapping

Bootstrapping is a nonparametric resampling procedure, which involves repeatedly sampling from the data set and estimating the indirect effect in each resampled data set (Preacher and Hayes 2008). It is a computer-based method for assigning measures of accuracy to sample estimates (Efron & Tibshirani, 1994). This technique allows estimation of the sample distribution of almost any statistic using only very simple methods (Varian, 2005).

The bootstrapping procedure has been suggested since it does not inflict the assumption of normality. The bootstrap confidence intervals will in this study be used as the basis for hypotheses testing of the multiple-step multiple mediator models.

5. Results

5.1. Initialization of data

Since the questionnaire was to be answered manually, the data collection ought to be plotted manually into the statistic program SPSS. As mentioned earlier, nine respondents of the experimental groups answered wrong on the check question about DariusDesign's CSR initiative, making only 119 respondents valid for further analysis.

Since the questionnaire included reversed questions, question 13 was reversed to give it the same scaling as question 14 and 15. A mean of these three questions were then computed as a new variable named *Strategic Motivation* (in Norwegian: *Strategisk Motivasjon*). *company trustworthiness* is a new variable computed by the mean of question 11 and 12, which asked the respondents if they trust the company and if they thought of DariusDesign as a sincere and genuine company.

All the words and essence of sentences from question 1 were characterized and counted for as Company/Brand, Products, CSR, and Miscellaneous (values equal 1, 2, 3 and 4), as well as graded as Positive, Negative, and Neutral (values equal 1, 2 and 3). *positive company cognition* is a computed variable through evaluating the data from question 1 in which all the words and essence of sentences concerning Company/Brand were assembled to another table in SPSS. The counted mood grades were also in separate columns. Hereafter, a new grading system was manually conducted on all words in a new column, *Bedriftantpos* (Positive company cognition); the number of positive words had the same number of positive signs, similarly negative signs to negative words. The point was to balance the positive signs to the negative signs. Example: if a respondent has one negative word about the company or the brand, and one positive word about the company or the brand, then the value would equal 0 ($-1 + 1 = 0$) in the column for *positive company cognition*. If a respondent has one negative word and two positive words, then the value would equal 1 ($-1 + 2 = 1$). If a respondent has two negative words and one positive word, then the value is -1.

A variance analysis (One-Way ANOVA) was made to create a table of the mean of all the questions asked. The output printouts from SPSS is to be found the Appendix, G.

Table 5: Descriptive means from the One-Way ANOVA Analysis

VARIABLES/GROUP	1 (PR w/CSR)	2 (Ad w/CSR)
Intentions to search for more information (spm 2)	4.78 (1.60)*	4.07 (1.71)
Evaluate to visiting (spm 3)	5.26 (1.49)	4.51 (1.72)
Likelihood for visiting (spm 4)	4.88 (1.49)	4.08 (1.73)
Intentions to buy (spm 5)	3.95 (1.16)	3.62 (1.38)
Company Trustworthiness	4.50 (1.11)	4.04 (1.05)
Strategic Motivation	4.96 (1.14)	5.39 (1.28)

* Mean (standard deviation)

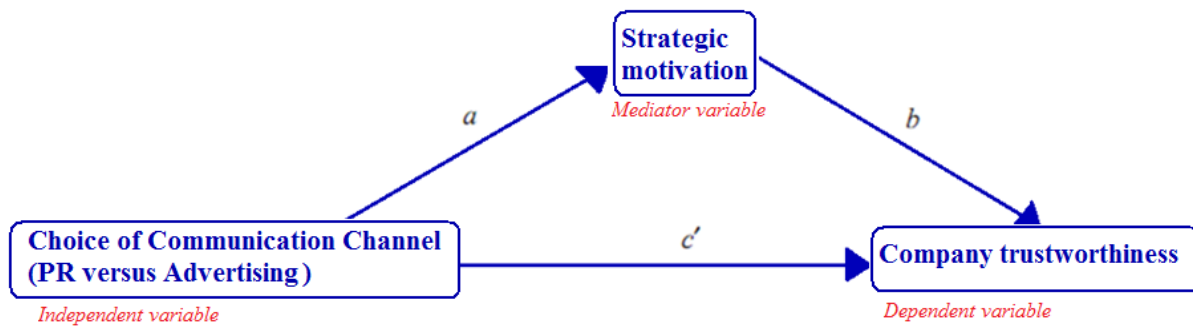
Kleffelgård and Setrom (2010) and Berge (2010) have shown that communication through PR has stronger effects than through advertising when introducing new products and services, and this study's main effects confirm the foregoing research results. The results from the variance analysis illustrates that PR achieved higher scores than advertising with the exception of the variable *Strategic Motivation*. It is assumed that PR is a more believable source of communication, and *Strategic Motivation* should therefore be lower for PR than for Advertising.

The One-Way ANOVA analysis confirms the main effect that there exist an effect between groups on *intentions to search more information*, *inclusion in consideration set*, and *likelihood to visit*, but not on *intentions to buy*. Further, it can be interesting to discover if there is a significant difference between groups on *company trustworthiness* and *Strategic Motivation*. The same analysis provided p-values¹ that conclude that the difference between groups is significant. The results from the analysis is to be found in the Appendix, G.

All six hypotheses, H₁, H₂, H₃, H₄, H₅, and H₆, have the same null hypothesis (H₀) which is there is no statistically significant difference between choice of communication channel. The significance level, α , is 0.05 (5 %). If the Sobel test gives a p-value lower than the α -level, the null hypothesis is thus rejected.

¹ The P-value of Strategic Motivation (StrategiskMotivasjon) is slightly larger than 5 % significance level (0.054), but below 10 % significance level. It is therefore reasonable to argue in favor of significant difference between groups on Strategic Motivation (StrategiskMotivasjon).

5.2. Hypothesis 1



Figur 6: Mediation model for hypothesis 1

H₁: The effect of PR versus Advertising on Company Trustworthiness is mediated by perceived strategic motivation, in which PR evokes less suspicion on strategic motivation than advertising and therefore gains higher company trustworthiness.

This simple mediation model uses the Sobel Test in order to uncover the significance of mediation. The required parameters; β and standard error are derived by modeling the relationship between the dependent variable y and the independent variable x . The linear regression outputs are to be found in the Appendix, H.

The significance level, α , is 0.05 (5 %). If the Sobel test presents a p-value lower than the α -level, then the null hypothesis is thus rejected. The results; the Sobel Z-value is thereby referred to as statistically significant. The table below shows the levels that were generated from the regression analysis and the Sobel test:

Table 7: Results from hypothesis 1

Relations from and to	β	Std. er.	Sig.	Sobel Z-value	P-value (one-tailed) ²
Com. Ch. → Strat. Mot.	0.434	0.223	0.054 ³	-1.8198	0.0344
Strat. Mot. → Comp. Trust.	-0.385	0.075	0.000		

² The p-value is one-tailed because this hypothesis tests against a one-sided alternative.

³ The P-value of Strategic Motivation is slightly larger than 5 % significance level, and below 10 % significance level. It is therefore reasonable to argue there exists an effect between choice of communication channels and strategic motivation.

Conclusion: The p-value is 0.0344, which is below the significance level of 0.05 ($\alpha = 5\%$). The null hypothesis is therefore rejected, and the conclusion is that the mediation variable, *Strategic Motivation*, is significant.

The β -value of the first regression is 0.226. It is in line with the hypothesis' logic, that PR (value 1) evokes less strategic motivation than advertising (value 2).

The β -value of the second regression is -0.385, which can be explained that the evidence of strategic motivation reduces the company trustworthiness by -0.385.

5.3. Hypothesis 2

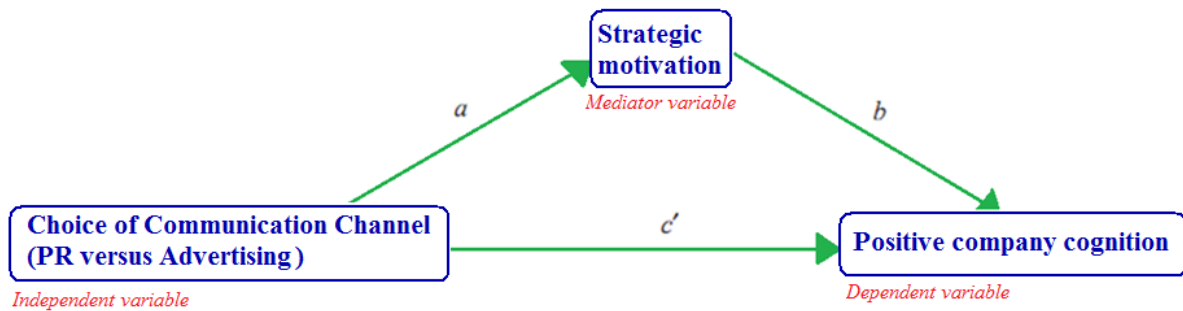


Figure 8: Mediation model for hypothesis 2

H₂: The effect of PR versus Advertising on Positive Company Cognition is mediated by perceived strategic motivation, in which PR evokes less suspicion on strategic motivation than advertising and therefore gains higher positive company cognition.

The table below shows the levels that were generated from the regression analysis and the Sobel test. The linear regression outputs are to be found in the Appendix, I.

Table 9: Results from hypothesis 2

Relations from and to	β	Std. er.	Sig.	Sobel Z-value	P-value (one-tailed)
Com. Ch. \rightarrow Strat. Mot.	0.434	0.223	0.054 ⁴	-0.262	0.397
Strat. Mot. \rightarrow Pos.comp.cog.	-0.032	0.121	0.790		

Conclusion: The p-value is 0.397, which is way higher the significance level of 0.05 ($\alpha = 5\%$). The null hypothesis cannot be rejected, and the conclusion is that the mediation variable, *Strategic Motivation*, is insignificant to the choice of communication channels and positive company cognition.

⁴ The P-value of Strategic Motivation is slightly larger than 5 % significance level, and below 10 % significance level. It is therefore reasonable to argue there exists an effect between choice of communication channels and strategic motivation.

5.4. Hypothesis 3

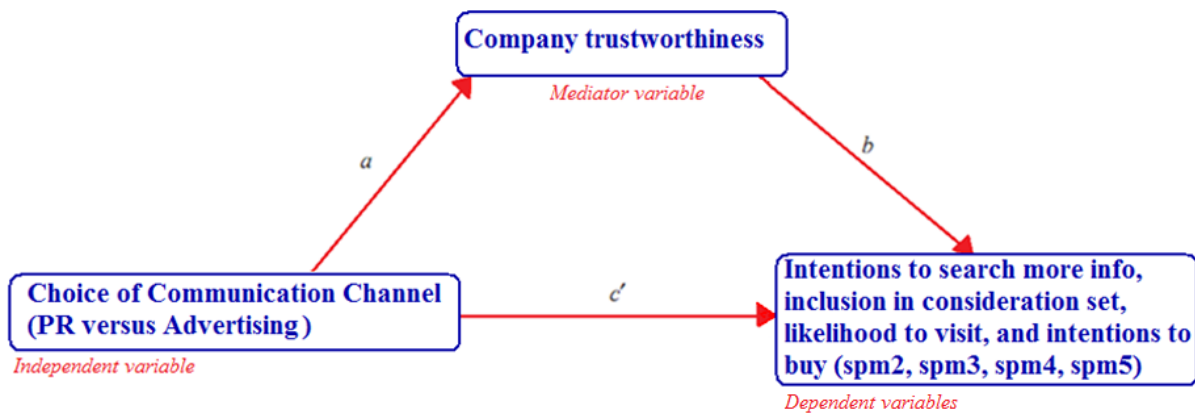


Figure 10: Mediation model for hypothesis 3

H₃: The effect of PR versus Advertising on intentions to search more information, inclusion in consideration set, likelihood to visit, and intentions to buy, is mediated by company trustworthiness, in which PR has larger effects than advertising.

The table⁵ below shows the levels that were generated from the regression analysis and the Sobel test. The linear regression outputs are to be found in the Appendix, J.

Table 11: Results from hypothesis 3

Relations from and to	β	Std. er.	Sig.	Sobel Z-value	P-value (one-tailed)
Com. Ch. → <i>Comp. trustw.</i>	-0.459	0.198	0.022		
<i>Comp. trustw.</i> → spm2	0.602	0.131	0.000	-2.07	0.019
<i>Comp. trustw.</i> → spm3	0.521	0.130	0.000	-2.01	0.022
<i>Comp. trustw.</i> → spm4	0.530	0.130	0.000	-2.02	0.022
<i>Comp. trustw.</i> → spm5	0.458	0.099	0.000	-2.07	0.019

⁵ The table above shows the results of Sobel Z-value and P-value from the Sobel tests where the parameters generated from “Com. Ch. → *Comp. trustw.*” were in the Sobel test calculations for each and every question from question 2 to question 5.

Conclusion: All the P-values from the Sobel Test were below the significance level of 0.05. The null hypothesis is therefore rejected, and the conclusion is that the mediation variable, *Company Trustworthiness*, is significant. Company trustworthiness increases the intentions to search for more information about the company, *inclusion in consideration set*, *likelihood to visit*, and *intentions to buy*.

The β -value of the first regression, -0.459, is accordingly in line with the hypothesis' logic, that messages through PR evokes more company trustworthiness than through advertising.

5.5. Hypothesis 4

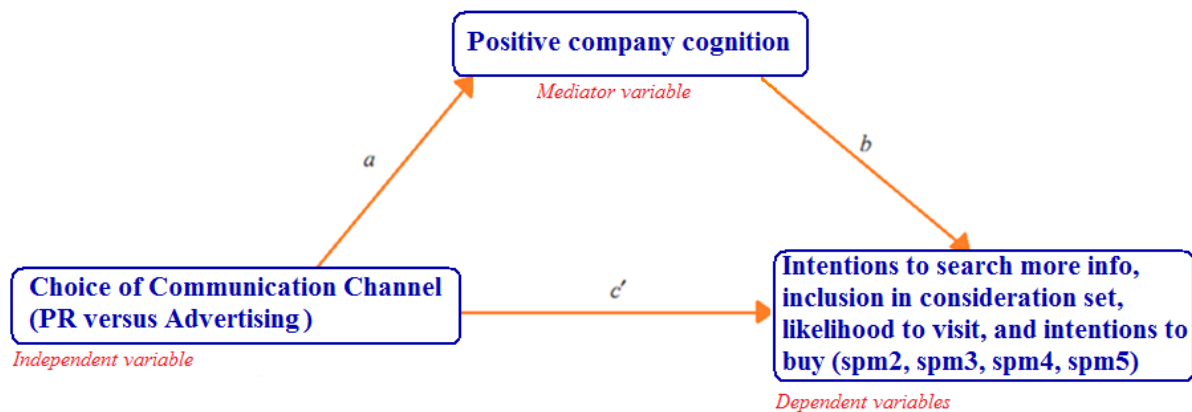


Figure 12: Mediation model for hypothesis 4

H₄: PR evokes more positive cognition towards the company than advertising, and therefore increases intentions to search more information, inclusion in consideration set, likelihood to visit, and intentions to buy.

The table⁶ below shows the parameters that were generated from the regression analysis and the Sobel test. The linear regression outputs are to be found in the Appendix, K.

Table 13: Results from hypothesis 4

Relations from and to	β	Std. er.	Sig.	Sobel Z-value	P-value (one-tailed)
Com. Ch. \rightarrow Pos. Comp. Cog.	0.355	0.295	0.231*		
Pos. Comp. Cog. \rightarrow spm2	0.170	0.096	0.078*	0.995	0.160
Pos. Comp. Cog. \rightarrow spm3	0.124	0.094	0.197*	0.882	0.189
Pos. Comp. Cog. \rightarrow spm4	0.190	0.093	0.044	1.037	0.150
Pos. Comp. Cog. \rightarrow spm5	0.182	0.072	0.012	1.092	0.137

Conclusion: The P-values from the Sobel test are all higher than the significance level of 0.05. The null hypothesis cannot be rejected, and the conclusion is that the mediation variable, *Positive Company Cognition*, is insignificant as a mediator variable between the choice of communication channels, and intentions to search more info, *inclusion in consideration set*, *likelihood to visit*, and *intentions to buy*.

⁶ The table above shows the results of Sobel Z-value and P-value from the Sobel tests where the parameters generated from “Group \rightarrow Pos. Comp. Cog.” were in the Sobel test calculations for each and every question from question 2 to question 5.

* The sig.-levels from the OLS regressions show that first three regressions are insignificant, given that $\alpha = 5\%$. The data is therefore already unfounded for further analysis.

5.6. Hypothesis 5

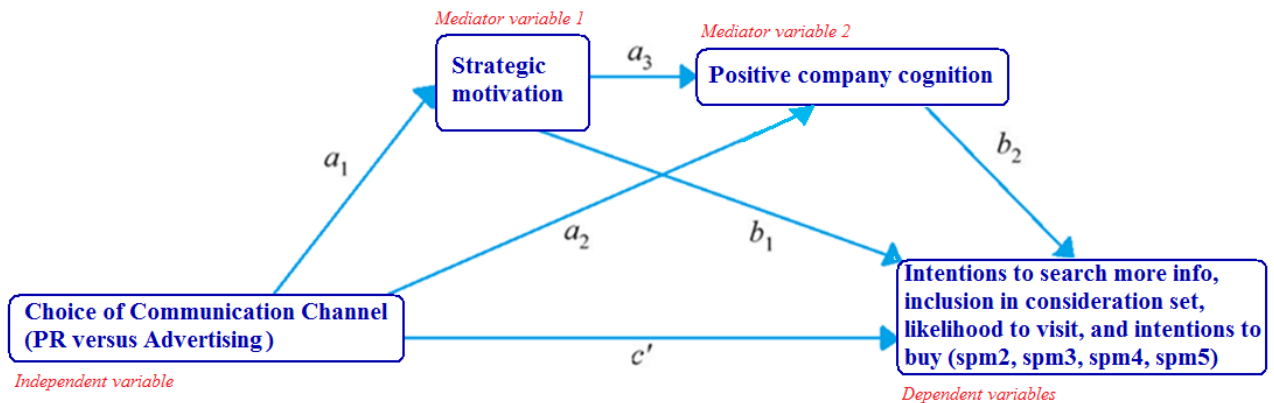


Figure 14: Multiple-Step Mediation Model for hypothesis 5

H₅: The effects of communication channels on intentions to search more information, inclusion in consideration set, likelihood to visit, and intentions to buy, are mediated by strategic motivation and positive company cognition. Specifically, choice of communication channels influences strategic motivation, which in turn has impact on positive company cognition, which finally affects intentions to search more information, inclusion in consideration set, likelihood to visit, and intentions to buy.

The initial formula of MEDTHREE was replaced by four running formulas, which can be found in Appendix, L. Each of the formulas was run separately in SPSS. How the formulas were run in SPSS can be found in Appendix, N.

Conclusion: The indirect effects (with bootstrap 95% CI) for the dependent variables included zero, meaning that *Strategic Motivation* (M1) and *Positive Company Cognition* (M2) do not explain the association between choice of communication channel (independent variable), and intention to search more information, *inclusion in consideration set*, *likelihood to visit*, and *intentions to buy*. The mediation chain $X \rightarrow M1 \rightarrow M2 \rightarrow Y$ is insignificant.

The results outputs of indirect effects (with bootstrap 95 %) from SPSS are to be found in Appendix, L.

5.7. Hypothesis 6

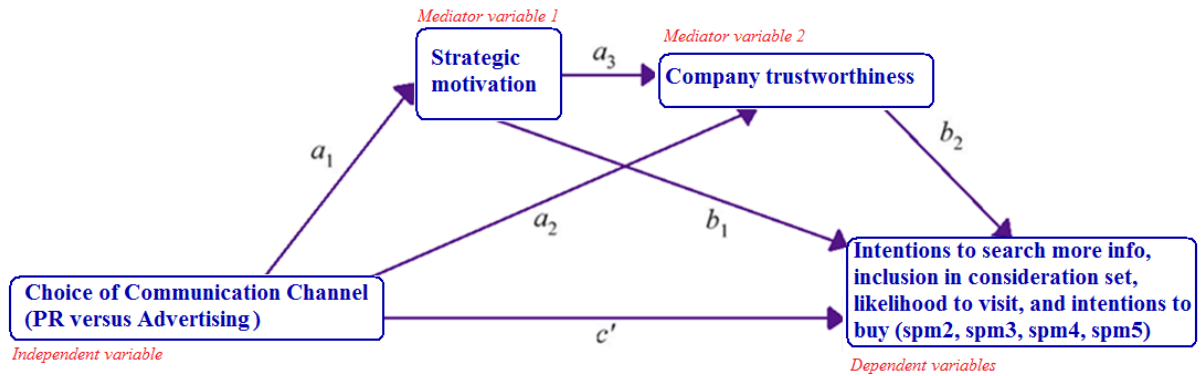


Figure 15: Multiple-Step Mediation Model for hypothesis 6

H₆: The effects of communication channels on intentions to search more information, inclusion in consideration set, likelihood to visit, and intentions to buy, are mediated by strategic motivation and company trustworthiness. Specifically, choice of communication channels influences strategic motivation, which in turn has impact on company trustworthiness, which finally affects intentions to search more information, inclusion in consideration set, likelihood to visit, and intentions to buy.

Similar to hypothesis 5, the initial formula of MEDTHREE was replaced by four running formulas, which can be found in Appendix, M. Each of the formulas was run separately in SPSS. How the formulas were run in SPSS can be found in Appendix, N.

Table 16: Confidence Intervals of Total Indirect Effects

Total Indirect Effects (with bootstrap 95% CI)		
	LL95% CI	UL95% CI
Intentions to search more information	-0.5173	-0.0334
Inclusion in consideration set	-0.5052	-0.0139
Likelihood to visit	-0.4769	-0.0072
Intentions to buy	-0.4334	-0.0333

Intentions to search more information

Conclusion: The total indirect effect is significant because 95% CI: {-0.5173, -0.0334} does not contain zero. The mediation chain $X \rightarrow M1 \rightarrow M2 \rightarrow Y$ is significant, implicating that both mediating variables (*strategic motivation* and *company trustworthiness*) are significant. Furthermore, there are no indirect effects when it comes to M1, M2, and M1&M2.

Inclusion in consideration set DariusDesign

Conclusion: The total indirect effect is significant because 95% CI: {-0.5052, -0.0139} does not contain zero. The mediation chain $X \rightarrow M1 \rightarrow M2 \rightarrow Y$ is significant, implicating that both mediating variables (*strategic motivation* and *company trustworthiness*) are significant. Furthermore, there are no indirect effects when it comes to M1, M2, and M1&M2.

Likelihood to visit DariusDesign (spm4)

Conclusion: The total indirect effect is significant because zero is outside the frames of 95% CI: {-0.4769, -0.0072}. The mediation chain $X \rightarrow M1 \rightarrow M2 \rightarrow Y$ is significant, implicating that both mediating variables (*strategic motivation* and *company trustworthiness*) are significant. Furthermore, there are no indirect effects when it comes to M1, M2, and M1&M2.

Intentions to buy from DariusDesign (spm5)

Conclusion: The total indirect effect is significant because zero is outside the frames of 95% CI: {-0.4334, -0.0333}. The mediation chain $X \rightarrow M1 \rightarrow M2 \rightarrow Y$ is significant, implicating that both mediating variables (*strategic motivation* and *company trustworthiness*) are significant. Furthermore, there are no indirect effects when it comes to M1, M2, and M1&M2.

6. Discussion

6.1. Summary of findings

The intentions behind this study were to challenge the communication tools PR and advertising, attempting to allocate the role PR has compared to advertising. Recent theorists have discussed the role of PR and its credibility and the functions advertising has today (Ries & Ries, 2004; Engeseth, 2009), and this study authenticates their thoughts of the rise or the fall of PR and advertising; is PR still perceived as a credible source of communication, and more credible than advertising? The research question, which is “Why has CSR a stronger effect for introduction of new products and services through PR than through advertising?” assumes that PR is a more effective communication channel than advertising, by using a new brand’s CSR initiative as message given through a newspaper article, which is PR, and a magazine advertisement, which is pure advertising.

A CSR message is chosen in this study because of its rising nature of importance among distinguished and large organizations all over the world. In order to increase the efficiency of communicating CSR messages, it is therefore important to have knowledge about how CSR can be communicated and to be trusted by the intended message receivers and why it happens to be like that. The understanding of why PR is more effective than advertising is also essential to both companies that engage in CSR and those who do not have CSR initiatives.

First of all, the variance analysis concludes that the main effects between PR and advertising are apparent. PR got significantly higher values than advertising on consumers’ intentions to search for more information about the company, inclusion in consideration set, and likelihood to visit. On consumers’ intentions to buy, there existed no significant difference between PR and advertising. There is significant distinctness between choice of communication channel on company trustworthiness and strategic motivation.

The six hypotheses in this study were constructed to retort to the research’s assumption that PR is a more effective communication channel than advertising, and to test which factors that make PR more effective.

The first hypothesis (H₁) states that “The effect of PR versus Advertising on Company Trustworthiness is mediated by perceived strategic motivation, in which PR evokes less suspicion on strategic motivation than advertising and therefore gains higher company trustworthiness.”. The Sobel Test adverts that strategic motivation is less evident for those who received the CSR message through PR compared to advertising, and perceived strategic motivation decreases company trustworthiness, indicating that strategic motivation is a significant mediating variable involving the message receivers (Choice of communication channel; PR vs. advertising) and Company Trustworthiness. This conclusion is in line with what PR has for centuries been known for – credibility. A credible source evokes less suspicion on strategic motivation on the actuality that PR is written by third party journalists with no vested interest in tricking consumers into buying or the like. Journalists are every so often recognized as “watchdogs”, investigating organizations’ secrets and so on.

The second hypothesis (H₂) articulates that “The effect of PR versus Advertising on Positive Company Cognition is mediated by perceived strategic motivation, in which PR evokes less suspicion on strategic motivation than advertising and therefore gains higher positive company cognition.”. Similar to the first hypothesis, the mediating variable is the same; strategic motivation, but the dependent variable is “Positive Company Cognition”. The Sobel Test revealed here that strategic motivation is not a significant mediating variable, designating that strategic motivation cannot explain the relationship between the choice of communication channel and positive cognition towards the company, DariusDesign.

The third hypothesis (H₃) states if “The effect of PR versus Advertising on intentions to search more information, inclusion in consideration set, likelihood to visit, and intentions to buy, is mediated by company trustworthiness, in which PR has larger effects than advertising.” The mediating variable is here Company Trustworthiness, tested between the CSR message receivers and intentions to search more info, inclusion in consideration set, likelihood to visit, and intentions to buy. Sobel Test statistics conclude by that Company Trustworthiness is a significant mediating variable. When receiving information messages about CSR initiatives, PR evokes more trust than advertising, and Company Trustworthiness is an important variable for companies that want to introduce a new product or service to the market because it affects people’s intentions to search for more information about the company or the new product and service, as well as increased inclusion in consideration set,

the likelihood to visit, and the most important variable; the likelihood that a purchase will be made by the consumer.

The fourth hypothesis (H₄) enounces that “PR evokes more positive cognition towards the company than advertising, and therefore increases intentions to search more information, inclusion in consideration set, likelihood to visit, and intentions to buy.” The two previous hypotheses have implied that PR is a more effective communication channel than advertising on the particulars that PR is more trustworthy because it evokes less suspicion on strategic motivation, and therefore positively affect consumers’ intentions to acquaint to the company. It was therefore relevant to ascertain if Positive company cognition is a mediating variable to the CSR messages receivers and intentions to search more information, inclusion in consideration set, likelihood to visit, and intentions to buy. Statistics concluded here that Positive company cognition is not a significant mediating variable.

The fifth hypothesis articulates that “The effects of communication channels on intentions to search more information, inclusion in consideration set, likelihood to visit, and intentions to buy, are mediated by strategic motivation and positive company cognition. Specifically, choice of communication channels influences strategic motivation, which in turn has impact on positive company cognition, which finally affects intentions to search more information, inclusion in consideration set, likelihood to visit, and intentions to buy”. The indirect effects with (bootstrap 95 % CI) conclude that the mediating variables; strategic motivation and positive company cognition are not significant to explain the relationship between choice of communication channel and consumers’ intentions search more information, inclusion in consideration set, likelihood to visit, and intentions to buy. This result is not surprising, given the fact that positive company cognition was not a significant mediating variable in the fourth hypothesis.

The sixth hypothesis states if “The effects of communication channels on intentions to search more information, inclusion in consideration set, likelihood to visit, and intentions to buy, are mediated by strategic motivation and company trustworthiness. Specifically, choice of communication channels influences strategic motivation, which in turn has impact on company trustworthiness, which finally affects intentions to search more information, inclusion in consideration set, likelihood to visit, and intentions to buy”. The indirect effects (with bootstrap 95%CI) conclude that the mediating variables; strategic motivation and

company trustworthiness are significant to explain the relationship between choice of communication channel and consumers' intentions search more information, inclusion in consideration set, likelihood to visit, and intentions to buy. This result is not surprising, given the fact that both strategic motivation and company trustworthiness were significant mediating variables correspondingly in the first hypothesis and the third hypothesis.

6.2. Theoretical implications

Preceding research on the field of CSR has had modest focus on how CSR messages should be communicated to consumers. In addition, recent theorists have also questioned the roles of advertising and PR as effective communication channels (Ries & Ries, 2004; Engeseth, 2009). This study has examined the effects of communicating CSR messages through both PR and advertising, examining the variables that may explain why PR is a more effective communication channel than advertising.

CSR has developed to be a widespread concept that has many admirers today (Davids, 1990; Sen & Bhattacharya, 2001; Porter & Kramer, 2006). It is claimed that CSR is a strategy that if implemented thoughtfully and thoroughly, it can enhance a corporation's competitiveness (Porter & Kramer, 2006) and that there is a positive relationship between CSR rating by investors and analysts, and market value of the company. The research in this paper makes several important contributions to marketing theory. First, it confirms the results from previous CSR research (Kleffegård & Setrom, 2010 and; Berge, 2010) that PR is more effective than advertising when introducing new products and services.

Second, this research challenges the disputed position that PR has or had as a credible source of communication. As strategic motivation is a significant mediating variable in the relationship between choice of communication channel and company trustworthiness, and the fact that PR evokes less perceived strategic motivation than advertising, a valuable wisdom is conceded. Persuasion knowledge theories suggest that people learn about persuasion through own experiences, from family and friends, and through observing marketers. The magnitude of this learning is that people's persuasion knowledge shapes how they respond as persuasion targets (Friestad & Wright, 1994). In this study, as information about DariusDesign was given to respondents through a newspaper article and an ad, the respondents automatically guide their attention to aspects of possible background conditions that caused the agent, DariusDesign to construct the attempt in that way. The results from this study reveal that PR

still has its position as a credible communication channel. The respondents that received information about DariusDesign through PR perceived lower strategic motivation, and thereby higher company trustworthiness, compared to advertising.

Third, this paper provides insight to why choice of communication channel can affect the effectiveness of message delivery. The goal to every message delivery from a brand and a company is to increase sales, and thereby profits. Profits are achieved only through purchase. PR and advertising received significantly similar results on intentions to buy, and that can be explained by that a consumer needs more knowledge about the company. For example, after a visit or a more independent information search, the consumer is at that moment more capable to decide whether to buy products from DariusDesign or not. DariusDesign is in a market with a lot of competition, and the brand needs to be more distinguished in order to achieve instant persuasion to purchase.

Although the mean on consumers' intentions to purchase was not significantly different between the PR and advertising, the multiple-step multiple mediation in the sixth hypothesis disclosed that strategic motivation and company trustworthiness explain the relationship between choice of communication channel and intentions to search more information, inclusion in consideration set, likelihood to visit, and intentions to buy. This finding indicates that PR evokes less strategic motivation than advertising, resulting in higher company trustworthiness, which again gives effects through higher intentions to search for more information about the company, increased inclusion in consideration set, increased likelihood to visit, and higher intentions to purchase.

By connecting these results to the theories of persuasion knowledge, it is logical to say that PR is more persuasive than advertising. PR persuades more than advertising; people are more willing to search more information about the company, the brand name is more likely to be included in the consideration set, and people are more disposed to visit the store. All these effects may lead to future purchase. The reason to why PR is more persuasive than advertising can be explained by that PR is historically known as a third part communicator with a objective point of view, and with no intentions to trick their readers into buy products or services from a specific store. Because PR is more trustworthy than advertising, it has therefore more power to persuade readers and consumers. As persuasion is connected to belief in the definition from the Oxford Dictionary of English ("the action or process of

persuading someone or of being persuaded to do or believe something”), confidence and trust in the communication channel has therefore a huge importance.

Nevertheless, it is reasonable to assume that the consumers’ intentions to buy will change between groups if the consumers would have a chance to get to know the company and the brand independently; perhaps through a visit to the store or through information search. It might be difficult to decide whether to buy from the store if the consumer has not even visited the store or received more information about the company. If their acquaintance with the company and the brand is satisfactory, then strengthened company trustworthiness might increase intentions to buy. As hypothesis six revealed, company trustworthiness is the key to higher intentions to buy, as this relation is significant.

6.3. Managerial Implications

Corporate Social Responsibility is a concept that is more and more expected by large and influential companies. It is a risk management tool and a means to increase competitiveness in the market. Conversely, CSR should not be implemented without having the knowledge about the consequences of CSR realization.

The results from this research suggests that CSR messages when introducing a new product or service should be communicated through PR rather than advertising. A message delivery through PR is perceived as less strategically motivated, which in turn increases a consumer’s trust in the company or the brand’s existence. Increased consumer trust amplifies intentions to search more information, inclusion in consideration set, likelihood to visit, and intentions to buy.

Having newspapers writing articles about a company’s bright sides can be difficult to achieve compared to making an advertisement. The ANOVA analysis unveiled that a consumer’s intentions to buy were the same⁷ between PR and advertising. As purchase is the ultimate goal to increased sales and profits, a company that only has advertisements can gain company trustworthiness through the interaction between the consumers and the company representatives. Applied to DariusDesign; if the consumer that was persuaded to visit the store through advertising gets a satisfactory and commendable interaction with the store workers,

⁷ There is no statistically significant difference between the groups.

the consumer might perceive the company as more trustworthy. As an additional advantage, this consumer might speak positively about the company to friends and family (word-of-mouth), which will again increase the number of visitors.

It is reasonable to assume that no matter the source of communication channel, consumers cannot really understand how attractive a company or a brand is before experiencing it. For those companies that only use advertising, it is therefore important to assure that the consumer-brand-experience is at a consumer perceived satisfactory level. Through especially sufficient consumer complaints services, a consumer will have stronger and more positive associations towards the company than before the occurrence of a complaint. Effective complaint handling can have a dramatic impact on customer retention rates, deflects the spread of damaging WOM, and improve bottom-line performance (Grönroos, 1998). For a company that wants to grow, it is rather important to reassure the repurchase by existing consumers. To ensure to this matter; unfortunately, only the choice of communication channel for message delivery is not sufficient, as many perspectives need to be taken care of.

If a company has a journalist representative in a newspaper that they regularly have communication with, and which they can use when they have press releases; such as introducing new products or services, it is a large advantage for the company.

7. Limitations and future research

As with any research study, this work has limitations. Four different forms of validity can serve as criteria for assessing this study: internal validity, external validity, statistical conclusion validity, and construct validity.

7.1. Internal validity

Internal validity is defined as “the extent to which findings can be attributed to interventions rather than any flaws in the research design” (Saunders, Thornhill & Lewis, 2009). There exist several threats to internal validity; (1) selection bias, (2) reliability of measures and procedures, (3) using a design of low power, (4) order effects, and (5) multiple test of significance (Price, 2000).

Selection bias is a statistical bias in which there is an error in choosing the individuals or groups to take part in a scientific study (Dictionary of Cancer Terms). Sampling bias is systematic error due to a non-random sample of a population (Medical Dictionary) causing some members of the population to be less likely to be included than others, resulting in a biased sample. Beforehand the experiment, it was already known that the sample is to be the class of Introductory Marketing at the bachelor’s level, making the sample homogeneous; all respondents are students of Norwegian School of Economics, they are all in the same class, and the majority of the respondents were between 22 and 25 years old. In order to secure a random sample of this population, the questionnaire forms were manually randomized into 1,2,1,2... so that the respondents receiving messages through PR or advertising were random. This randomization also secured a even distribution of the two groups.

The reliability of measures and procedures is high in this study. As all respondents were given the exact same information before the experiment started increases the validation of this study. In addition, the information given was also specific, which allows few misinterpretations.

The design of power discusses in particular the sample size and the design when collecting the data (Price, 2000). A small sample size may have insufficient power to detect a real effect even if it is present. In this study, the sample size is 119, which is a sufficient number of

respondents in order to investigate the causal relations between communication channels and communication effects. The experiment has an ideal design, posttest-only control group design, which is a renowned design for experiments (Trochim & Donnelly, 2007). More in detail, the questionnaire was thoughtfully designed in order to achieve the desired perceptions of DariusDesign. For example, the first question after the introduction asked if the respondent could write down words or sentences qualifying DariusDesign, trying to assess the respondent's immediate response. Later, the respondents were asked to evaluate the company, using a likert-style rating with the seven-point numeric rating scale.

The order effects occur if the study has had measures over a series of trials. As the experiment was conducted only once, and the fact that the students received partial course credits for participating, the conflict of order effects is not considered a divergence in this study.

The hypotheses were tested by the Sobel Test and bootstrapping, but not simultaneously, meaning that this study did not have multiple tests of significance. The Sobel test has been criticized because it assumes that the indirect effects are normally distributed (Preacher & Hayes, 2004). Conducting bootstrapping is therefore recommended in addition to the Sobel test. In conformity with Preacher and Hayes' (2004, 2008) recommendations, bootstrap confidence intervals is more representative to be used in as the basis for hypotheses-testing if the Sobel test and the bootstrapping tests generate inconsistent results. In this study, it is impossible to identify if these tests would generate contradictory outcomes.

7.2. External validity

External validity is "the extent to which the research results from this study are generalizable to all relevant contexts. This study's results may not reflect the reality as notable limitation of the questionnaire is that the respondents are relatively homogenous. The respondents were all students from NHH and from the same class, in addition to the fact that the questionnaire was conducted under the knowledge that the students are qualified as central processing respondents (Tellis, 2004). It is therefore beyond the research's knowledge how people will process this message in the questionnaire passively or peripherally (ibid.). Students may not be a representative sample of the population, making the findings not generalizable to all types of consumers in the society that would likely to be exposed to both communication channels and messages.

The time limit represented during the experiment; that the respondents needed to answer all questions within 15 minutes may have affected their responses. Since this study assessed the individuals immediate responses, the responses will likely to be generalizable because most people do not evaluate deeply every advertisement or article they come across.

The concept Corporate Social Responsibility has numerous definitions and explanations which can lead to misunderstandings to the measurement based on what the respondents previously know about CSR. If a respondent in the past have heard about a company with CSR efforts in the media, angled from a positive point of view, he or she would more likely rate this questionnaire positively. In the contrary case, the respondent would probably have a negative stand to companies with CSR efforts, answering the questionnaire more negatively. Anyhow, this research provides a comprehensible indication of the tendency on consumers' responses.

The brand used in this study was fictive, yet, some respondents thought that the brand was real. Due to the design of the logo, the respondents clearly analyzed the logo more than the given written information. The logo was described as “snobbish” many times in the first question, and the link between a snobbish brand and CSR is unclear. The results might be different if the logo was more neutral.

The distinction of DariusDesign to be a pure product or service was not clear, and therefore may affect the answers.

7.3. Statistical conclusion validity

Statistical conclusion validity is defined as “the degree to which conclusions we reach about relationships in our data are reasonable” (Trochim, 2006). There are two types of errors one can make in conclusions; type 1, which incorrectly conclude that there is a relationship when there is none, and type 2, that is incorrectly conclude that there is no relationship when there is one (ibid.).

There exist five threats to statistical conclusion validity: (1) low reliability of measures, (2) random heterogeneity of respondents, (3) low statistical power, (4) fishing, and (5) violated assumptions of statistical tests (Trochim, 2006). (1), (2), and (3) are associated to making a

type 2 error, (4) is related to making a type 1 error, while (5) can lead to both types of errors and it is often not possible to predict what type of error is likely to be made.

First, reliability is defined as “the extent to which data collection technique or techniques will yield consistent findings, similar observations would be made or conclusions reached by other researchers or there is transparency in how sense was made from the raw data” (Saunders, Lewis and Thornhill, 2009). The Sobel z -test by Baron and Kenny (1986) is a renowned method to test the significance of the indirect path between the independent variable, X, and the mediator variable, M, and the mediator variable and the dependent variable, Y (Baron & Kenny, 1986). Equivalently in z -tests, whether the difference between the total effect and the direct effect is statistically significant (Zhao, Lynch Jr. & Chen, 2010). Full mediation is present when there is evidence of indirect effect, but no indirect effect. When there are both indirect and direct effects, it is called “partial mediation”. Zhao, Lynch Jr. & Chen (2010) argue that the direct effect should not stay unexplained because the partial mediation represents an omitted mediator. This study focused only on the indirect effect, which potentially is deficient of the information about the omitted mediators. Bootstrapping (with 95 % CI, 5000 times) is a methodology that is widely applicable and easily implemented approach in SPSS through the MEDTHREE syntax (Kirk & Stumpf, 2009).

Second, the sample was very homogenous; they were all students at NHH, they were all around the same age, and they were from the same class. The threat of “random heterogeneity of respondents” is therefore not apparent in this study. However, the consistent sample in this study illustrates a clear pattern of the responses.

Third, statistical power is the probability that a test will reveal a treatment effect when it occurs (Trochim, 2006). Any statistical test relies on four basic components: (1) sample size, which is the number of observations in the data, (2) effect size which is the effect of the treatment relative to the noise in the data, (3) significance level, and (4) statistical power that is the probability that a test will reveal a treatment effect when it occurs (ibid.). The sample size of the data is high and therefore gives a Gaussian-distribution. All the hypotheses were significant when the p -value was below 0.5, a standard significance value. The statistical power is high due to the sample size, the treatment effect, and the low significance level.

Fourth, the statistical tests in this research were only performed once, and the problem of fishing is not relevant. That does not, however, eliminate the possibility of making a type 1 error.

Fifth, violated assumptions of statistical tests is conceivably the most complicated and comprehensive threat to statistical conclusion validity. Violated statistical assumptions enable researchers with competing alternative hypotheses to write articles where they criticize, and sometimes outright vilify, the methodology and assumptions of the other researcher in an attempt to reinforce his/hers own findings. In this study, linear regression was used, and the antecedents of regression are satisfied in this study.

7.4. Construct validity

Construct validity “refers to the extent to which the measurement questions actually measure the presence of those constructs the study intended them to measure” (Saunders, Lewis & Thornhill, 2009). Construct validity seeks agreement between a theoretical concept and a specific measuring device or procedure. Construct validity can be divided into two sub-categories: (1) Convergent validity and (2) discriminate validity.

Convergent validity is the actual general agreement among ratings, gathered independently of one another, where measures should be theoretically related (Carmines & Zeller, 1979). The operationalization in this study converges on other operationalizations that are theoretically similar to this study; the mean scores in this study can be correlated with the results from previous studies about effects in communication channels and CSR by Kleffegård and Setrom (2010) and Berge (2010).

Discriminate validity is the lack of a relationship among measures which theoretically should not be related (Carmines & Zeller, 1979). In the hypotheses which included positive company cognition to strategic motivation and behavioral intentions, the statistical testing revealed no interrelation between these theories. The theory about an individual’s cognition towards a company is thereby not connected to strategic motivation and behavioral intentions.

Moreover, when assessing the internal consistency in this study; when it was clear that positive company cognition was not a mediating variable, future testing with this variable gave consistently insignificant results.

7.5. Future research

The purpose of this study was to allocate the variable(s) that can explain the relationship between choice of communication channel and intentions to search more info, *inclusion in consideration set*, *likelihood to visit*, and *intentions to buy*. This research concluded that PR is more effective than advertising because PR evokes less strategic motivation towards the company, which increases company trustworthiness, and therefore increases *intentions to search more information*, *inclusion in consideration set*, *likelihood to visit*, and *intentions to buy*.

It is advised that companies should have a PR-person in a newspaper representing the company when it has press releases if possible.

Future research should attempt to account for measuring consumers' *intentions to buy* after their first experience with the company, where the consumers can evaluate the company independently. A first experience could be a visit to the company's web page, a visit to the store, or a dialogue with the staff of the store. The goal for every company is to increase sales, and it can be interesting to see if choice of communication channel can have a permanent effect to consumer.

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Appendix

A. The first page of the questionnaire

It was given to the respondents that received information about CSR through PR, which was group 1, and group 2 received information about CSR through advertising.

GRUPPE 1

Studentnummer:

Informasjon om spørreundersøkelsen:

Denne spørreundersøkelsen er en del av en masteroppgave og et forskningsprosjekt.

Tusen takk for at du deltar i denne undersøkelsen – svarene dine vil være verdifulle i forhold til masteroppgaven og forskningsprosjektet.

Spørsmålene besvares ved at du setter ring rundt det tallet i skalaen som beskriver mest det du føler, fra for eksempel *lite sannynlig/meget sannsynlig* og *helt uenig/helt enig*.

Hensikten med spørreundersøkelsen er å kapre din umiddelbare reaksjon, så det er derfor viktig at du ikke tenker for lenge på spørsmålene.

Vennligst notér studentnummeret ditt øverst til høyre for å sikre at du får kursgodkjenning i SOL010. Når svarene registreres i et dataprogram, vil ikke studentnummeret bli registrert. Du er derfor sikret konfidensialitet.

Med vennlig hilsen

Jane Xia

B. Introduction to the information was given on page 2 of the questionnaire

Se for deg at du er nettopp ferdigutdannet ved NHH og skal begynne i ny jobb innenfor konsulentnæringen. Du trenger en ny jobbgarderober, og kommer over avisartikkelen på neste side:

C. Information given to Group 1

Service provider: DariusDesign

Communication channel: PR

Information: with CSR

DariusDesign har kommet til Norge

*Dato: 11.09.10
Skrevet av: Kari Nordmann*

Den nye flagship-butikken til DariusDesign i Bergen har i disse dager fått enorme besøkstall, og ikke minst blitt omtalt i mange norske moteblader. Klesplaggene til begge kjønn gjenkjennes som stilrene, klassisk, men med et friskt og ungt innslag.

DariusDesign ble opprettet tidlig i 2010 av to masterstudenter fra Stanford University. Disse følte et behov for å skape klassiske plagg som kan brukes på jobb og ellers i sammenhenger hvor kleskoden er *business casual*. Plaggene skal bære et klassisk preg, men samtidig være moderne og friskt for yngre mennesker.

Det mange kanskje ikke vet om DariusDesign er dets innsats overfor barn i den tredje verden som ikke har tilgang til varme klær i vinterhalvåret. For hver handel hos DariusDesign, går en prosentvis andel på tre til fem prosent til klær som skal kle opp fattige barn på vinteren. Samarbeidet går igjennom hjelpeorganisasjonen *Help Wear*, som drives av DariusDesign.



Gå videre til neste side for å besvare spørsmålene. Ikke se tilbake til artikkelen.

D. Information given to Group 2

Service provider: DariusDesign

Communication channel: Advertising

Information: with CSR

DariusDesign har kommet til Norge



Den nye flagship-butikken til DariusDesign i Strandgaten 10, Bergen, åpnet dørene 1. september 2010, og har i disse dager fått enorme besøkstall, og ikke minst blitt omtalt i mange norske moteblader. Bli inspirert av høstens moter av klassiske, men moderne og friske plagg for unge mennesker.

DariusDesign ble opprettet tidlig i 2010 av to masterstudenter fra Stanford University. Disse følte et behov for å skape klassiske plagg som kan brukes på jobb og ellers i sammenhenger hvor kleskoden er *business casual*.

Vi gjør en innsats for de fattige barna i den tredje verden ved at vi kler dem opp. Dette bidrar du med ved handel hos oss. For hver handel, går tre til fem prosent av beløpet direkte til innkjøp av vinterklær som varmer de små kroppene i fattige land. Samarbeidet går igjennom hjelpeorganisasjonen *Help Wear*, som også drives av oss.

Gå videre til neste side for å besvare spørsmålene. Ikke se tilbake til artikkelen.

E. The questionnaire

All questions were given to both choice of communication channel (PR vs. advertising).

The questionnaire had originally more questions, but the irrelevant questions to this paper have been excluded in this appendix.

1. Hvilken tanker gjør du deg om selskapet? Skriv ned de seks første stikkordene/setningene du kommer på i de seks boksene nedenfor.

2. Hvor sannsynlig vil du vil søke mer informasjon om DariusDesign?

Lite sannsynlig						Meget sannsynlig
1	2	3	4	5	6	7

3. Hvor sannsynlig vil du vurdere å besøke DariusDesign i Bergen neste gang du skal ut og handle?

Lite sannsynlig						Meget sannsynlig
1	2	3	4	5	6	7

4. Hvor sannsynlig kommer du til å ta en tur innom DariusDesign neste gang du er ute og handler?

Lite sannsynlig						Meget sannsynlig
1	2	3	4	5	6	7

5. Hvor sannsynlig vil du handle klær hos DariusDesign?

Lite sannsynlig						Meget sannsynlig
1	2	3	4	5	6	7

6. Kjønn:

Mann	Kvinne
------	--------

7. Alder:

18-21	22-25	26-30	>30
-------	-------	-------	-----

8. Kull:

1	2	3
---	---	---

9. Dette scenarioet er relevant for meg.

Helt uenig						Helt enig
1	2	3	4	5	6	7

10. Hva slags CSR-tiltak er det DariusDesign driver med? (Sett kryss i én av boksene.)

- Støtter funksjonshemmede ungdom slik at de får en bedre hverdag
- Kler opp barn i fattige land som ikke har tilgang til klær i vinterhalvåret
- Gir prosentvis andel av salget til organisasjoner som jobber mot human trafficking
- Støtter organisasjoner som jobber mot barnearbeid

11. Jeg tror DariusDesign er til å stole på.

Helt uenig							Helt enig
1	2	3	4	5	6	7	

12. Jeg tror at DariusDesign er en oppriktig klesbedrift.

Helt uenig							Helt enig
1	2	3	4	5	6	7	

13. Jeg tror at bedriften har et genuint ønske om å skape en bedre verden.

Helt uenig							Helt enig
1	2	3	4	5	6	7	

14. Jeg tror at denne bedriftens CSR-tiltak kun er strategisk motivert.

Helt uenig							Helt enig
1	2	3	4	5	6	7	

15. Jeg tror at hensikten med CSR-tiltaket er profitt- og lønnsomhetsbasert.

Helt uenig							Helt enig
1	2	3	4	5	6	7	

F. The sample – printouts from SPSS

Gruppe

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	64	50.0	50.0	50.0
2	64	50.0	50.0	100.0
Total	128	100.0	100.0	

The total number of responses, and the distribution between the two groups.

Rett=1,Galt=2

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	119	93.0	93.0	93.0
2	9	7.0	7.0	100.0
Total	128	100.0	100.0	

Nine responses were rejected for further analysis because they answered wrong (Valid = 2) on the check question.

Kvinne =1, Mann=2

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	50	42.0	42.0	42.0
2	69	58.0	58.0	100.0
Total	119	100.0	100.0	

The distribution between genders; 50 responses came from females, and 69 came from males.

18-21=1, 22-25=2, 26-30=3, >30=4

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	66	55.5	55.5	55.5
2	49	41.2	41.2	96.6
3	4	3.4	3.4	100.0
Total	119	100.0	100.0	

Most respondents (N = 66) were between 18 and 21 years of age, secondly 49 respondents were between 22 and 25 years. Only four respondents were between 26 and 30 years.

G. One-Way ANOVA output printouts from SPSS

Descriptives

Spm2

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
1	58	4.78	1.601	.210	4.35	5.20	1	7
2	61	4.07	1.711	.219	3.63	4.50	1	7
Total	119	4.41	1.690	.155	4.11	4.72	1	7

Descriptives

Spm3

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
1	58	5.26	1.493	.196	4.87	5.65	2	7
2	61	4.51	1.719	.220	4.07	4.95	1	7
Total	119	4.87	1.650	.151	4.57	5.17	1	7

Descriptives

Spm4

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
1	58	4.88	1.488	.195	4.49	5.27	1	7
2	61	4.08	1.725	.221	3.64	4.52	1	7
Total	119	4.47	1.656	.152	4.17	4.77	1	7

Descriptives

Spm5

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
1	58	3.95	1.161	.152	3.64	4.25	2	7
2	61	3.62	1.380	.177	3.27	3.98	1	7
Total	119	3.78	1.283	.118	3.55	4.01	1	7

Descriptives

TroverdighetBEDRIFT

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
1	58	4.50	1.112	.146	4.21	4.79	2	6
2	61	4.04	1.050	.134	3.77	4.31	2	7
Total	119	4.26	1.101	.101	4.06	4.46	2	7

Descriptives

StrategiskMotivasjon

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
1	58	4.96	1.143	.150	4.66	5.26	2	7
2	61	5.39	1.279	.164	5.07	5.72	3	7
Total	119	5.18	1.229	.113	4.96	5.41	2	7

The output shows that the p-value between groups for intentions to search more information (spm2), inclusion in consideration set (spm3), and likelihood to visit (spm4) are lower than 5 % ($\alpha=0.05$), and that the difference between groups is significant. The difference between the groups on intentions to buy (spm5) is not significant.

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Spm2	Between Groups	15.000	1	15.000	5.453	.021
	Within Groups	321.824	117	2.751		
	Total	336.824	118			
Spm3	Between Groups	16.743	1	16.743	6.436	.012
	Within Groups	304.367	117	2.601		
	Total	321.109	118			
Spm4	Between Groups	18.902	1	18.902	7.257	.008
	Within Groups	304.745	117	2.605		
	Total	323.647	118			
Spm5	Between Groups	3.147	1	3.147	1.926	.168
	Within Groups	191.173	117	1.634		
	Total	194.319	118			

The output shows that the difference between groups is significant on Company Trustworthiness (TroverdighetBEDRIFT) and Strategic Motivation (StrategiskMotivasjon)⁸.

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
TroverdighetBEDRIFT	Between Groups	6.264	1	6.264	5.364	.022
	Within Groups	136.648	117	1.168		
	Total	142.912	118			
StrategiskMotivasjon	Between Groups	5.592	1	5.592	3.791	.054
	Within Groups	172.575	117	1.475		
	Total	178.166	118			

⁸ The P-value of Strategic Motivation (StrategiskMotivasjon) is slightly larger than 5 % significance level, and below 10 % significance level. It is therefore reasonable to argue in favor of significant difference between groups on Strategic Motivation (StrategiskMotivasjon).

H. Linear regression outputs from Hypothesis 1

Linear regression has been conducted among these two paths:

1. In the first regression, y = Strategic Motivation, while x = Choice of communication channel (Gruppe)

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.526	.355		12.756	.000
	Gruppe	.434	.223	.177	1.947	.054

a. Dependent Variable: StrategiskMotivasjon

2. In the second regression, y = Company Trustworthiness, while x = Strategic Motivation

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.259	.398		15.723	.000
	StrategiskMotivasjon	-.385	.075	-.430	-5.148	.000

a. Dependent Variable: TroverdighetBEDRIFT

The produced values are then placed in Sobel test calculator by Daniel Soper (2010). This test generates the Sobel Z-value, and the P-value.

The Sobel Test Calculator - output

Sobel Test Calculator for the Significance of Mediation

This calculator uses the Sobel test to tell you whether a mediator variable significantly carries the influence of an independent variable to a dependent variable; i.e., whether the indirect effect of the independent variable on the dependent variable through the mediator variable is significant. This calculator returns both the one-tailed and two-tailed probability values.

```
graph LR; IV[Independent Variable] -- "A (SE_A)" --> MV[Mediator Variable]; IV --> DV[Dependent Variable]; MV -- "B (SE_B)" --> DV;
```

Please supply the necessary parameters, and then click the 'Calculate' button.

A: The regression weight (regression coefficient) for the relationship between the independent variable and the mediator.

SE_A: The standard error of the relationship between the independent variable and the mediator.

B: The regression weight (regression coefficient) for the relationship between the mediator variable and the dependent variable.

SE_B: The standard error of the relationship between the mediator variable and the dependent variable.

Sobel Test Statistic: -1.819792

Probability (One-Tailed): 0.034395

Probability (Two-Tailed): 0.068791

I. Linear regression outputs from Hypothesis 2

Similar to the hypothesis 1, in this hypothesis, two OLS regressions were conducted among these two paths:

1. In the first regression, y = Strategic Motivation, while x = Choice of communication channel (Gruppe)

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.526	.355		12.756	.000
	Gruppe	.434	.223	.177	1.947	.054

a. Dependent Variable: StrategiskMotivasjon

2. In the second regression, y = Positive Company Cognition, while x = Strategic Motivation

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.125	.646		3.291	.001
	StrategiskMotivasjon	-.032	.121	-.025	-.266	.790

a. Dependent Variable: Bedriftantpos

The produced values are then placed in the online Sobel test calculator by Daniel Soper (2010). This test generates the Sobel Z-value, and the P-value.

The Sobel Test Calculator - output

A: 0.434 The regression weight (regression coefficient) for the relationship between the independent variable and the mediator.

SE_A: 0.223 The standard error of the relationship between the independent variable and the mediator.

B: -0.032 The regression weight (regression coefficient) for the relationship between the mediator variable and the dependent variable.

SE_B: 0.121 The standard error of the relationship between the mediator variable and the dependent variable.

Sobel Test Statistic: -0.262054

Probability (One-Tailed): 0.396640

Probability (Two-Tailed): 0.793280

J. Linear regression outputs from Hypothesis 3

In order to generate the parameters β and standard error, linear regression were performed among five routes:

1. In the first regression, $y = \text{Company Trustworthiness}$, while $x = \text{Choice of communication channel (Gruppe)}$

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.959	.316		15.706	.000
	Gruppe	-.459	.198	-.209	-2.316	.022

a. Dependent Variable: TroverdighetBEDRIFT

2. In the second regression, $y = \text{spm2}$, while $x = \text{Company Trustworthiness}$

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.845	.575		3.208	.002
	TroverdighetBEDRIFT	.602	.131	.392	4.611	.000

a. Dependent Variable: Spm2

3. In the third regression, $y = \text{spm3}$, while $x = \text{Company Trustworthiness}$

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.652	.572		4.635	.000
	TroverdighetBEDRIFT	.521	.130	.348	4.010	.000

a. Dependent Variable: Spm3

4. In the fourth regression, $y = \text{spm4}$, while $x = \text{Company Trustworthiness}$

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.212	.573		3.858	.000
	TroverdighetBEDRIFT	.530	.130	.352	4.066	.000

a. Dependent Variable: Spm4

5. In the fifth regression, $y = \text{spm5}$, while $x = \text{Company Trustworthiness}$

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.830	.437		4.192	.000
	TroverdighetBEDRIFT	.458	.099	.392	4.614	.000

a. Dependent Variable: Spm5

K. Linear regression outputs from Hypothesis 4

This hypothesis also based on a mediation model. In order to generate the parameters β and standard error, linear regression were performed among five routes:

1. In the first regression, y = Positive company cognition, while x = Choice of communication channel (Gruppe)

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.421	.470		3.021	.003
	Gruppe	.355	.295	.111	1.204	.231

a. Dependent Variable: Bedrifantpos

2. In the second regression, y = spm2 , while x = Positive company cognition

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.080	.242		16.854	.000
	Bedrifantpos	.170	.096	.162	1.775	.078

a. Dependent Variable: Spm2

3. In the third regression, y = spm3 , while x = Positive company cognition

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.635	.238		19.494	.000
	Bedrifantpos	.122	.094	.119	1.297	.197

a. Dependent Variable: Spm3

4. In the fourth regression, $y = \text{spm4}$, while $x = \text{Positive company cognition}$

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.098	.236		17.344	.000
	Bedrifantpos	.190	.093	.185	2.038	.044

a. Dependent Variable: Spm4

5. In the fifth regression, $y = \text{spm5}$, while $x = \text{Positive company cognition}$

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.425	.181		18.884	.000
	Bedrifantpos	.182	.072	.229	2.544	.012

a. Dependent Variable: Spm5

L. MEDTHREE outputs from Hypothesis 5

The initial formula of MEDTHREE was replaced by four running formulas. Each of the formulas was run separately in SPSS.

$$1) \text{ MEDTHREE } Y = \frac{\text{Spm2}}{X} = \frac{\text{Gruppe}}{M1} = \frac{\text{StrategiskMotivasjon}}{M2} = \frac{\text{Bedriftantpos}}{\text{boot}} = 5000$$

$$2) \text{ MEDTHREE } Y = \frac{\text{Spm3}}{X} = \frac{\text{Gruppe}}{M1} = \frac{\text{StrategiskMotivasjon}}{M2} = \frac{\text{Bedriftantpos}}{\text{boot}} = 5000$$

$$3) \text{ MEDTHREE } Y = \frac{\text{Spm4}}{X} = \frac{\text{Gruppe}}{M1} = \frac{\text{StrategiskMotivasjon}}{M2} = \frac{\text{Bedriftantpos}}{\text{boot}} = 5000$$

$$4) \text{ MEDTHREE } Y = \frac{\text{Spm5}}{X} = \frac{\text{Gruppe}}{M1} = \frac{\text{StrategiskMotivasjon}}{M2} = \frac{\text{Bedriftantpos}}{\text{boot}} = 5000$$

General explanations about the forthcoming results tables:

- Mediator 1 (M1) is the simple mediation through M1.
- Mediator 2 (M2) is the simple mediation through M2
- M1 & M2 is the mediation through both M1 and M2
- X is the independent variable: Choice of Communication Channel
- Y is the dependent variable(s): Intentions to search more information (spm2), inclusion in consideration set (spm3), likelihood to visit (spm4), and intentions to buy (spm5).
- Total is the total indirect effect (sum of all three). If the 95% CI does not contain 0 then the mediation chain $X \rightarrow M1 \rightarrow M2 \rightarrow Y$ is "significant", regardless of whether or not c and c' are significant. The combination of the first mediator and the second mediator helps to explain the association between X and Y.

1) SPSS output from the MEDTHREE macro for estimating paths in a multiple step multiple mediator model; MEDTHREE on Intentions to search more info about DariusDesign (spm2).

```
Run MATRIX procedure:

VARIABLES IN MEDIATION MODEL
  Y Spm2
  X Gruppe
  M1 Strategi
  M2 Bedrifta

DESCRIPTIVES STATISTICS AND PEARSON CORRELATIONS
  Mean SD Spm2 Gruppe Strategi Bedrifta
Spm2 4,4118 1,6895 1,0000 -,2110 -,2024 ,1619
Gruppe 1,5126 ,5020 -,2110 1,0000 ,1772 ,1106
Strategi 5,1821 1,2288 -,2024 ,1772 1,0000 -,0246
Bedrifta 1,9580 1,6124 ,1619 ,1106 -,0246 1,0000

SAMPLE SIZE
  119

Model Path Estimates
  Coeff SE t p
a1 : ,4337 ,2227 1,9470 ,05399
a2 : ,3813 ,3009 1,2672 ,2076
a3 : -,0599 ,1229 -,4873 ,6269
b1 : -,2230 ,1234 -1,8069 ,0734
b2 : ,1889 ,0931 2,0291 ,0448
c : -,7103 ,3042 -2,3352 ,0212
c' : -,6807 ,3038 -2,2404 ,0270

Indirect Effects (with bootstrap 95%CI and standard errors)
  Effect LL95%CI UL95%CI BootSE
Total : -,0296 -,2458 ,1818 ,1054
M1 : -,0967 -,2760 ,0159 ,0752
M2 : ,0720 -,0460 ,2471 ,0736
M1&M2 : -,0049 -,0395 ,0204 ,0144

----- NOTES -----

Number of Bootstrap Samples:
  5000

----- END MATRIX -----
```

⁹ The P-value of Strategic Motivation (StrategiskMotivasjon) is slightly larger than 5 % significance level, and below 10 % significance level. It is therefore reasonable to argue there exists an effect between choice of [communicationscommunication](#) channels and strategic motivation.

Comments about the results:

Indirect Effects (with bootstrap 95%CI)		
	LL95%CI	UL95%CI
Total	-0.2458	0.1498
Mediator 1 (Strategic Motivation)	-0.2760	0.0159
Mediator 2 (Positive comp. cogn.)	-0.0460	0.2471
Mediator 1 & Mediator 2	-0.0395	0.0204

Based on 5000 bootstrap samples, the 95% confidence interval for the indirect effects of *strategic motivation* and *positive company cognition* indicates that there are no indirect effects between the choice of PR and Advertising and intentions to search for more information about DariusDesign. As zero is in the interval of 95 % CI, it can be explained that with 95% confidence that the indirect effects are not present. Neither *strategic motivation* nor *positive company cognition* is mediating variables for the effects of choice of PR or Advertising and consumers' intentions to search for more information about DariusDesign.

The model path estimates (a_1 , a_2 , a_3 , b_1 , b_2 , c , and c') indicated significance on paths a_1 ¹⁰, b_2 , c and c' .

¹⁰ The P-value of Strategic Motivation (StrategiskMotivasjon) is slightly larger than 5 % significance level, and below 10 % significance level. It is therefore reasonable to argue there exist an effect between choice of [communicationscommunication](#) channels and strategic motivation.

2) SPSS output from the MEDTHREE macro for estimating paths in a multiple step multiple mediator model; MEDTHREE on inclusion in consideration set (spm3)

```
Run MATRIX procedure:

VARIABLES IN MEDIATION MODEL
  Y Spm3
  X Gruppe
  M1 Strategi
  M2 Bedrifta

DESCRIPTIVES STATISTICS AND PEARSON CORRELATIONS
  Mean SD Spm3 Gruppe Strategi Bedrifta
Spm3 4,8739 1,6496 1,0000 -,2283 -,2004 ,1191
Gruppe 1,5126 ,5020 -,2283 1,0000 ,1772 ,1106
Strategi 5,1821 1,2288 -,2004 ,1772 1,0000 -,0246
Bedrifta 1,9580 1,6124 ,1191 ,1106 -,0246 1,0000

SAMPLE SIZE
  119

Model Path Estimates
  Coeff SE t p
a1 : ,4337 ,2227 1,9470 ,0539
a2 : ,3813 ,3009 1,2672 ,2076
a3 : -,0599 ,1229 -,4873 ,6269
b1 : -,2132 ,1210 -1,7625 ,0806
b2 : ,1422 ,0913 1,5579 ,1220
c : -,7504 ,2958 -2,5369 ,0125
c' : -,7085 ,2978 -2,3788 ,0190

Indirect Effects (with bootstrap 95%CI and standard errors)
  Effect LL95%CI UL95%CI BootSE
Total : -,0419 -,2373 ,1498 ,0962
M1 : -,0925 -,2625 ,0330 ,0757
M2 : ,0542 -,0433 ,2063 ,0630
M1&M2 : -,0037 -,0309 ,0142 ,0110

----- NOTES -----

Number of Bootstrap Samples:
  5000

----- END MATRIX -----
```

Comments about the results:

Indirect Effects (with bootstrap 95%CI)		
	LL95%CI	UL95%CI
Total	-0.2373	0.1498
Mediator 1 (Strategic Motivation)	-0.2625	0.0330
Mediator 2 (Positive comp. cogn.)	-0.0433	0.2063
Mediator 1 & Mediator 2	-0.0309	0.0142

The 95% confidence interval for the indirect effects of *strategic motivation* and *positive company cognition* indicates that there are no indirect effects between the choice of PR and Advertising and consumers' evaluations to visit DariusDesign. As zero is in the interval, it can be explained that with 95% confidence that the indirect effects are not present. Neither *strategic motivation* nor *positive company cognition* is mediating variables for the effects of choice of PR or Advertising and consumers' evaluations to visit DariusDesign.

The model path estimates (a_1 , a_2 , a_3 , b_1 , b_2 , c , c') indicated significance on path a_1 , c and c' .

3) SPSS output from the MEDTHREE macro for estimating paths in a multiple step multiple mediator model; MEDTHREE on likelihood to visit (spm4)

```
Run MATRIX procedure:

VARIABLES IN MEDIATION MODEL
  Y Spm4
  X Gruppe
  M1 Strategi
  M2 Bedrifta

DESCRIPTIVES STATISTICS AND PEARSON CORRELATIONS
  Mean SD Spm4 Gruppe Strategi Bedrifta
Spm4 4,4706 1,6561 1,0000 -,2417 -,1743 ,1852
Gruppe 1,5126 ,5020 -,2417 1,0000 ,1772 ,1106
Strategi 5,1821 1,2288 -,1743 ,1772 1,0000 -,0246
Bedrifta 1,9580 1,6124 ,1852 ,1106 -,0246 1,0000

SAMPLE SIZE
  119

Model Path Estimates
  Coeff SE t p
a1 : ,4337 ,2227 1,9470 ,0539
a2 : ,3813 ,3009 1,2672 ,2076
a3 : -,0599 ,1229 -,4873 ,6269
b1 : -,1702 ,1200 -1,4183 ,1588
b2 : ,2145 ,0905 2,3699 ,0195
c : -,7973 ,2960 -2,6939 ,0081
c' : -,7998 ,2954 -2,7074 ,0078

Indirect Effects (with bootstrap 95%CI and standard errors)
  Effect LL95%CI UL95%CI BootSE
Total : ,0024 -,2067 ,2035 ,1018
M1 : -,0738 -,2430 ,0420 ,0718
M2 : ,0818 -,0498 ,2656 ,0791
M1&M2 : -,0056 -,0426 ,0243 ,0154

----- NOTES -----

Number of Bootstrap Samples:
  5000

----- END MATRIX -----
```


Comments about the results:

Indirect Effects (with bootstrap 95%CI)		
	LL95%CI	UL95%CI
Total	-0.2067	0.2035
Mediator 1 (Strategic Motivation)	-0.2430	0.0718
Mediator 2 (Positive comp. cogn.)	-0.0498	0.0791
Mediator 1 & Mediator 2	-0.0426	0.0154

The 95% confidence interval for the indirect effects of *strategic motivation* and *positive company cognition* indicates that there are no indirect effects between the choice of PR and Advertising and consumers' *likelihood to visit DariusDesign*. As zero is in the interval, it can be explained that with 95% confidence that the indirect effects are not present. Neither *strategic motivation* nor *positive company cognition* is mediating variables for the effects of choice of PR or Advertising and consumers' *likelihood to visit DariusDesign*.

The model path estimates (a_1 , a_2 , a_3 , b_1 , b_2 , c , c') indicated significance on path a_1 , b_2 , c and c' .

4) SPSS output from the MEDTHREE macro for estimating paths in a multiple step multiple mediator model; MEDTHREE on intentions to buy from DariusDesign (spm5)

```
Run MATRIX procedure:

VARIABLES IN MEDIATION MODEL
  Y Spm5
  X Gruppe
  M1 Strategi
  M2 Bedrifta

DESCRIPTIVES STATISTICS AND PEARSON CORRELATIONS
  Mean SD Spm5 Gruppe Strategi Bedrifta
Spm5 3,7815 1,2833 1,0000 -,1273 -,2361 ,2290
Gruppe 1,5126 ,5020 -,1273 1,0000 ,1772 ,1106
Strategi 5,1821 1,2288 -,2361 ,1772 1,0000 -,0246
Bedrifta 1,9580 1,6124 ,2290 ,1106 -,0246 1,0000

SAMPLE SIZE
  119

Model Path Estimates
  Coeff SE t p
a1 : ,4337 ,2227 1,9470 ,0539
a2 : ,3813 ,3009 1,2672 ,2076
a3 : -,0599 ,1229 -,4873 ,6269
b1 : -,2190 ,0930 -2,3547 ,0202
b2 : ,1884 ,0702 2,6839 ,0084
c : -,3253 ,2344 -1,3877 ,1679
c' : -,2973 ,2290 -1,2982 ,1968

Indirect Effects (with bootstrap 95%CI and standard errors)
  Effect LL95%CI UL95%CI BootSE
Total : -,0280 -,2201 ,1463 ,0905
M1 : -,0950 -,2459 ,0091 ,0652
M2 : ,0718 -,0412 ,2077 ,0627
M1&M2 : -,0049 -,0347 ,0192 ,0129

----- NOTES -----

Number of Bootstrap Samples:
  5000

----- END MATRIX -----
```

Comments about the results:

Indirect Effects (with bootstrap 95%CI)		
	LL95%CI	UL95%CI
Total	-0.2201	0.1463
Mediator 1 (Strategic Motivation)	-0.2459	0.0091
Mediator 2 (Positive comp. cogn.)	-0.0412	0.2077
Mediator 1 & Mediator 2	-0.0347	0.0192

The 95% confidence interval for the indirect effects of *strategic motivation* and *positive company cognition* indicates that there are no indirect effects between the choice of PR and Advertising and consumers' intentions to purchase from DariusDesign. As zero is in the interval, it can be explained that with 95% confidence that the indirect effects are not present. Neither *strategic motivation* nor *positive company cognition* is mediating variables for the effects of choice of PR or Advertising and consumers' *likelihood to visit* DariusDesign.

The model path estimates ($a_1, a_2, a_3, b_1, b_2, c, c'$) indicated significance on path $a_1, b_1,$ and b_2 .

M. MEDTHREE outputs from Hypothesis 6

Similar to hypothesis 5, the initial formula of MEDTHREE was replaced by four running formulas. Each of the formulas was run separately in SPSS.

$$1) \text{ MEDTHREE } Y = \frac{\text{Spm2}}{X} = \frac{\text{Gruppe}}{M1} = \frac{\text{StrategiskMotivasjon}}{M2} = \frac{\text{TroverdighetBEDRIFT}}{\text{boot}} = 5000$$

$$2) \text{ MEDTHREE } Y = \frac{\text{Spm3}}{X} = \frac{\text{Gruppe}}{M1} = \frac{\text{StrategiskMotivasjon}}{M2} = \frac{\text{TroverdighetBEDRIFT}}{\text{boot}} = 5000$$

$$3) \text{ MEDTHREE } Y = \frac{\text{Spm4}}{X} = \frac{\text{Gruppe}}{M1} = \frac{\text{StrategiskMotivasjon}}{M2} = \frac{\text{TroverdighetBEDRIFT}}{\text{boot}} = 5000$$

$$4) \text{ MEDTHREE } Y = \frac{\text{Spm5}}{X} = \frac{\text{Gruppe}}{M1} = \frac{\text{StrategiskMotivasjon}}{M2} = \frac{\text{TroverdighetBEDRIFT}}{\text{boot}} = 5000$$

1) SPSS output from the MEDTHREE macro for estimating paths in a multiple step multiple mediator model; MEDTHREE on Intentions to search more info (spm2)

```

Run MATRIX procedure:

VARIABLES IN MEDIATION MODEL
  Y Spm2
  X Gruppe
  M1 Strategi
  M2 Troverdi

DESCRIPTIVES STATISTICS AND PEARSON CORRELATIONS
  Mean SD Spm2 Gruppe Strategi Troverdi
Spm2 4,4118 1,6895 1,0000 -,2110 -,2024 ,3921
Gruppe 1,5126 ,5020 -,2110 1,0000 ,1772 -,2094
Strategi 5,1821 1,2288 -,2024 ,1772 1,0000 -,4297
Troverdi 4,2647 1,1005 ,3921 -,2094 -,4297 1,0000

SAMPLE SIZE
  119

Model Path Estimates
  Coeff SE t p
a1 : ,4337 ,2227 1,9470 ,0539
a2 : -,3016 ,1847 -1,6332 ,1051
a3 : -,3630 ,0754 -4,8128 ,0000
b1 : -,0378 ,1299 -,2908 ,7718
b2 : ,5413 ,1459 3,7093 ,0003
c : -,7103 ,3042 -2,3352 ,0212
c' : -,4454 ,2936 -1,5174 ,1319

Indirect Effects (with bootstrap 95%CI and standard errors)
  Effect LL95%CI UL95%CI BootSE
Total : -,2649 -,5173 -,0334 ,1237
M1 : -,0164 -,1540 ,0972 ,0588
M2 : -,1633 -,3873 ,0399 ,1093
M1&M2 : -,0852 -,1944 ,0023 ,0507

----- NOTES -----

Number of Bootstrap Samples:
  5000

----- END MATRIX -----

```

Indirect Effects (with bootstrap 95%CI)		
	LL95%CI	UL95%CI
Total	-0.5173	-0.0334
Mediator 1 (Strategic Motivation)	-0.1540	0.0972
Mediator 2 (Company Trustworthiness)	-0.3873	0.0399
Mediator 1 & Mediator 2	-0.1944	0.0023

2) SPSS output from the MEDTHREE macro for estimating paths in a multiple step multiple mediator model; MEDTHREE on inclusion in consideration set (spm3)

```

Run MATRIX procedure:

VARIABLES IN MEDIATION MODEL
  Y Spm3
  X Gruppe
  M1 Strategi
  M2 Troverdi

DESCRIPTIVES STATISTICS AND PEARSON CORRELATIONS
  Mean SD Spm3 Gruppe Strategi Troverdi
Spm3 4,8739 1,6496 1,0000 -,2283 -,2004 ,3476
Gruppe 1,5126 ,5020 -,2283 1,0000 ,1772 -,2094
Strategi 5,1821 1,2288 -,2004 ,1772 1,0000 -,4297
Troverdi 4,2647 1,1005 ,3476 -,2094 -,4297 1,0000

SAMPLE SIZE
  119

Model Path Estimates
  Coeff SE t p
a1 : ,4337 ,2227 1,9470 ,0539
a2 : -,3016 ,1847 -1,6332 ,1051
a3 : -,3630 ,0754 -4,8128 ,0000
b1 : -,0613 ,1286 -,4763 ,6348
b2 : ,4420 ,1445 3,0578 ,0028
c : -,7504 ,2958 -2,5369 ,0125
c' : -,5210 ,2907 -1,7920 ,0758

Indirect Effects (with bootstrap 95%CI and standard errors)
  Effect LL95%CI UL95%CI BootSE
Total : -,2294 -,5052 -,0139 ,1249
M1 : -,0266 -,1763 ,1071 ,0679
M2 : -,1333 -,3515 ,0256 ,0986
M1&M2 : -,0696 -,1760 ,0027 ,0464

----- NOTES -----

Number of Bootstrap Samples:
  5000

----- END MATRIX -----

```

Indirect Effects (with bootstrap 95%CI)		
	LL95%CI	UL95%CI
Total	-0.5052	-0.0139
Mediator 1 (Strategic Motivation)	-0.1763	0.1071
Mediator 2 (Company Trustworthiness)	-0.3515	0.0256
Mediator 1 & Mediator 2	-0.1760	0.0027

3) SPSS output from the MEDTHREE macro for estimating paths in a multiple step multiple mediator model; MEDTHREE on likelihood to visit DariusDesign (spm4)

```

Run MATRIX procedure:

VARIABLES IN MEDIATION MODEL
  Y Spm4
  X Gruppe
  M1 Strategi
  M2 Troverdi

DESCRIPTIVES STATISTICS AND PEARSON CORRELATIONS
  Mean SD Spm4 Gruppe Strategi Troverdi
Spm4 4,4706 1,6561 1,0000 -,2417 -,1743 ,3519
Gruppe 1,5126 ,5020 -,2417 1,0000 ,1772 -,2094
Strategi 5,1821 1,2288 -,1743 ,1772 1,0000 -,4297
Troverdi 4,2647 1,1005 ,3519 -,2094 -,4297 1,0000

SAMPLE SIZE
  119

Model Path Estimates
  Coeff SE t p
a1 : ,4337 ,2227 1,9470 ,0539
a2 : -,3016 ,1847 -1,6332 ,1051
a3 : -,3630 ,0754 -4,8128 ,0000
b1 : -,0130 ,1287 -,1013 ,9195
b2 : ,4682 ,1446 3,2373 ,0016
c : -,7973 ,2960 -2,6939 ,0081
c' : -,5768 ,2909 -1,9826 ,0498

Indirect Effects (with bootstrap 95%CI and standard errors)
  Effect LL95%CI UL95%CI BootSE
Total : -,2206 -,4769 -,0072 ,1188
M1 : -,0057 -,1472 ,1265 ,0663
M2 : -,1412 -,3607 ,0347 ,0990
M1&M2 : -,0737 -,1774 ,0012 ,0462

----- NOTES -----

Number of Bootstrap Samples:
  5000

----- END MATRIX -----

```

Indirect Effects (with bootstrap 95%CI)		
	LL95%CI	UL95%CI
Total	-0.4769	-0.0072
Mediator 1 (Strategic Motivation)	-0.1472	0.1265
Mediator 2 (Company Trustworthiness)	-0.3607	0.0347
Mediator 1 & Mediator 2	-0.1774	0.0012

4) SPSS output from the MEDTHREE macro for estimating paths in a multiple step multiple mediator model; MEDTHREE on intentions to buy from DariusDesign (spm5)

```

Run MATRIX procedure:

VARIABLES IN MEDIATION MODEL
  Y Spm5
  X Gruppe
  M1 Strategi
  M2 Troverdi

DESCRIPTIVES STATISTICS AND PEARSON CORRELATIONS
  Mean SD Spm5 Gruppe Strategi Troverdi
Spm5 3,7815 1,2833 1,0000 -,1273 -,2361 ,3923
Gruppe 1,5126 ,5020 -,1273 1,0000 ,1772 -,2094
Strategi 5,1821 1,2288 -,2361 ,1772 1,0000 -,4297
Troverdi 4,2647 1,1005 ,3923 -,2094 -,4297 1,0000

SAMPLE SIZE
  119

Model Path Estimates
  Coeff SE t p
a1 : ,4337 ,2227 1,9470 ,0539
a2 : -,3016 ,1847 -1,6332 ,1051
a3 : -,3630 ,0754 -4,8128 ,0000
b1 : -,0820 ,0993 -,8261 ,4104
b2 : ,4084 ,1116 3,6606 ,0004
c : -,3253 ,2344 -1,3877 ,1679
c' : -,1023 ,2244 -,4559 ,6493

Indirect Effects (with bootstrap 95%CI and standard errors)
  Effect LL95%CI UL95%CI BootSE
Total : -,2230 -,4334 -,0333 ,1023
M1 : -,0356 -,1531 ,0549 ,0498
M2 : -,1232 -,2903 ,0353 ,0810
M1&M2 : -,0643 -,1531 ,0006 ,0398

----- NOTES -----

Number of Bootstrap Samples:
  5000

----- END MATRIX -----


```

Indirect Effects (with bootstrap 95%CI)		
	LL95%CI	UL95%CI
Total	-0.4334	-0.0333
Mediator 1 (Strategic Motivation)	-0.1531	0.0549
Mediator 2 (Company Trustworthiness)	-0.0353	0.0353
Mediator 1 & Mediator 2	-0.1531	0.0006

N. How to run the MEDTHREE macro in SPSS

The recipe for running the MEDTHREE macro:

1. Open the MEDTHREE syntax file before opening SPSS.

2. Run the macro by marking the text from “Define...” till the end, and then 

3. Open the data

4. Open a new Syntax and copy and paste the formula:

MEDTHREE Y = yvar/X = xvar/M1 = m1var/M2 = m2var/boot = z

5. yvar = the dependent variable

6. xvar = the independent variable

7. m1var = the first mediator variable

8. m2var = the second mediator variable

9. z=5000 (the number of bootstrap samples)

Extracted from Preacher & Hayes (2009):

Unlike the single-step, the multiple mediator model has a path between two mediators, from M1 to M2 (Preacher, Hayes & Myers, 2009). Using the tracing rule, four effects of X on Y can be identified; three specific indirect effects and one direct effect. The direct effect of X on Y, path c' , is the weight for X in a model estimating Y from X, M1, and M2. The first specific indirect effect progresses only through M1 and is defined as the product of the a_1 and b_1 paths, where the a_1 path is the weight for X in a model predicting M1 from X and the b_1 path is the weight for M1 in a model estimating Y from X, M1, and M2. The second specific indirect effect progresses through M2 only. This effect is defined as the product of a_2 and b_2 , where a_2 is the weight for X in a model predicting M2 from X and M1, and b_2 is the weight for M2 in a model predicting Y from X, M1, and M2. The third specific indirect effect progresses first through M1 and then through M2 before ending at Y and is quantified as the product of a_1 , a_3 , and b_2 , where a_3 is the regression weight for M1 in a model predicting M2 from M1 and X and a_1 and b_2 are defined as previously. These three specific indirect effects, when added together, define the total indirect effect of X on Y:

$$\text{Total indirect effect of X on Y} = a_1b_1 + a_2b_2 + a_1a_3b_2$$

and the total effect, c , is, as always, the sum of the direct and indirect effects:

$$c = c' + a_1b_1 + a_2b_2 + a_1a_3b_2$$