UNIVERSITY OF JYVÄSKYLÄ
School of Business and Economics

I RECOMMEND WHAT YOU RECOMMEND - IMPACT OF SOCIAL INFLUENCE AND BRAND PERCEPTIONS ON CONSUMER RECOMMENDATIONS

Master's Thesis, Marketing & Psychology

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ABSTRACT

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Abstract

In order to gain social approval, people often change their opinions and behavior to match it with others. This effect is called conformity. This study examined conformity in a recommendation-based setting. Previous research has suggested that forces behind the reception of social influence needs to be better understood. Thus, this study also aimed to shed more light on how previous brand evaluations, brand perceptions, affect conformity. Brand perceptions examined in this study were familiarity, preference, purchase intent and brand attitude. Behavioral conformity measurement was used in order to avoid issues with scales. Conformity was examined in a recommendation-based task where participants (n = 28) rated their recommendation intent for 50 pre-selected brands. After rating each brand, they were influenced with a normative group opinion of the brand's recommendation intent. The normative group opinion was coded with a program to show either higher, lower or the same recommendation intent with the subject. Afterwards the participants rated the brands again. Brand perceptions were evaluated in a web survey prior to conformity measurement. The results clearly show how the participants changed their initial recommendation intent to match with the group opinion, which is in line with the previous research. Also in line with the previous research, purchase intent affected conformity. As opposed to previous findings, other brand perceptions didn't affect conformity. Thus, the results highlight the importance of recommendations and referrals in the field of marketing: consumer's previous familiarity, preference or attitude towards the brand seem to lose their importance when other consumers' opinions come into the picture. Conflicting results may stem from using recommendation intent as the conformity measure or relatively small sample of familiar brands to participants. The results emphasize the power of social influence within consumer behavior. In practice, companies should heavily focus on managing customer recommendations by tracking, analyzing and influencing it.

Keywords
Conformity, social influence, brand perceptions, brand familiarity, brand preference, purchase intent, brand attitude, recommendation, behavioral measurement

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ABSTRACT

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Otsikko Suosittelen mitä sinä suosittelet - sosiaalisen vaikutuksen ja aikaisempien brändikäsitys- ten vaikutus kuluttajan suositteluhalukkuuteen	
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Abstrakti

Ihmiset vaihtavat usein mielipidettään tai käyttäytymistään vastaamaan muiden ihmisten mielipiteitä ja käyttäytymistä kuuluakseen joukkoon, eli mukautuvat. Tämän tutkielman tarkoituksena oli tutkia sosiaalista mukautumista brändien suositteluttehtävässä. Mukautumista tapahtuu, kun ihmiset ovat alttiina sosiaaliselle vaikutukselle. Aikaisemman tutkimuksen perusteella sosiaalisen vaikutuksen vastaanottamiseen vaikuttavat asiat vaativat lisää tutkimusta. Tästä johtuen tämä tutkimus pyrki myös lisäämään ymmärrystä siitä, kuinka aikaisemmat käsitykset brändistä vaikuttavat mukautumiseen. Nämä aikaisemmat käsitykset brändeistä olivat tässä tutkimuksessa brändin tuttuus, brändimieltymys, ostoaie ja brändiasenne. Niitä mitattiin itsearviointilomakkeella. Mukautumista mitattiin käyttäytymiseen perustuvalla tehtävällä. Tehtävässä osallistujat (n = 28) arvioivat, kuinka todennäköisesti he suosittelisivat heille näytettyä brändiä muille. Brändejä oli 50 kappaletta, jotka esitettiin osallistujille logoina tietokoneohjelmalla. Brändit valittiin kansallisesta bränditutkimuksesta, joille tehtiin esitestaus. Jokaisen brändin suosittelun arvioinnin jälkeen osallistujat näkivät ryhmän mielipiteen suositteluhalukkuudestaan kyseisestä brändistä. Ryhmän mielipide oli koodattu ohjelma, joka näytti korkeampaa, samaa tai matalampaa suositteluarviota brändistä osallistujalle. Lopuksi osallistujien tuli viivästetysti arvioida brändit uudelleen, tällä kertaa näkemättä ryhmän arviota. Tulokset näyttävät selkeästi, kuinka osallistujat muuttavat mielipidettään ryhmän mielipiteeseen mukautuen, joka tukee aiempaa tutkimusta aiheesta. Myös aiempaa tutkimusta tukien, ostoaie vaikutti mukautumiseen. Vastoin aiempia tutkimustuloksia, muut ennakoidut brändikäsitykset eivät vaikuttaneet konformointiin. Ristiriidassa olevat tulokset aikaisempien brändikäsitysten osalta voivat johtua esimerkiksi suositteluksymyksestä tai tuttujen brändien vähäisestä määrästä. Tulokset korostavat suosittelun merkitystä markkinoinnissa: kuluttajien omat, aikaisemmat kokemukset tuttuudesta, mieltymyksestä tai brändiasenteesta näyttävät menettävän merkitystään sen rinnalla, kun kuvaan astuvat toisten mielipiteet brändin suosittelusta. Yritysten markkinoinnin kannalta tulokset korostavat panostamista asiakkaiden suositteluihin ja hyvien brändikokemusten jakamiseen sosiaalisen vaikutuksen maksimoimiseksi.

Avainsanat Mukautuminen, sosiaalinen vaikutus, brändikäsitys, tuttuus, mieltymys, ostoaie, brändiasenne, suosittelu, käyttäytymiseen perustuva mittaus
Säilytyspaikka Jyväskylän yliopiston Kauppakorkeakoulu

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1 GLOSSARY

Glossary of social influence and conformity terms.

Compliance	"Compliance refers to a particular kind of response - acquiescence - to a particular kind of communication - a request. The request may be explicit -- or it may be implicit. But in all cases, the target recognizes that he or she is being urged to respond in a desired way." (Cialdini and Goldstein 2004)
Electronic Word of mouth (eWOM)	"any positive or negative statement made by potential, actual, or former customers about a product or company, which is made available to a multitude of people and institutions via the Internet." Hennig-Thurau, Gwinner, Walsh and Gremler 2004)
Informational social influence	"-- influence to accept information obtained from another as *evidence* about reality" (Deutsch and Gerard 1955)
Informative conformity	"-- they conform because the group has altered their perception" (Berns et al. 2005)
Interpersonal influence	"The operation of interpersonal processes is dependent upon the individual's attending to and acting upon the beliefs, thoughts, and expectations of others. The premise underlying the present research is that the extent to which individuals are sensitive to social comparison cues relevant to their product choices and usage is a mediator of interpersonal influence." (Bearden and Rose 1990)
Majority effect	"The accepted resolution of the conflict between individual and group decision-making is the well-known "rule of the majority." (Berns et al. 2005)
Mere exposure effect	"-- mere exposure of the individual to a stimulus object enhances his attitude toward it. By "mere" exposure is meant a condition making the stimulus accessible to the individual's perception." (Zajonc 1968)
Normative conformity	"-- people capitulate to the group despite knowing that they are wrong --" (Berns et al. 2005)

Normative social influence	"-- influence to conform with the positive expectations of another" (Deutsch and Gerard 1955)
Reinforcement learning	"-- conformity is underlined by reinforcement learning, i.e., social norms selectively reinforce certain behaviors" (Klucharev et al. 2009)
Reference group	"Consumers use others as a source of information for arriving at and evaluating one's beliefs about the world, particularly others who share beliefs and are similar on relevant dimensions" (Escalas and Bettman 2005)
Social conflict	"-- a conflict with the group opinion is perceived as a violation of social information, anagulous to using wrong grammar, and activates conflict monitoring and adjustment mechanisms" (Huang et al. 2014)
Social conformity	"The modification of an individual's judgement under the pressure of a group --." (Berns et al. 2005)
Social influence	"-- learning about the preferences and behaviors of others." Cascio, O'Donnell, Bayer, Tinney and Falk 2015)
Susceptibility to social influence	"-- attitude and and behavior change in response to social norms or peer pressure." (Cascio et al. 2015)
Word of mouth (WOM)	"-- a process of personal influence, in which communications between a communicator and a receiver influence consumer purchase decision". (Cheung and Thadani 2012)

2 INTRODUCTION

2.1 Social conformity and marketing

We often change our behavior and opinions to match them with our social group. This effect of conforming one's opinion to a normative group opinion is known as social conformity. (Bernberg 1954; Bearden and Etzel 1982; Venkatesan 1986; Bearden, Netemeyer and Teel 1989; Cialdini and Goldstein 2004; Klucharev, Hytönen, Rijpkema, Smidts and Fernández 2009; Shestakova, Rieskamp, Tugin, Ossadtchi, Krutitskaya and Klucharev 2013; Huang, Kendrick and Yu 2014.) Social influence to our behavior is often unavoidable because we have a strong need for belonging and avoiding punishments such as social exclusion from the group (Berns, Chappelow, Zink, Pagnoni, Martin-Skurski and Richards 2005; Spitzer, Fischbacher, Herrnberger, Grön and Fehr 2007; Chaiken et al. 1996).

Social influence is a delicate subject for marketers, granted that recommendations, reference group and word of mouth (WOM) act as a powerful force in consumer behavior and switching their purchase decisions (Bearden and Rose 1990; Childers and Rao 1992; Lascu and Zinkhan 1999; Wangenheim and Bayon 2002; Escalas and Bettman 2005). Consumer's own expressions such as recommendation of a brand has enormous influence on other consumers' perceptions and choices of the brand. This is due to the fact that other consumers' references are perceived to be more trustworthy than companies'. (Jansen, Zhang, Sobel and Chowdury 2009; Lee and Watkins 2016). Moreover, the new digital media environment allows consumers to share their experiences and information about products and services constantly (Bearden and Rose 1990; Childers and Rao 1992; Lascu and Zinkhan 1999; Escalas and Bettman 2005; Chevalier and Mayzlin 2006; Chintagunta, Gopinath and Venkataraman et al. 2010; Anderson and Magruder 2012; Berger 2014). Thus, recommendations have an effect on consumers' decision making by leading to conformity at least in some extent.

Yet branding has been found to influence consumers' preferences and decision making (Bruce, Bruce, Black, Lepping, Henry, Bradley, Cherry, Martin,

Papa, Davis, Brooks and Savage 2014; Philiastides and Ratcliff 2013) and it is known that previous perceptions of a brand (e.g. familiarity, preference and attitude) affect consumer behavior (Lane and Jacobson 1995; Wilson and Peterson 1989). We should ask to which extent these perceptions affect consumer's own recommending behavior when we add social influence to the picture? In this study these perceptions are studied as brand perceptions which refer to brand familiarity, brand liking, purchase intent, and brand attitude.

In marketing literature, social conformity has been referred to various synonymous terms. These include conformity, informative / normative conformity, interpersonal influence, majority effect and susceptibility to social influence. Social conformity is used as the key term in this study. In a similar fashion, concepts of referrals, recommendation and WOM are also used as synonyms in marketing literature or combined together (e.g. Brown and Reignen 1987; Gupta and Harris 2010). Recommendation and WOM are used in this study as synonymous terms.

2.1.1   Research gap

Studies of social conformity have shown that there are differences between people in terms of how likely and how much they will conform their behavior. (Klucharev et al. 2009; Klucharev, Munneke, Smidts and Fernández 2011). Less is known about what aspects alter this difference, i.e. are there individual differences in conformity behavior or do they depend on perceptions to the variable being measured, such as brand or product.

Consumers' recommendations have a great impact on other consumers' decisions (Anderson and Magruder 2012; Berger 2014; Chevalier and Mayzlin 2006; Chintagunta et al. 2010; Duan, Gu and Whinston 2008, Ye, Law, Gu and Chen 2011), product and brand popularity, successful product launches (Aral and Walker 2011, 2012; Hinz, Skiera, Barrot and Becker 2011; Van der Lans, Van Bruggen, Eliashberg and Wierenga 2010; Watts and Dodds 2007), buying behavior and preferences (Arndt 1967). The influences of consumer to consumer recommendations have been extensively researched (You, Vadakkepatt and Joshi 2015). However, a recent academic study argues that the process of making a decision to recommend something is not yet well known and therefore needs to be better understood (Cascio et al. 2015). Further, it needs to be better explained how referrals and recommendation are perceived in the recipient's mind; previous experiences and perceptions affect to our perceptions and therefore, need to be studied further to understand the complex mechanism of the effects of recommending and referrals. (Bettman and Park 1980; Wilson and Peterson 1989). Moreover, considering recommendations in a larger construct of social influence, it needs to be further studied *how* this influence affects information processing and decision making, i.e. how this influence operates (Bearden and Etzel 1982). This is still a current topic in marketing research as in 2016 Marketing Science Institute listed complex consumer journeys and decision processes as its research priorities for the years 2016-2018 (Marketing Science Institute 2016). Finally, in this study, it is possible to compare the power of social influ-

ence versus brand perceptions in the framework of recommending - as Cascio et al. (2015) argue "*other-directed recommendations may differ in key ways from self-oriented preferences and may be changed through mechanisms not apparent in previous studies of social influence*".

This study aims to shed light on whether the above-mentioned brand perceptions and social influence have a wider impact on brand recommending behavior.

2.1.2 Research goal, research problems and research questions

This study has three goals. Firstly, does social influence have impact on consumers' recommending behavior. Secondly, do brand perceptions impact conformity behavior. These brand perceptions are brand familiarity, liking, purchase intent, and attitude towards the brand. The research questions are:

1. Does social influence affect brand recommending behavior?
2. Do brand perceptions have an effect on the possible conformity effect?

2.1.3 Structure of the research

After the introduction, a literature review is given in the areas of social conformity and brand perceptions. Methodology of the research follows the literature review. Results examine the basic information of the data and statistical tests of the data. Discussion provides insights based on the study on theoretical and managerial levels as well as an evaluation of this study. Finally, topics for further research will be proposed.

Introduction
- Research gap
- Research goal and research problems
- Study structure

Social conformity and recommendation
- Social conformity
- Recommendation

Brand perceptions
- Brand familiarity
- Brand preference
- Purchase intent
- Brand attitude

Methodology
- Materials and Methods

Results
- Participants
- Results from brand perceptions
- Conformity effects

Discussion
- Theoretical contributions
- Managerial implications
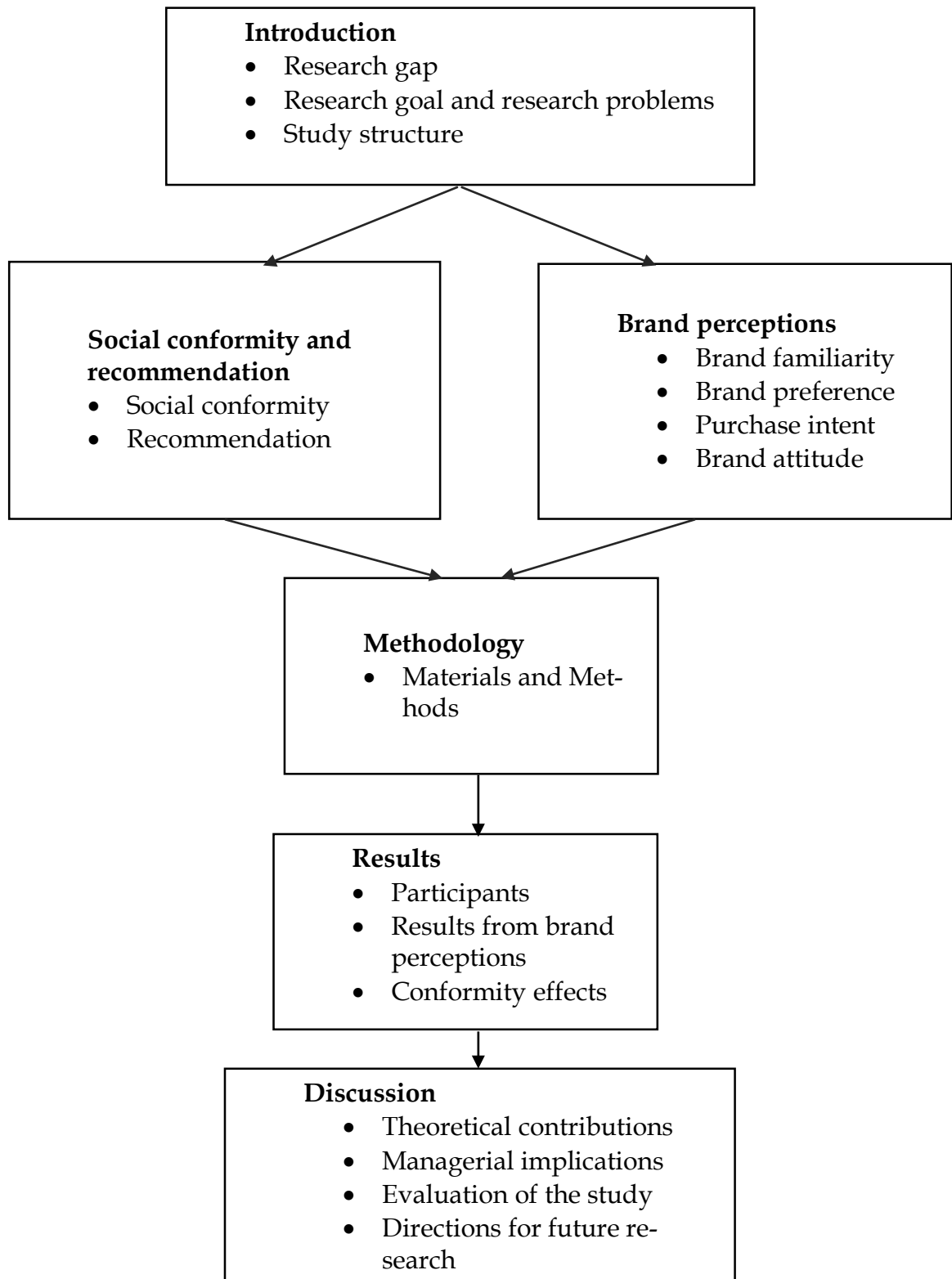- Evaluation of the study
- Directions for future research

FIGURE 1: Structure of the research paper

3 SOCIAL CONFORMITY AND RECOMMENDATION

Conforming to social influence has had an evolutionary importance for survival. It still is an important part of socializing and belonging to a group. The impact of a conflict within a group and its effects to conformity have been demonstrated in neuropsychological processes as well. (Eisenberger, Lieberman and Williams 2003; Klucharev et al. 2009; Klucharev et al. 2011.) Recommending has been repeatedly found in competitive marketplaces and it has been seen as a powerful force influencing consumer's perceptions of brand and product popularity (Cascio et al. 2015). This chapter sheds light on what social conformity is and how it and recommending can affect each other.

3.1 Social conformity

People conform their behavior and opinions to match them with others', willing to gain social approval from them. When an individual alters one's behavior with the normative group behavior, real or imagined, the act is called *social conformity*. (e.g. Bernberg 1954; Bearden et al. 1989; Deutsch and Gerard 1955; Cialdini and Goldstein 2004; Klucharev et al. 2009.) Marketing literature draws the term conformity from social sciences and is defined in marketing as

> a change in consumers' product evaluations, purchase intentions, or purchase behavior as a result of exposure to the evaluations, intentions, or purchase behaviors of referent others" (Lascu and Zinkhan 1999).

Social norms, reference groups and conforming have been studied in the field of psychology and marketing for decades (Sherif 1936; Jacobs and Campbell 1961; Rosenberg 1961; Bearden and Etzel 1982). The pioneering work for social conformity effect was published more than half a century ago, when Solomon Asch (1951) conducted an experiment in which a participant was instructed to estimate which line was the same length with one of the three other lines. The decision was not made alone but in a group, in which other members were actually

actors and had been instructed to give the wrong answer. The result was that 37 % of the real participants modified their opinion with the group and gave the wrong answer of the matching line.

Recent years' neuropsychological studies containing also behavioral experiments of social conformity have repeatedly shown that people conform to the group's opinion when they are asked to make decisions and influenced with others' decisions (Klucharev et al. 2009; Klucharev et al. 2011; Shestakova et al. 2013; Charpentier, Moutsiana, Garrett and Sharot. 2014; Huang et al. 2014). In marketing literature, social conformity has been studied by exposing the participants to direct social influence (Burnkrant and Cousineau 1975; Cohen and Golden 1972; Stafford 1966**;** Calder and Burnkrant 1977) as well as by measuring indirect social influence (Grubb and Hupp 1968; Jacobson and Kossoff 1963; Ross 1971).

In order to conform one's attitude or behavior there must first be a deviation between the person's and the group's attitude or behavior. A mismatch with the group's normative opinion causes *a social conflict*. This social conflict leads to anxiety and actually predicts the opinion change of a person, i.e. conformity. (Berns, Capra, Moore and Noussair 2010; Klucharev et al. 2009; Charpentier et al. 2014; Huang et al. 2014.) This is due to the fact that the social conflict is perceived as a violation of the normative social information and therefore requires adjustment of behavior (Huang et al. 2014).

Several studies have found that the neural base for physical pain and conflicts with social environment and relationships (social pain) is overlapping. In other words, the brain senses the experience of social and physical pain in the same way. Therefore, social rejection literally hurts: it activates the dorsal anterior cingulate cortex (dACC), the same area that physical pain experience activates. (Botvinick, Braver, Barch, Carter and Cohen 2001; Eisenberger and Lieberman 2004; Klucharev et al. 2009.) This is why we actually do feel "broken hearted" if we get rejected. These kind of symbolical verbal representations exist in many languages indicating the importance of social approval in culture. It has been suggested that the reason for overlapping systems in social attachment and pain is evolutionarily important for survival because social separation from a mother or a tribe would not have good consequenses. Thus, social rejection is evolutionally a similar threat as physical pain. (Eisenberger et al. 2003.) This knowledge can help us understand why we as humans are motivated to avoid social conflicts and are likely to conform.

3.1.1   Aspects affecting conformity

What motivates people to conform their behavior and opinions to others? Understanding this has been searched on a group and individual level, and in terms of public and private conformity, normative and informational influence, behavioral goals, and values.

Public and private conformity

Conformity can be viewed from the group's perspective, when a group establishes for example behavioral norms and from an individual's perspective when the member of the group needs to adjust to the norms (Burnkrant and Cousineau 1975). When conformity is viewed from the group's perspective, it can be also called *public conformity*. Conformity happens in public when there is other people's surveillance and when people want to avoid punishments or gain social rewards. From the individual's perspective conformity has been called *private conformity* which refers to voluntary change in behavior and thinking influenced by others. The occurrence of private conformity is more likeyl when the consumer wants to be part of the group. (Allen 1965.)

Normative and informational influence

The above dichotomy underlies in the assumption that social influence can be either normative or informational. On a public, or a group level, conformity happens through compliance. When people know that if they don't follow certain policies, others will notice and they will be punished for that. Private conformity affects through identification to the group and willingness to have a relationship with the group. Conformity that operates through compliance and identification is called *normative influence* (Deutsch and Gerard 1955; Kelman 1961.)

Informational influence affects conformity when a person thinks that the information provider gives information about reality (Deutsch and Gerard 1955). It has been thought to operate through internalization, or in other words when a person identifies their values with the influencer and therefore conforms. Value identification can strongly impact conforming behavior but also drops immediately if the person experiences that the behavior is not anymore in line with one's individual values. (Kelman 1961.)

Behavioral goals

Another view to understand conformity has been drawn from people's goals, i.e. what do they want to reach by conforming. Basically, our reaction to other's beliefs depends on the perceived consensus. Three motivational approaches are suggested to conformity: a goal of accuracy, a goal of affiliation and a goal of maintaining a positive self-concept. Usually people's behavior serves several goals at the same time. (Cialdini and Goldstein 2004.)

The goal of accuracy refers to the individual's tendency to conform with the opinion of the audience and give the right answer. However, if the person has motivation for accurate decisions and is accountable for their own decision even for one person, conforming behavior decreases. The goal of affiliation refers to mimicing unconsciously others' actions, such as postures and facial expressions, for affiliation as well as for gaining social approval to fulfil a sense of belonging and to protect self-esteem. Finally, the goal of maintaining a positive self-concept refers to one's willingness to blend in to the crowd. By conforming

it will be more likely that you are not excluded from the group. (Cialdini and Goldstein 2004.)

The need for accuracy may vary, though. Research has indicated that the importance of a task affects the strength of the conforming effect and the impact of the group on one's decision. Task importance means the individual's judgement of the importance of the punishment or reward following the task. When the importance is high (punishment or reward is considerable), the social conformity effect is stronger and the participants rely on the group more than when the task importance is low (punishment or reward is small). (Baron, Vandello and Brunsman 1996.)

Personal and group characteristics

Personal characteristics influencing conformity contain several specified aspects from cognitive clarity to self-esteem and age. Some studies have found that agreeing personality tendencies increase in young adulthood (Roberts and DelVecchio 2000).

One of the very early conformity studies examined the influence of group size. It was found that conformity reached a plateau when there were only three members in the group. Also, if there is at least one person who doesn't conform easily, it gives space to others not to conform. (Asch 1951; Rosenberg 1961.)

It is also easier to conform if the members of the group are similar to each other in some important characteristics to them. People conform more easily if they find that other members share same views of the world with them. If other group members differ in some imporant characteristic from the person, there is less conformity. (Lascu and Zinkhan 1999.)

Task or situational characteristics

Task or situation characteristics include features about the task (e.g. difficulty), expected outcomes, task importance, prior experiences about conformity, situation's publicity, expected punishments and rewards, crisis, initial position and expectations. All of these influence conformity. Conformity is more likely to happen in a situation when the task is difficult and there is only little information available, there is ambiguity in individuals' opinions, and if the task requires subjective judgement. (Lascu and Zinkhan 1999.)

Values

It should be considered that conforming to the major group opinion may not be rewarding for everyone. There are reasons why some people might want to distinguish themselves from the crowd. One possible reason could be the feeling of being an individual. In some groups, values might be the opposite of the majority and breaking social norms is more acceptable than obeying them. (Blanton and Christie 2003; Kim and Markus 1999; Nail, MacDonald, and Levy 2000.) However, although the group opinion might be deviating from the majority, the

conformity effect still persists inside the group - they just conform their opinion to the group's opinion.

Conformity in non-social settings

Can conformity occur also in non-social settings? Research has found that conformity effect is stronger when a decision making situation is social, i.e. the person must reflect his or her opinion with the opinion of other people. This has been studied comparing the effect of getting a group's versus a computer's rating of attractiveness of faces. It is apparent that people conform more when they see other people's ratings to faces than when they see the computer rating the attractiveness of faces. This indicates that the social influence weighs on people's decisions about attractiveness of faces. (Klucharev et al. 2009; Huang et al. 2014; Kim and Hommel 2015.)

However, a study of event-based conformity suggests that conformity effect may also appear in a non-social situation. The task was again to rate attractiveness of faces and it the participants were influenced with social and non-social influence. Researchers found that also in a non-social situation the participants unconsciously conformed with the number following their rating, although the number wasn't given any specific meaning (e.g. that the number would be any rating at all). However, compared with the social arrangement, the conformity effect was still stronger, which stands up for the importance of the social influence on our decision making. (Kim and Hommel 2015.)

3.2 Recommendation

Recommending, referrals and WOM are used as synonyms in marketing literature. Some studies refer to "word of mouth referrals" (e.g. Brown and Reingen 1987) whereas some to "word of mouth recommending" (e.g. Gupta and Harris 2010). In this study, these terms are also used as synonyms and recommending is referred to also as word of mouth.

WOM has been simply described as interpersonal influence between people who are familiar with each other (Brown and Reingen 1987). Cheung and Thadani (2012) define WOM as

> "-- a process of personal influence, in which communications between a communicator and a receiver influence consumer purchase decision".

As WOM inherits characteristics from the social interaction of influencing others, it's relationship with social conformity is close. Wangenheim and Bayon (2002) summarize the terms around WOM and social conformity as follows:

> "The influence that a source's word of mouth information exhibits on the receiver has traditionally been explained by models of interpersonal influence -- [which] can

be categorized as either informational or normative influence [e.g. Deutsch and Gerard 1995]. Word of mouth can operate thought both channels: Informational influence occurs when information is accepted as evidence of reality [Burnkrant and Cosineau 1975]. In contrast, normative influence operates through compliance, which means that the individual conforms to the verbalised expectations of referent others [Kelman 1961].

Definitions refer to oral communication between consumers related to recommending products or services. The other side typically influences the others' opinion or purchasing decision. WOM is not only about giving positive recommendations but also spreading negative experiences of a product or service. Overall, it's about sharing attitudes, opinions and reactions of products or services. This kind of interpersonal influence has been stated to affect consumers' buying behavior largely. (Arndt 1967; Richins and Root-Shaffer 1988; Jansen et al. 2009.) In today's digital world WOM has an even wider impact as it can be spread over the internet, giving the acronym a prefix e standing for electronic WOM (eWOM). One notable difference between eWOM and WOM is that the referring person can be unknown for the receiver. (Hennig-Thurau, Gwinner, Walsh and Gremler 2004)).

Strong correlations have been found between peer support for a brand and conformity. Peer support for a brand strongly impacts the choice of a brand. Members of a group also look for reinforcement when they choose a peer supported brand. (Midgley, Dowling and Morrison 1989.)

In an online environment, it is possible to measure the impact of recommendations to sales. Several studies have indicated that consumer ratings have a clear impact on sales of the product: positive recommendation indicates better sales performance than negative one. What is more interesting is that it is only positive ratings that increase sales but instead the fact that there *are* ratings. It also seems that the sales performance of a product is the same in a case where there is variety in the ratings (positive and negative) as opposed to where there are only good ratings. It has been suggested that the variety in ratings indicates for consumers that there is discussion around the product and thus generates more sales. Chevalier and Mayzlin 2006; Clemons, Gao and Hitt 2006; Moe and Trusov 2011.)

It is not straightforward though that a person's positive or negative recommendation always has an effect on the recipient. Dimensions such as trust towards the referee (Solomon 1996) and opinion leadership (Richins and Root-Shaffer 1988) affect the impact on the recipient. Furthermore, from the referee's perspective it has been studied that there are several motives for spreading eWOM, including will for social interaction, desire for economic incentives, concern for other consumer's choices and enhancing self-worth (Hennig-Thurau et al. 2004).

3.2.1 I recommend what you recommend - social conformity in recommendations

Social influence and recommending has been known to influence not only buying decisions but even the recommending behavior of consumers. In other words, people recommend what is recommended to them. For example, peer recommendations had a significant influence to recommending behavior of male adolescents in an online setting. The study was conducted in the rapidly changing field of mobile game applications and successfully imitated the new online recommendation environment. In the study 65 male adolescents rated online games, after which they were shown the other participants' recommendations. The others' recommendations were actually manipulated information for the subjects to see if they change their recommending behavior. The results showed that participants changed their recommendation from their initial recommendation when they had been shown that their recommendation differs from the group's recommendation. The same study also considered the individual differences in one's willingness to alter the recommendation intention measured with functional magnetic resonance imaging technique (fMRI). (Cascio et al. 2015.)

Social influence and recommending studies on online product rating forums interestingly also show that the rating posted is already influenced by previous ratings. It has been studied that a negative trend appears on ratings when the amount of ratings increases. (Schlosser 2005; Li and Hitt 2008; Godes and Silva 2012.)

The studies cited above show that social influence affects the dynamics of perception of products and services to the extent of affecting recommendation and buying behavior. This means that people conform to others' opinions. However, the limitations of these studies is that they don't modify consumers' perceptions regarding the product, service or brand of which they are studying. In addition, many studies indicate how brand perceptions affect the recommending behavior itself but the effects haven't been further explored. This study extends the research of how brand perceptions related to recommending affect in social circumstances, where consumers opinions and behaviors are constantly influenced by others. Therefore, this study also builds partly on Wilson and Peterson's (1989) work in which they demonstrated that prior brand preference and purchase intentions modify the information processing of other's positive or negative recommendation. These will be reviewed in the following chapter.

3.2.2 Conformity hypotheses

As already noted above, participants are likely to conform to a group opinion. Further, as reviewed in an earlier chapter, behavioral conformity measurement can be viewed as more reliable than the scales developed for it. Therefore, this study's behavioral setting follows the example of the studies of Klucharev et al. (2009), Klucharev et al. (2011), Huang et al. (2014) Charpentier

et al. (2014), and Cascio et al. (2015) on how to measure conformity. In findings of Klucharev et al. (2009) participants 1) raised their ratings of attractiveness of faces when they were shown manipulated group ratings that were more positive than the participants', 2) decreased their rating when they saw group rating to be lower of theirs' and 3) didn't change their opinion in the situation where the group rating was the same with them. Later, Klucharev et al. (2011) repeated the results in another study, finding also neuropsychological factors that prevent social conformity.

In a similar fashion than Klucharev's research group, Huang et al. (2014) studied the attractiveness of faces and found that the participants significantly changed their ratings of face attractiveness according to the manipulated group opinion, and didn't change their ratings when the group opinion was the same. Supporting results have been found in Charpentier's et al. (2014) study in which they studied collective and private decision making between pairs of products. They found out that participants changed their chocses after seeing the choices of others, and didn't change if the choice was the same as their's. Similar results in behavior were also reported by Cascio et al. (2015) in their study of peer influence in recommending behavior. They argued that by examining social influence's power by going further than the end user, it is possible to reflect "*how information passed on to other potential consumers may be biased by the current average group opinion*".

Following the results of these studies on the opinion change when the group opinion is inconsistent with the participants and to not changing it when the group opinion is consistent, the following hypothesis is proposed:

H1: Participants conform to social influence in a recommendation-based task.

4 BRAND PERCEPTIONS

Effective marketing strategies can be used when a company knows how consumers perceive their brand (Keller 1993; Chen, Nelson and Hsu 2015). In a digital environment consumers express thoughts and feelings about their favorite brands via social platforms which can change the other consumers' brand perceptions (Jansen et al. 2009; Hennig-Thurau et al. 2004). Despite the wide research around recommendation, it has not yet provided much information about how brand moderates the effect of consumer-to-consumer - recommendations (Ho-Dac, Carson and Moore 2013). This chapter takes a look at different brand perceptions and how they affect conforming to other's recommendation intent. Lastly, a summarizing table of hypotheses is provided.

4.1 Brand perceptions

Here 'brand perceptions' refers to a set of perceptions, which are *brand familiarity, preference, purchase intent* and *brand attitude*. Studying the mechanisms that may affect the relationship between exposure to social influence and recommendation intent is vital since many of the recommendation studies have not taken brand perceptions into account (Arndt 1967). The brand perceptions of familiarity, liking, purchase intent and brand attitude have been chosen based on a recent study (Venkatraman, Dimoka, Pavlou, Vo, Hampton, Bollinger, Hershfiel, Ishihara and Winer 2015) in which these measures, called traditional survey measures, are used to measure brand perceptions in advertising effectiveness.

Wilson and Peterson (1989) found that a person's evaluative perception of a brand determines how recommendation affects the recipient. According to them, asking the participants to evaluate a brand (can be also previously unknown) creates an affective perception towards a brand, which in turn affects how they react to positive or negative information about the brand after the evaluation. The study also suggests that the stronger the brand is, the stronger

the consumer's brand commitment is. This is due to a stronger preference and this, in turn, leads consumers to become more likely to make recommendations for strong rather than than weak brands (Ryu and Feick 2007). In addition, it has been found that consumers are not as confident with their brand choice if they have selected a weaker brand, and weaker brands are not as desirable (Simonson 1992; Heath, Ryu, Chatterjee, McCarthy, Mothersbaugh, Milberg and Gaeth 2000). Ryu and Feick (2007) suggest that therefore consumers have lower motivation for recommending weak brands.

Based on the literature on brand perceptions and recommendation intent, it is necessary to study how brand perceptions can affect social conformity. In other words, if brand perceptions affect recommendation intent, is that effect so strong that it even "protects" the consumer from exposure to opposing social influence? This is interesting especially in the case of negative recommendations. If strong positive brand perceptions can protect the brand from those the impact of negative social influence is smaller.

4.1.1 Brand familiarity

In the field of psychology it has been known for decades that the more familiar people are with something the more they tend to like it (Maslow 1937). Zajonc called it a mere exposure effect in his study of familiarity of words and their liking (see also chapter 1: Term Glossary [Zajonc 1968].)

In marketing it's also known that branding largely impacts brand familiarity and familiarity of a brand makes the brand more accessible in terms of product choice. Brand name familiarity brings financial value to companies over tangible assets. (Lane and Jacobson 1995; Bruce et al. 2014.) Brand familiarity is defined here as Alba and Hutchinson (1987) state it:

> Brand familiarity is defined as the number of product-related experiences that have been accumulated by the consumer.

Brand familiarity and awareness are related constructs since familiarity leads to greater awareness, i.e. recall and recognition of a brand (Keller 1993). Brand awareness gives competitive advantage for the company: consumers are more likely to choose their brand or product that they are aware of, even when they don't have prior experience on the specific product (Aaker and Day 1974; Hoyer and Brown 1990; Lane & Jacobson 1995). Brand awareness also affects loyalty and it can boost marketing communication effectiveness (Keller 1993). Brand familiarity affects brand choice and it can even work as a heuristic when a consumer chooses a product and by doing so saves time and effort (Hoyer and Brown 1990). Brand awareness also affects brand attitude (Lu, Chang and Chang 2014).

According to Keller (1993), there are three major reasons why brand awareness in consumer decision making is important. Firstly, when consumers recall the brand from the product category they can consider the brand in their selection group. Secondly, in that selection group, brand awareness has also

been shown to affect product choice due to people buying only familiar brands. Brand awareness also has an effect in situations with low-involvement decision settings when consumers don't care or don't know much about the product or brand. Thirdly, without brand awareness brand associations can not exist. Brand awareness enables the creation of strong brand associations.

Since prior knowledge and experiences affect brand information processing (Allison and Uhl 1964; Jacoby, Olson and Haddock 1971; Bettman and Park 1980), it has been thought that product class familiarity may affect reference group influence (Bearden and Etzel 1982). Brand familiarity and affect cannot be separated when consumers make product choices because it has been noticed that greater exposure to a brand leads to a greater liking of a brand. Therefore, even when consumers think they are choosing products or brands rationally they have long been exposed to effects, such as familiarity, that create affect. (Hoyer and Brown 1990.)

Since familiarity and affect are related, some studies hypothesize that familiar brands receive more positive recommendations. It has been also thought that negative recommendations are not as devastating for familiar brands than they are for unfamiliar brands. Brand familiarity has even been found to moderate the impact of WOM on brand evaluations, such as purchase intention and brand attitude. (Sundaram and Webster 1999; Lu et al. 2014.) Based on these findings, the following is hypothesized:

H2: Brand familiarity affects consumers' conformity to social influence on recommending behavior.

4.1.2 Brand preference

Brand liking is often referred to as brand preference (e.g. Venkatraman, Clithero, Fitzimons and Huettel 2012). Bahn (1986) defines brand preference as follows:

> Preference for an object is determined by how much liking is given to the presence or absence of particular stimulus attributes.

Most research on the subject measures brand preference by asking the level of liking of the brand (Sengupta and Fitzsimons 2000; Liu and Smeesters 2010; Venkatraman et al. 2015; Hamerman and Johar 2013; Ramsøy and Skov 2014; Shepherd, Chartrand and Fitzsimons 2015). Brand preference has been found to influence customer decision making (Bahn 1986). Bahn (1986) notes in his study of brand preference formation that for some consumers, brand preference can be based on multiple attributes but it can also be formed by a single attiribute.

Wilson and Peterson (1989) studied how brand perceptions affect product evaluations and purchase intent. Firstly, they asked subjects to tell their preference of brand A over brand B, and then were exposed to either positive or negative WOM. The researchers suggested that the subjects were more likely to engage with positive WOM about their preferred brand. The non-preferred brand would enhace receptiveness for negative WOM. They hypothesized also that if

the participant didn't have a preference over the two brands there would not be a difference in the receptiveness of negative or positive WOM about the product.

Their findings were intriguing. Firstly, if negative WOM included a problem with performance of the brand's product, 41% of the participants lowered their value perception of the brand in all of the three groups (A better than B; B better than A; no preference over A or B). Their finding supports this study's hypothesis of conformity. However, those who had rated the brand A better than B, were less likely to lower their value evaluation of the brand A even when it was reported to have problems with performance. And in opposite, the same group was more likely to lower their evaluation rating of the brand B when reported to have performance problems. The same happened with the group that had preferred brand B in first hand - they were also more likely to keep their good evaluation of their preferred brand and lower the evaluation of their non-preferred brand A. In the group where A and B were evaluated as the same value without preference over the other, participants lowered their evaluation of the brand A more than brand B. Brand A was told to be more expensive and the researchers concluded that participants had higher expectations towards it. (Wilson and Peterson 1989.)

As noted in Chapter 4.1.1, familiarity with a brand increases the preference for it and familiar brands do not suffer as much from negative WOM as non-familiar brands. Therefore, it can be assumed, as was done with familiarity hypotheses, that preference for a brand protects the brand from social influence. Moreover, as Wilson and Peterson (1989) show, preferred brands do not suffer as much from negative social influence than non-preferred brands. Based on the findings in this chapter, the following hypothesis is set:

H3: Brand liking affects consumers' conformity to social influence on recommending behavior.

4.1.3   Purchase intent

Purchase intent refers to the intention of purchasing a product or service and is measured by self-report (Seiders, Voss, Grewal and Godfrey 2005). Studying purchase intent and its effect on brands is, according to Fitzsimons and Morwitz (1996), important for two major reasons. Firstly, it's important to know what kind of effects marketing has on not only on the product itself but the whole brand. Secondly, purchase intentions on a brand level and its behavioral consequenses require more research. It has been found that even measuring purchase intent increases the propability of purchase. This has been studied with measuring purchase intent for products (Morwitz, Johnson, Schmittlein 1993) and at the brand level (Fitzimons and Morwitz 1996). Furthermore, reference groups have been found to influence consumers' purchase intentions (Bearden and Etzel 1982; Wilson and Peterson 1989).

Wilson and Peterson (1989) also studied purchase intent in the aforementioned study of the effect of brand perceptions on product evaluations and

whether they alter how social influence affects perception of brands. Their findings on purchase intent as a perception (asked before influenced with WOM) were that when subjects are exposed to positive WOM of a product, their purchase intention increases. When considering preference for the brand A or B or no preference conditions the results get more complex. Firstly, the group which preferred the brand A were more likely to increase their purchase intent of the brand A when exposed to positive WOM, compared to brand B when exposed to positive WOM. Secondly, brand B-preferring group was more likely to increase their purchase intent of the brand when influenced with positive WOM. Although they were also influenced with positive WOM of the non-preferred brand A, their purchase intent didn't increase much.

Negative WOM was an especially powerful influencer of leading the participants to lower their purchase intent in all of the three groups. The findings supported their hypothesis that negative WOM impacts purchase intent of a non-preferred brand (around 62% were less likely to purchase the non-preferred brand).

Unexpectedly in the brand B-preferring group purchase intent was dramatically lowered when exposed to negative WOM (57% lowered their purchase intention). In the case of a non-preferred brand or no preference over another the negative WOM drastically lowered purchase intent. (Wilson and Peterson 1989.) Based on the findings in this chapter the following hypothesis is set:

H4: Purchase intent affects consumers' conformity to social influence on recommending behavior.

4.1.4   Brand attitude

Brand attitude can be defined as *consumers' overall evaluations of a brand* (Keller 2003). Brand attitude consists of attributes and benefits pivotal to the brand (Keller 1993). Brand attitudes can be beliefs about the perceived quality such as attributes of a product or beliefs of its functional or experiential benefits (Zeithaml 1988). Fishbein and Ajzen (1975; Ajzen and Fishbein 1980) have proposed a dominant model in marketing to understand attitudes. In this model, the attitude toward performing a certain act consists of two factors: a) belief of the outcome and b) evaluation of the outcome's value.

Attitudes can have a functional value of expressing self-concept (Katz 1960) but they can also be formed without profound thinking - as Keller (1993) suggests, attitudes can be obtained only by heuristics.

Brand attitude has been studied widely in literature of attitude toward advertisements and advertising effectiveness (Miniard, Bhatla and Rose 1990). It has been suggested that the attitude toward the ad affects brand attitude and purchase intention (Mitchell and Olson 2000; Shimp 1981). In addition, brand attitude strength affects purchase intention, brand choice and purchase behavior (Priester, Nayakankuppam, Fleming and Godek 2004; Park, MacInnis, Priester, Eisingerich and Iacobucci 2010).

As mentioned earlier, brand familiarity affects brand attitude. When studied in the context of blogging and sponsored recommendation posts, it has been found that higher brand familiarity indicates more positive attitudes towards the brands which then leads to more positive receptiveness of sponsored recommendations, compared to responsiveness when the brand is unfamiliar and it has been recommended in a sponsored blog post. (Lu et al. 2014.)

Since brand familiarity affects brand preference as well as brand attitude (Lu et al. 2014), brand attitude affects brand purchase intention (Priester et al. 2004; Park et al. 2010), and perceptions to the brand studied influences the effect of confomity by negative social influence having more significant power especially to the non-committed brands, (Wilson and Peterson 1989), the following hypothesis is set:

H5: Brand attitude affects consumers' conformity to social influence on recommending behavior.

Hypotheses	Key supporting literature
H1: Participants conform to social influence in a recommendation-based task.	Deutsch and Gerard 1955; Kelman 1961; Wilson and Peterson 1989; Cialdini and Goldstein 2004; Klucharev et al. 2009; Klucharev et al. 2011; Huang et al. 2014; Charpentier et al. 2014; Cascio et al. 2015
H2: Brand familiarity affects consumers' conformity to social influence on recommending behavior.	Bearden and Etzel 1982; Sundaram and Webster 1999; Lu et al. 2014
H3: Brand liking affects consumers' conformity to social influence on recommending behavior.	William and Peterson 1989; Sundaram and Webster 1999; Lu et al. 2014
H4: Purchase intent affects consumers' conformity to social influence on recommending behavior.	Wilson and Peterson 1989
H5: Brand attitude affects consumers' conformity to social influence on recommending behavior.	Lu, Chang and Chang 2014; Priester, Nayakankuppam, Fleming and Godek 2004; Park, MacInnis, Priester, Eisingerich and Iacobucci 2010; Wilson and Peterson 1989

TABLE 1: Hypotheses and the key supporting literature

5   METHODOLOGY

The data for the study was collected from DIGA - Digitaalinen asiakaskokemus (digital customer experience), which was University of Jyväskylä's School of Business and Economics and Centre for Interdisciplinary Brain Research (CIBR) collective research project. As the research project was interested in neurological changes in brains when social conflict and conformity happens, the conformity tests for this study were made at the same time when the brain imagining study was done. Behavioral data from the measurements was used to examine this study's research questions.

5.1   Materials and Methods

5.1.1   Experimental research strategy and quantitative method

There are three types of traditional research strategies: experimental, survey and case study. Differences between these are that experimental studies usually measure how one variable affects another, surveys refer to collecting information from a certain population with a standardized method and case studies are designed to give more specific information about a certain phenomenon or a small sample. (Hirsjärvi, Remes and Sajavaara 2005, 125.) Experimental research includes a design where circumstances are consciously modified in order to see if there are effects between the variables. To see if the modified environment affects the participants there is usually a control group that is not exposed to the change. (Karjalainen 2010, 11-12.) In this study a control group was not needed because of a repeated measures design.

Two types of approaches, quantitative and qualitative, can be taken to conducting the research after the strategy has been chosen. (Hirsjärvi et al. 2005, 125-126.) Qualitative research refers to conducting information that can answer questions such as "where", "what kind of" or other information that is qualitative in its nature. Quantitative research studies questions like "how

much", "how many" or other information referring to numeric measurement. (Karjalainen 2005, 19.) However, these approaches should not be seen as contradictory but more of practical ways to interpret the phenomena being studied. They can be even used in the same study to get a better picture of a complex phenomenon. The main question is what would be the best way to capture the answer to the research problem in the most valid way. (Hirsjärvi et al. 2005, 126-129.) This study is quantitative in its nature because it measures the relationship between variables.

Finally, the purpose of the study can be either mapping (creating new hypothesis and exploring new phenomena), explanatory (studying causal relationships), descriptive (documenting) and predictive (what are the consequenses of a certain phenomenon) (Hirsjärvi et al. 2005, 129-130). This study is explanatory because it searches for causal relationships between variables.

5.1.2   Validity and reliability of the research

Validity and reliability of the research are important to examine because they inidcate whether the results can reflect the real world and add something new to the information that has previously been gained. Reliability of this study's results also stem from the used methods, measures and processing of the materials collected. Trustworthiness of the research is commonly reviewed through reliability and validity.

Validity refers to the competence of the research: the conclusions are valid and provide an answer to the research problem. In other words, validity means the ability to measure a certain research problem. Validity can be further divided into internal and external validity. Internal validity indicates that the results really come from the research setting and are not caused by, for example, external distraction. Therefore, the chosen measures and variables are important. External validity means that the results can be replicated or generalized. However, sometimes even carefully designed models can not exclude some aspects that affect validity. Firstly, even though the researcher knows what they are studying with the questionnaires it is always up to the participant who interprets the questions through their experiences and reality. Secondly, people can change their behavior when they know they are being measured. (Hirsjärvi et al. 2005, 216-217; Karjalainen 2010, 16.)

Reliability refers to replicability of the research - whether the research setting can be done again and the results obtained in the similar fashion. Therefore, reliable results are true and did not happen accidentally. For example, the differences in the results are due to the differences in the phenomenon studied, e.g. opinions, and not due to the badly designed questionnaires. (Hirsjärvi et al. 2005, 216-217; Karjalainen 2010, 16.)

To avoid problems with validity and reliability in this study, they are acknowledged in the following way. Firstly, the chosen measures have been extensively studied in their respective fields of psychology and marketing. Secondly, the methods and measures to study the causal relationships between these materials have been chosen from previous, peer-reviewed studies that

have validated the questionnaires. Those studies were published in high impact factor journals, e.g. Neuron and Journal of Marketing Research (impact factors can be seen at Scimago Journal and Country Rank, 2017). Thirdly, the research model and setting is replicable. Fourthly, the participants were not told in advance that they will need to rate the brands three times. Otherwise, they could have realized the purpose of the study and consequently modified their behavior.

5.1.3 Measuring social conformity

Behavioral studies of social conformity have measured conformity behavior in two ways. One way is to measure subjects' overall tendency to conforming behavior beforehand with a scale. Another way is to split the participants into two groups after analyzing their behavioral responses of how much they conformed in a given task: to those who conformed (changed their opinion) on a statistically significant level, and those who didn't. In marketing literature conformity has been often measured with a scale developed by marketing professionals whereas in (neuro)psychology it has been noticed that scales are not as reliable indicators of conformity behavior as measuring by the actual answers (the actual behavior) is.

   In psychology research there are a few scales developed for measuring conformity. Those are Mehrabian conformity scale (Mehrabian and Stefl 1995) and Self-monitoring scale (Snyder and Gangestad 1986). In both of these scales participants have filled the scale before the study and they have been divided into conformists and non-conformists based on the scale. In marketing research for example Arndt (1967) uses Kassarjian's Social Preference Scale whereas Bearden et al. (1989) have developed their own scale, Consumer Susceptibility to Interpersonal Influence.

   However, there are certain issues when using the scales. Firstly, they might have issues with validity, i.e. does the scale really measure what it's supposed to. Secondly, even if it does it may not do so when translated to another language, as in this study it needed to be done. Thirdly, no significant study has used the Mehrabian conformity scale and therefore it's usage might be doubtful, and even in the less significant studies using the scale report participants have had problems completing the scale (e.g. Charpentier et al. 2014). Moreover, the scale might not correlate with the conforming behavior at all. Arndt (1967) reports that Kassarjian's Social Preference Scale, which measures inner- and other-directedness, didn't correlate with his hypothesis that other-directed people would conform more easily than inner-directed. Bearden et al. (1989) have developed a valid and reliable scale of interpersonal influence. However, to date there are no articles in top marketing journals using their scale to measure interpersonal influence in a valid and reliable way and therefore it was not chosen for this study either. All in all, there is no direct scale to measure conformity (Lascu and Zinkhan 1999).

   Due to the lack of a valid scale it has been noticed that measuring the level of conformity behavior can be done in valid way by asking the participants

their opinion first, then exposing them to the others' opinions, and once more asking their own opinion. From the third response, it is possible to see whether the person conformed or not and how much. In academically respected studies the participant's responses have then been split by median from their third response, which indicates that the other half conformed and the other half didn't conform as much. This way the groups of conformists and non-conformists can be composed. (Klucharev et al. 2009.)

The experiments which split the participants based on their responses usually follow the same pattern: the participants are asked to rate faces or an object, after which they see the average rating of the group (which in reality, is a manipulated rating). After 15-30 minutes the subjects are asked to rate the same items again. The results show that they change their opinion towards the group opinion, either lowering or raising their rating depending on the group rating. This change is statisticially significant, results varying between $p < 0,05$ and $p < 0,0001$ depending on the study. Of course, if the (manipulated) average group rating has been closely the same with the subject's own rating, they don't change their opinion. (Klucharev et al. 2009; Klucharev et al. 2011; Shestakova et al. 2013; Charpentier et al. 2014; Huang et al. 2014.) In many of these studies participants rate attractiveness of faces. Preferring attractive faces is innate which means that it's not learned during socialization from parents or from media, and attractiveness is also a socially important feature (Rubenstein, Kalakanis and Langlois 1999; Langlois, Kalakanis, Rubenstein, Larson, Hallam and Smoot 2000). This makes it makes it an ideal object for measuring conformity.

The lack of reliable scales in conformity describes how abstract the concept is, even though its impact on consumer behavior is significant. However, neuropsychological research has found that conformity behavior can be predicted by measuring the strength of social conflict which arises from differing opinions. (Klucharev et al. 2009; Berns et al. 2010, Campbell-Meiklejohn et al. 2010; Falk et al. 2010.)

5.1.4   Measuring brand perceptions

The logos chosen for this study were national and global brands selected from Taloustutkimus 2015 (Vinni, 2016). The list consisted of the 200 most respected brands by Finnish people. The brands were previously pretested to be the most known brands for Finnish people by free recall, i.e. spontaeneously. Those 200 brands were categorized into five categories (food, clothing, home, technology and personal care) after which they were pretested for their familiarity with a web survey. 30 people answered the web survey and based on the survey the brands were ranked by their familiarity. Finally, five most and least known brands were selected from each category for this study (for example, in the clothing category the most well known brand was Marimekko and the least well known brand Your Turn).

Brand perceptions are measured with a slightly modified questionnaire of Traditional Measures of survey questions from Venkatraman et al. (2015) study.

Traditional measures of survey questions were chosen for this study as they were successfully validated and used in Venkatraman et al. (2015) study. Venkatraman used the same measures to collect participants' perceptions to products and brands. However, for this study some of the product-featured questions were excluded (e.g. usage intent) as they were not relevant. Questions were also translated to Finnish. Brand familiarity was measured by asking the participant to rate their familiarity with the presented brand logo with a scale of 1= very unfamiliar; 5 = very familiar (Venkatraman et al. 2015).

To measure brand preference, participants rate their feeling of liking of the brand with a scale of 1 = I dislike it very much; 5 = I like it very much (e.g. Sengupta and Fitzsimons 2000; Liu and Smeesters 2010; Ramsøy and Skov 2014; Venkatraman et al. 2015). Purchase intent was rated in a similar way, with a scale of 1 = very unlikely to 5 = very likely when asked how likely the participant was to purchase a product of the brand. Brand attitude was measured by asking the participants to evaluate brands with good/bad, positive/negative and like/dislike dimensions with a continuing scale from 1 to 7 (Park et al. 2010; Venkatraman et al. 2015). To see the questionnaire for this study, see the Appendix 1: Questionnaire for brand perceptions in English. Although there is criticism towards using single item survey questions (Diamantopoulos, Sarstedt, Fuchs, Wilczynski and Kaiser 2012), they have been also studied to be valid in marketing studies asking for consumers' preferences, perceptions or intentions (Bergkvist and Rossiter 2007).

5.1.5 Data collection and analysis

Data collection was done in two phases (Figure 3). These phases were 1) brand perceptions data collection (web survey) 2) recommendation intent + participants see "others'" recommendation intent and recommendation intent collected again after 30 minutes without prior notice to participants. The brand perceptions web survey took approximately 10 minutes to fill out.

```
┌─────────────────────┐
│ Pre-selection of    │
│ brands              │
└─────────────────────┘
          │
          ▼
┌─────────────────────┐
│ 28 subjects selected│
│ for the conformity  │
│ experiment          │
└─────────────────────┘
          │
          ▼
┌─────────────────────────────┐
│ Selected subjects complete  │
│ the brand predispositions - │
│ questions as a web survey   │
└─────────────────────────────┘
```

The Experiment

Participant rates his/her recommendation intent towards a brand*

Participant sees "300 other students' rating for the brand" (manipulated)

Break c. 15 minutes

Participant rates his/her recommendation intent towards the brand again**

Possible Social Conformity

*Total of 50 brands
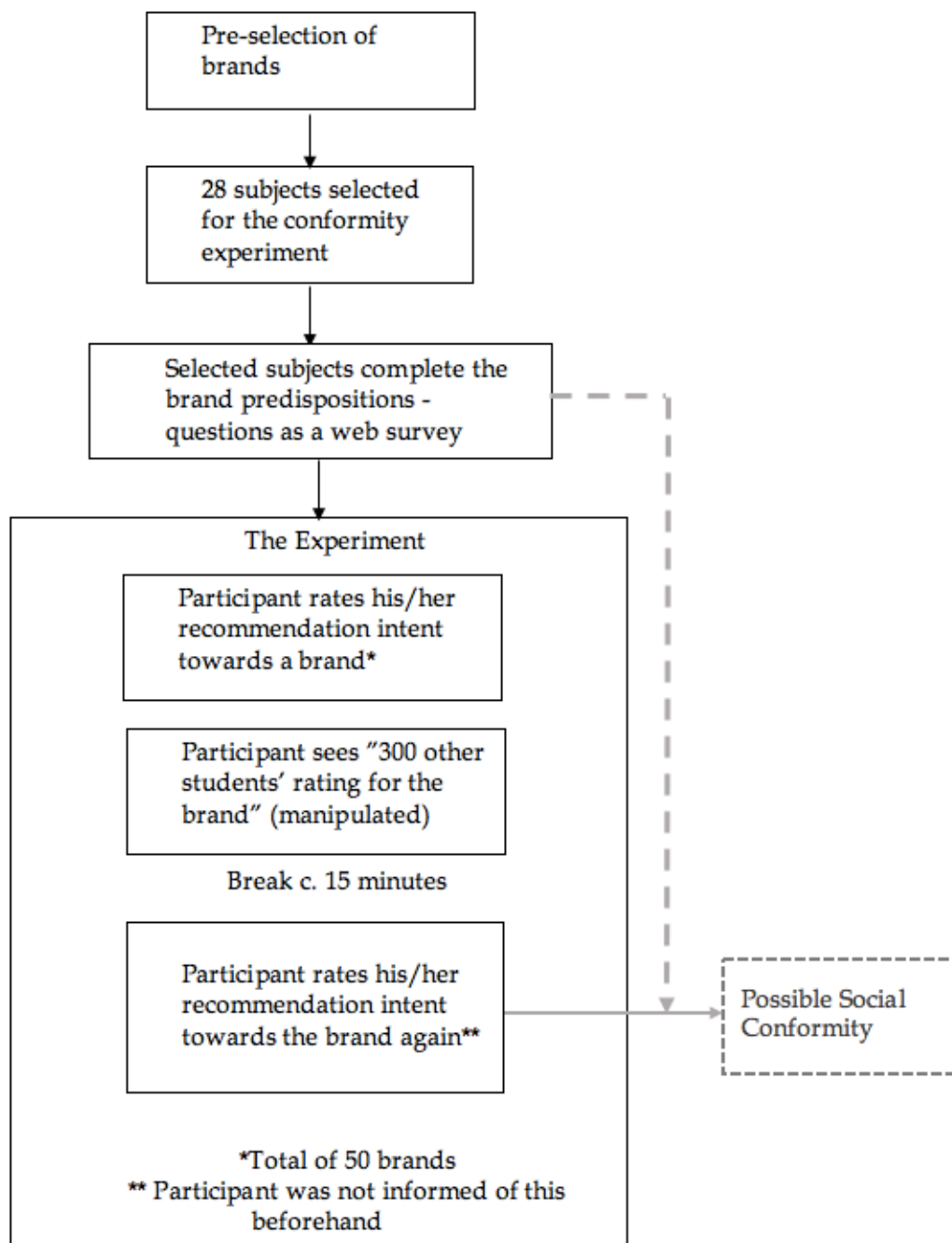** Participant was not informed of this beforehand

FIGURE 2: Data collection process

In the second phase participants individually evaluated their recommendation intent for the same 50 brands of which they previously had filled the web survey of brand perceptions. Participants were informed in Finnish that they will see logos of 50 brands and they need to rate their recommendation intent, "I would recommend this brand", of each with a scale of 1 to 7 (1 = totally disagree, 7 = totally agree; Figure 4). The task was executed while the participant sat in a MEG-device, with brands presented on a computer screen one at a time. Participants gave their ratings with a two-button keyboard either lowering or increasing the number of their rating (rating scale 1-7). Immediately after they had given their rating, participants saw the average rating of the others' brand recommendation intent (Figure 5).

In reality, the "average rating of the other participants" was coded with the Presentation program to either a) be the same or almost the same score b) be 2-4 points below or c) be 2-4 points above the participant's score (see Figure 5). The aim was to create a social conflict between the participant's own and the "other participants'" opinion, which is necessary in conformity measurement. This recommendation task's manuscript was coded based on Klucharev et al. (2011) neuroimagining study of social conformity. In other words, participants were told that they are seeing brand ratings of 300 students aged from 20-35 but this was not the real case.

The second phase included also re-testing subject's recommendation intent. Data collection was made 30 minutes after the MEG-measurement had been completed. Re-testing was intended to be a surprise for the participants to make sure that they wouldn't guess the aim of the study beforehand. This was made to see if the participants conformed their opinion based on the "average rating" of "other participants". From the difference between original opinion and the final opinion (re-test) it was analysed how the brand preferences in the first phase affected to recommendation intention. In re-test the participants didn't see "others" opinion anymore after giving their own rating.

Data was analysed with IBM SPSS Statistics version 24. Conformity effects were studied with repeated measures ANOVA. Brand Perceptions' effects were studied with 2-way ANOVAs.

FIGURE 3: Participant rates her / his recommendation intent

FIGURE 4: Participant sees group opinion of the recommendation intent

6 RESULTS

6.1 Participants

As the study was made with same subjects as in the DIGA research project mentioned above the subjects were recruited for the brain imaging study from respondents to a personality questionnaire (n = 182 of which 77,5% were female and 86,8% were aged between 20 and 29 years). Of those 182 subjects, 30 were invited to take part in the conformity tests based on their personality. They filled a web survey of brand perceptions before participating to the conformity tests. Time range between answering the web survey and attending the conformity tests ranged from 0 to 54 days (M = 15; SD = 17,3).

Finally, 28 subjects completed the conformity tests. They were given a small monetary compensation and 4x25 euros grocery gift card was raffled among them. The incentive was reasonable since the measurements took several hours as the data was collected at the same time with brain imaginging study of social conformity for DIGA research project.

Of the 28 participants selected to the conformity tests, 18 (64,3%) were female. 16 of the subjects (57,1%) were aged between 20-24 years, eight between 25-29 (28,6%), three between 30-34 (10,7%) and one between 15-19 (3,6 %). 23 subjects were students and 5 were employed. 5 subjects evaluated their economical situation as "good", 18 subjects as "fairly good" and 5 subjects as "fairly bad".

6.2 Results from the brand perceptions survey

As 28 subjects evaluated their familiarity, preference, purchase intent and brand attitude for 50 brands, total of 1400 observational units were analyzed. Figures 7 to 10 illustrate the results of each brand perception's distribution from the survey results.
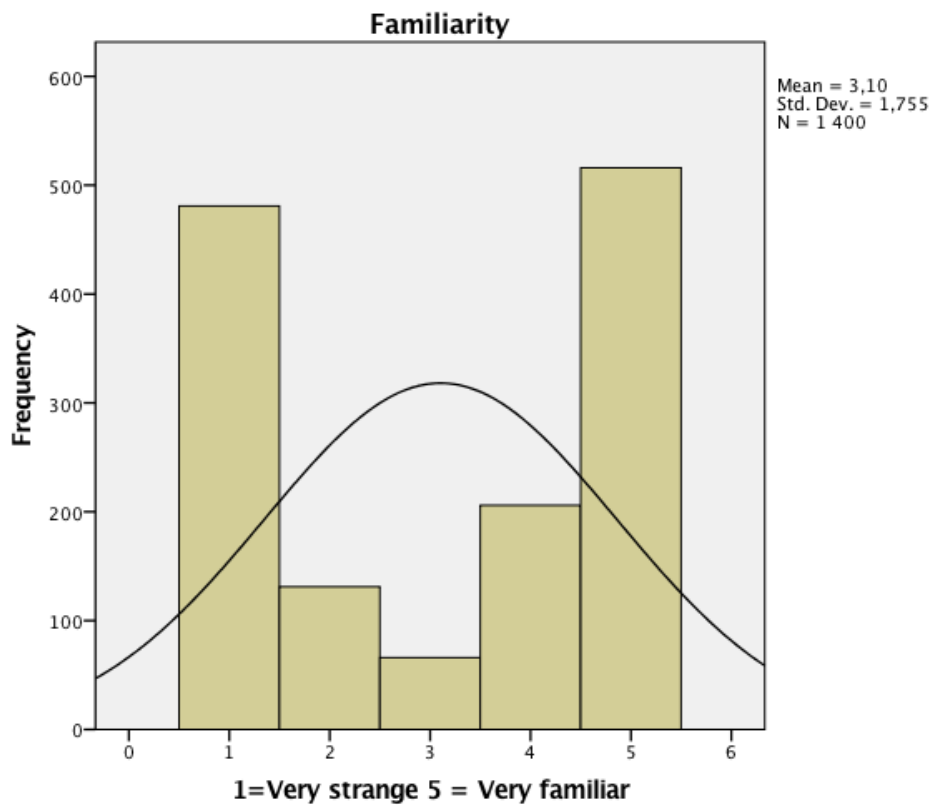
Familiarity

Mean = 3,10
Std. Dev. = 1,755
N = 1 400

1=Very strange 5 = Very familiar

FIGURE 5: Brand Familiarity distributed in brand perceptions survey results
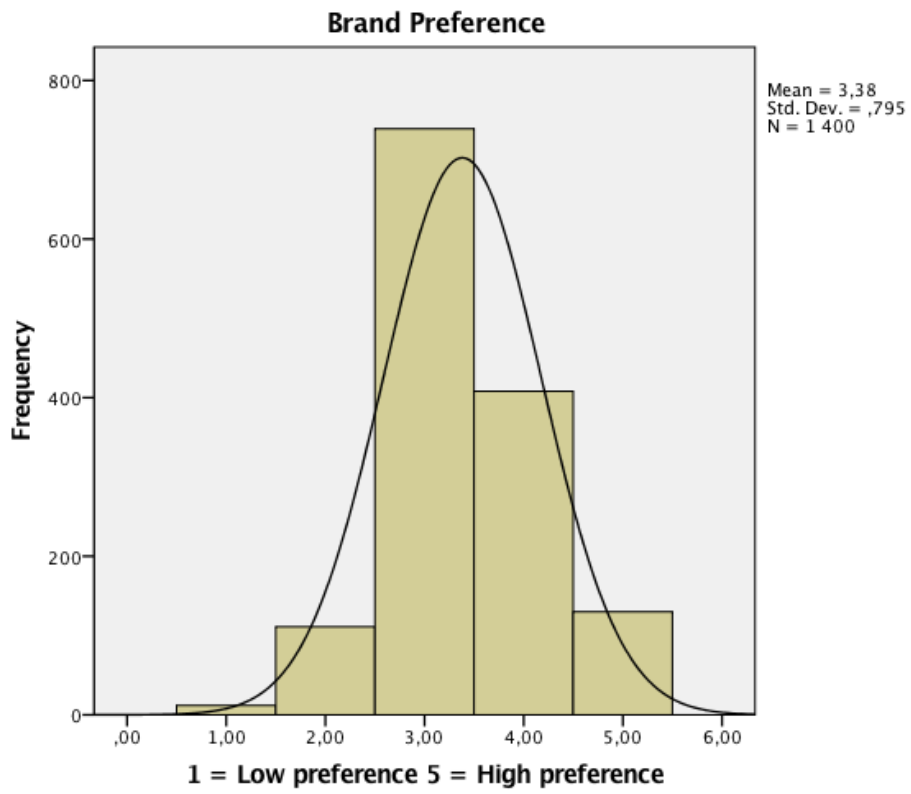
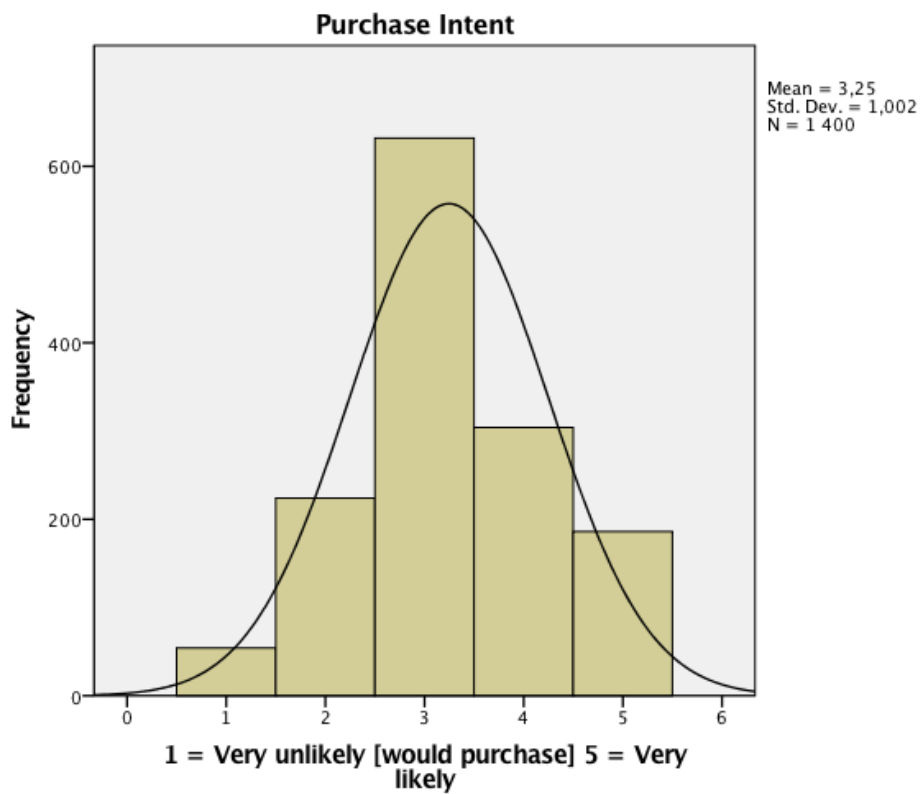FIGURE 6: Brand Preference distributed in brand perceptions survey results

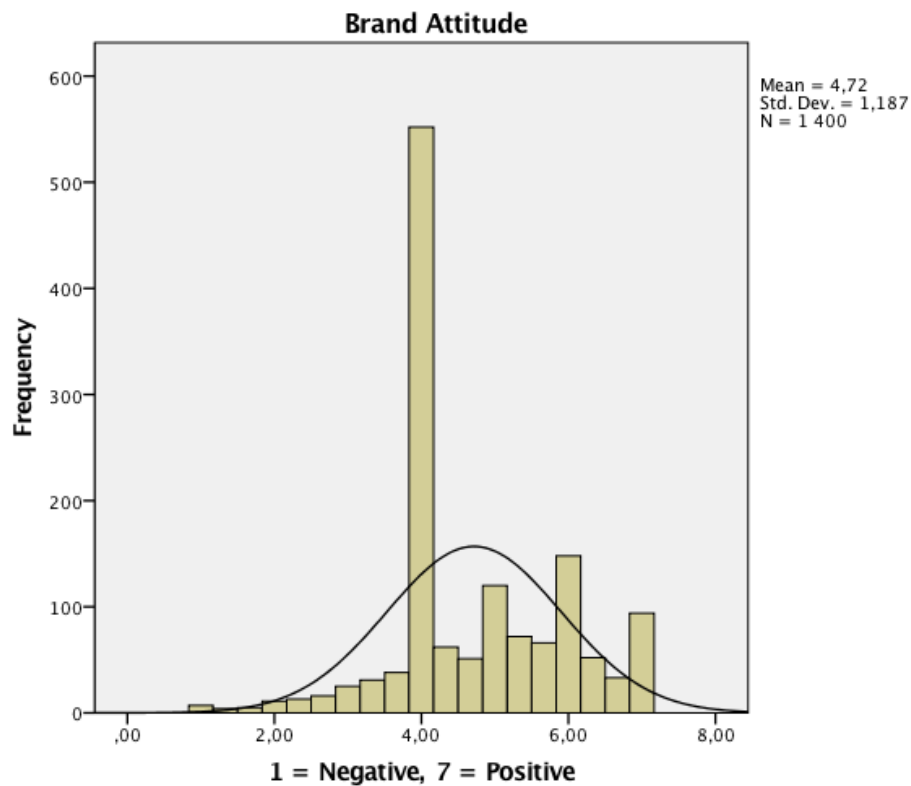FIGURE 7: Purchase Intent distributed in brand perceptions survey results

FIGURE 8: Brand Attitude distributed in brand perceptions survey results

6.3 Conformity effects

Overall, the participants' recommendation rating was moderate (original opinion: mean recommendation 4,81, SD 1,92; final opinion: mean recommendation 4,814, SD 1,89). In line with the conformity hypothesis, subjects changed their recommendation rating to match their opinion with the group rating and didn't change when there was no conflict with the group rating (Figure 11). On average, participants increased their recommendation rating when the group's recommendation rating was higher, whereas they decreased their recommendation rating when the group ratings were more negative than their own initial rating (see Table 2). A repeated measures ANOVA with changes in recommendation ratings as the dependent variable and the three-level within-subject factor group rating revealed that these changes correspond to a significant main effect ($F(2, 1394) = 39,49$; $p = 0,000$; $\eta p^2 = .054$). In the Conflict More category

participants significantly increased their recommendation rating when the group's recommendation rating was higher ($F(1, 479) = 28,85$; $p = 0,000$; $\eta p^2 = .057$ and significantly decreased when it was lower ($F(1, 494) = 45,84$; $p = 0,000$; $\eta p^2 = .085$). Therefore, it can be said that the group opinion affected subjects' judgements of recommendation intent. The effect of conflict size between large (3 points more positive or negative conflict) and small (2 points more positive or negative conflict) conflicts was not significant. To summarize, the study results revealed a strong conformity effect in which the recommendation ratings for brands were changed due to the social influence of a group rating.

Brand perceptions' effect on conformity was reviewed as well. In line with the hypothesis, purchase intent affected conformity ($F(4, 970) = 3,58$; $p < 0,01$, $\eta p^2 = .015$). The higher purchase intent was, the stronger was conformity effect. Against the other brand perceptions hypotheses, none of the other brand perceptions had an effect to conformity.
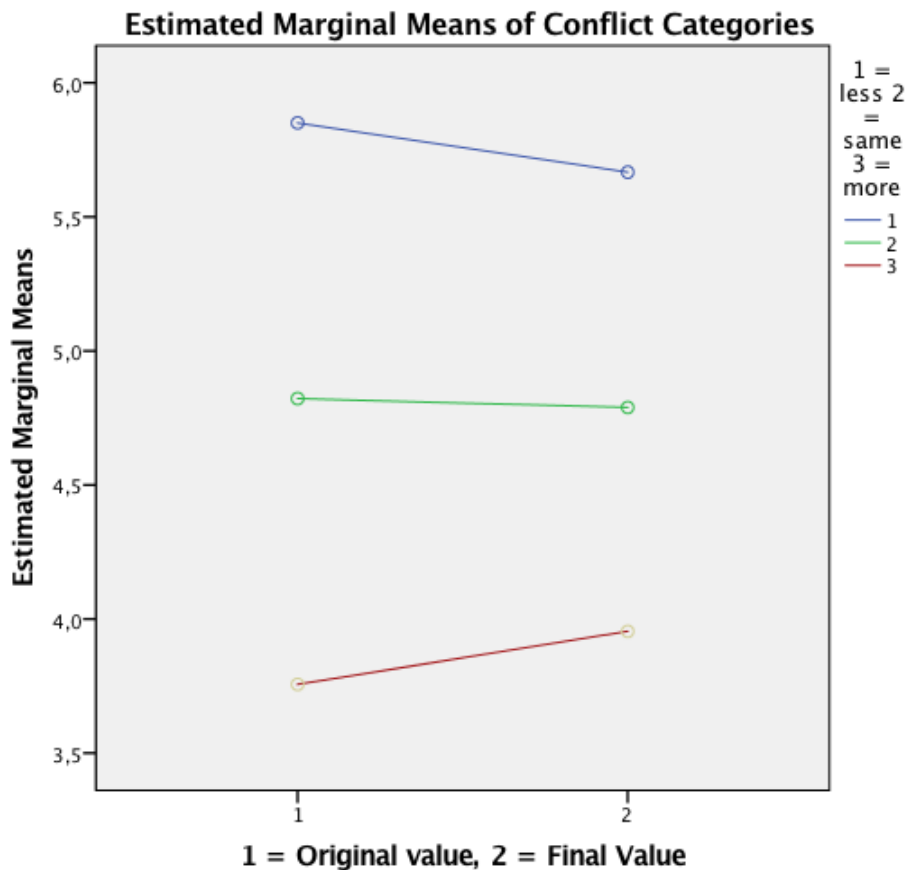

FIGURE 9: Mean score changes in conflict categories illustrated

TABLE 2: Mean score changes in conflict categories

Conflict category	N	Original mean value	Final mean value	Significance
Less	495	5,85	5,67	$p = 0{,}000$***
Same	422	4,82	4,79	$p > 0{,}05$
More	480	3,76	3,95	$p = 0{,}000$***

*** = statistically significant

7 DISCUSSION

7.1 Theoretical implications

This study was conducted to find out whether conformity would appear in this research setting and to shed more light on how previous preferences and perceptions may affect conformity. The research questions were:

1. Does social influence affect brand recommending behavior?
2. Do brand perceptions have an effect on the possible conformity effect?

To answer these questions, five hypotheses were tested based on the literature reviewed.

Recent years' social conformity studies have shown that people change their opinion to match it with a normative group opinion (e.g. Venkatesan 1986; Bearden et al. 1989; Cialdini and Goldstein 2004). It seems to be rewarding even at a neural level to alter own opinions with others' (Klucharev et al. 2009; Campbell-Meiklejohn et al. 2010). Therefore, it might be an evolutionally important ability to have flexibility in one's judgements (Eisenberger et al. 2003).

In this study, the participants' own judgements of a recommendation intent for 50 pre-selected brands were exposed to a recommendation intent of a "group". It was assumed that the group opinion forms a normative guideline to follow and has such a powerful influence on the participants' own recommendation ratings that they would change their initial recommendation rating. As expected, participants changed their opinion in line with the hypothesis. They increased their recommendation rating when the group opinion was higher than theirs, and likewise decreased when the group opinion was lower than theirs. This study clearly shows how people change their opinion when exposed to others' opinions.

Other than the normative group opinion, the results may be affected by selecting recommendation intent as the question with which conformity was measured. Recommending has been stated to be a powerful force in consumer behavior and affecting, for example, perceptions of a brand, purchase decisions and product popularity (e.g. Bearden and Rose 1990; Childers and Rao 1992; Escalas and Bettman 2005). In addition, peer recommendations may have a significant influence to recommending behavior of consumers (Cascio et al. 2015). Also, the size of a "group" recommendation may have affected the results. In this study, the participants were told to see "300 students'" recommendation rating. Perhaps, if the group would have been smaller or implausibly big, it wouldn't have had as much of an influence. On the contrary, even small groups with deviating opinion have been found to affect the subject's own opinion (Ash 1951).

Further, the results may reflect participants' behavioral goals. Accoding to Cialdini and Goldstein (2004), three motivational goals are related to conformity behavior. It could be that the participants wanted to be accurate in their recommendation ratings, and therefore conformed. Or, they just unconsiously mimiced others' actions. Maintaining a positive self-concept may reflect willingness to belong to the group. Participants may have had several goals at the same time and these probably differed at the individual level.

The findings also support Lascu and Zinkhan's (1999) previous research. According to them, conformity is more likely to happen when there is only little information available of the situation and if the situation requires subjective judgement. They have also suggested that when the task is difficult, conformity increases. Furthermore, if people have similarities conformity increases. Reflecting those findings, this study suggests that also when the task is easy conformity behavior appears. In addition, most of the participants in this study may have perceived themselves similar with their student status with the "300 other students" because they were also students.

An intriguing finding is that the participants changed their opinion although they were allowed to give their answer privately and there was no one else in the room. Previous research has suggested that conformity may happen under surveillance (public conformity). Private conformity, i.e. "real" opinion change and conformity happens if people still change their mind although they don't need to express their opinion after exposed to the others'. (Burnkrant and Cousineau 1975; Allen 1965.) In this study, although the participants were able to give their answer privately it could be that they have still viewed the research situation as a public situation because they knew their answers would be analyzed. Thus, we cannot be certain if the participants really changed their mind or if they just conformed publicly. However, as there were 50 brands to evaluate of which about half of them unfamiliar to the participants based on their own familiarity rating it could be assumed that they would not remember, which rating score they gave for each brand. Thus, the results may well indicate also private conformity. Perhaps they didn't remember which score they gave a certain brand but the conflict with the group opinion stayed in their mind for the next evaluation round.

The finding that the participants didn't conform in the No Conflict / Same group was also in line with the hypothesis. However, the ratings in that group also decreased slightly, although not significantly. In previous studies, recommendation ratings on online forums seem to form a negative trend when the amount of ratings increase. As a careful explanation, a slight decrease of the rating scores could be an indicator of the phenomenon but would need more research to be able to confirm the finding.

On the contrary to the conformity findings, earlier studies have also found that conforming is not rewarding for everyone (Blanton and Christie 2003; Kim and Markus 1999; Nail et al. 2000.). When results were examined in an individual level, it could be seen that not everyone changed their opinion of a brand recommendation rating when exposed to the others' opinion. Also, sometimes they changed, sometimes they did not. Therefore, it could be assumed that there would be some predefined characteristics which would affect (non)conforming to a certain brand.

Brand perceptions were examined in this study to find out what kind of dynamics lay behind conformity behavior in a brand recommendation setting. This study supported only one of the proposed hypotheses. Purchase intent was found to affect to conformity behavior, in line with the hypothesis. Previous research has mainly studied how purchase intent changes when people are influenced with positive WOM about the brand (Bearden and Etzel 1982; Wilson and Peterson 1989). In this study, purchase intent wasn't measured again after influencing participants with WOM. However, the results indicate that the higher the purchase intent is, the more likely the participant is to conform with the group.

As opposed to the familiarity, liking and brand attitude hypotheses, the perceptions did not have an effect to conformity behavior. On the contrary to previous research (Sundaram and Webster 1999; Lu et al. 2014; Wilson and Peterson 1989), familiarity, brand preference and brand attitude did not alter conformity by "protecting" the brand from negative influence. In other words, regardless of the brands' familiarity, preference and brand attitude of the participant, the brand still suffered from negative recommendations.

It could be said that the actual conflict with the group opinion is such a strong influencer that it overdrives whether the person was very familiar with a brand, liked it, or had a positive brand attitude towards it. Perhaps a larger data set would have been needed with more brands and more subjects to rate them. Also, if the participants did not know half of the brands very well there might not be existing preferences or attitudes towards those brands which would have affected the conformity results. On the contrary, this highlights the importance of purchase intent because it indeed affected the results. Perhaps purchase intent is a measure which does not require much of a prior experience of the brand and thus, it affected the results.

7.2 Managerial implications

In marketing literature social influence and conformity are often discussed along with word of mouth and its notable effects on other consumers' behavior (Bearden and Rose 1990; Childers and Rao 1992; Lascu and Zinkhan 1999; Wangenheim and Bayon 2002; Escalas and Bettman 2005). Other consumers' references are perceived as more trustworthy than of companies' (Jansen et al. 2009; Lee and Watkins 2016). This study also supports the previous findings that social influence mechanics clearly count for successful opinion alteration, although ethical considerations are important.

Branding and perceptions influences consumers' preferences and decision making (Lane and Jacobson 1995; Wilson and Peterson 1989; Bruce et al. 2014; Philiastides and Ratcliff 2013). However, based on this study it seems that when it comes to belonging to a group and matching own opinions with others' the need for adjusting one's own opinions is higher than one's perceptions of a brand. This increases the importance of effective brand referral management through recommendations and, for example, brand ambassadors. In an online environment, the results highlight the importance of creating memorable customer experiences that customers want to share online and offline. Furthermore, managers should put more weight on communication skills and crisis management. Tracking and analysing a company's online footprint grows in importance in order to take action immediately and fix the situation if any negative recommendations or product ratings appear.

Managing recommendations and referrals is especially important when consumers' purchase intent is high. According to the results of this study, high purchase intent indicates stronger conformity. Thus, the more likely a consumer is to buy a product, more likely she or he is to conform to a positive WOM of it - and the other way around. If a consumer is thinking of buying a product, WOM seems to be important characteristic in the decision making process. In practice, companies should focus on bringing other customers' positive recommendations into consumer's awareness at the moment of the purchase evaluation. In brick and mortar stores the salesperson could tell the potential customer, which product is the most recommended by other consumers. In an online environment other customers' recommendations should be available throughout the purchase evaluation process.

7.3 Evaluation of the research

The results of this study are limited by a few shortcomings. Firstly, the participants were mainly studying young adults and thus, generalising the results to a larger population may cause some problems. It has been found that a tendency to agree with other people increases during youth (Roberts and DelVecchio 2000) and so, the results of this study may be generalised only to young adults.

Secondly, the laboratory setting may have affected participants' behavior because they knew they were being measured (Hirsjärvi et al. 2005, 216-217). As already noted when discussing public and private conformity it is possible that the participants' conforming behavior could have been affected by the characteristics of the research setting. A noteworthy detail is also the fact that when they first rated their recommendation intent they were sitting under a MEG-brain scanning helmet. It could be assumed that it is not an everyday situation and thus, may cause some excitement or anxiety, although it is hard to evaluate whether it has affected the results at all. Thirdly, since the study was made in cooperation with the DIGA research project, the participants were selected for the study based on their personality characteristics. Finally, Brand Perceptions were measured with single item survey questions, except Brand Attitude. There are conflicting views within academia whether single-item survey questions are as valid as multiple measure survey questions (Bergkvist and Rossiter 2007; Diamantopoulos et al. 2012).

Regardless of the shortcomings, the study has also several advantages. Firstly, replicability of the research setting increases reliability. The behavioral research setting was similar to a widely used setting of measuring conformity (Klucharev et al. 2009; Klucharev et al. 2011). Klucharev et al. (2009) study with the similar conformity design is published on extremely high impact factor journal which is hard to reach (Scimago Journal and Country Rank 2017) and thus the conformity measurement design does not raise concerns. In this study (see Chapter 5.1.3 Measuring social conformity), it was also taken into account that survey based conformity measures didn't seem to be reliable enough to be used without serious cautions and thus was not selected. Regarding the Brand Perceptions survey, even though there is no solid view of single and multiple measure survey questions, single measure survey questions were chosen for this study for a couple of reasons. Single item questions have been widely used in other marketing studies as well (e.g. Fitzimons and Morwitz 1996; Sengupta and Fitzsimons 2000; Seiders et al. 2005; Liu and Smeesters 2010; Park et al. 2010; Ramsøy and Skov 2014; Venkatraman et al. 2015). In addition, single item survey questions have been recommended to use in marketing research settings measuring preferences, intentions and perceptions (Bergkvist and Rossiter 2007).

7.4   Directions for future research

Understanding the dynamics behind consumers' willingness to recommend a brand or a prouct is not yet that well known (Cascio et al. 2015). Previous studies argue that it needs to be better understood what kind of previous experiences and perceptions affect our perceptions of brands and products (Bettman and Park 1980; Wilson and Peterson 1989). This is still a current topic in marketing research as in 2016 Marketing Science Institute listed complex consumer jour-

neys and decision processes as its research priorities for the years 2016-2018 (Marketing Science Institute 2016).

A couple of previous studies have shown that conformity may also happen in a non-social setting (Klucharev et al. 2009; Huang et al. 2014; Kim and Hommel 2015). In those studies, participants conformed a bit towards computer's opinion, and even towards meaningless numbers given after their own rating of faces' attractiveness. Given that robots and artificial intelligence will become part of individuals' lives in the future, it could be studied whether they will affect conformity as strongly as today other people affect.

In terms of future research if familiarity, preference and brand attitude do not have effect on conformity it could be useful to study other mechanics affecting conformity. For example, instead of brand attitude brand attachment could be studied. Park et al. (2010) suggest that it might be a more accurate indicator of consumer behavior. Also, a possible change of brand perceptions could be taken into account. It would be interesting to see if the participant's individual recommendation ratings follow the group opinion, and would this also affect their brand perceptions the same way. Further, more complex statistical analyses could be made of the effects of the brand perceptions effect on conformity. This study included direct effects to the conformity behavior but brand perceptions may affect the conformity dynamics through indirect or moderating effects.

To acquire a deeper understanding on consumers' recommending intentions, conformity behavior and perceptions affecting it, a qualitative research method could be useful. A qualitative research method could provide more insight on motivational factors behind conformity such as goals of belonging to the group or whether the social influence stimulus is perceived as normative or informative. In addition, recommending and perceptions could be of academic interest to study in a context of products instead of brands. Previous experiences of a certain product might be more concrete compared to "using" a certain brand.

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APPENDIX 1: QUESTIONNAIRE FOR BRAND PERCEPTIONS IN ENGLISH

How familiar are you with the brand in the picture?
5 – Very familiar
4 – Familiar
3 – Neutral
2 – Unfamiliar
1 – Very unfamiliar

Thinking about the brand you see, please indicate which statement best describes your feelings about the brand.
5 – I like it very much
4 – I like it
3 – I neither like nor dislike it
2 – I dislike it
1 – I dislike it very much

How likely are you to purchase a product of this brand?
5 – Very likely
4 – Likely
3 – Undecided
2 – Unlikely
1 – Very unlikely

Below you will find three pairs of adjectives. Indicate how well one or the other adjective in each pair describes your overall feeling of brand? (7-point scale)

Bad _ _ _ _ _ _ _ Good
Pleasant _ _ _ _ _ _ _ Unpleasant
Dislike _ _ _ _ _ _ _ Like