

# **What is the impact of Facebook tie strength and behavior on purchase intention?**

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## Abstract

Social media treats all users the same. It does not distinguish your best friend or a friend you have not seen for a few years. In the offline and online world tie strength is already perceived by receivers as more influential in decision making (Word- of – Mouth). This research aims to investigate if this phenomenon also consists on social media, focused on Facebook. Furthermore, the thesis discusses the impact of Facebook behavior, product involvement, product attitude and income on purchase intention. My work bridges the gap between theory and practice. A conceptual framework is provided that maps the predictors of purchase intention. A self-administered survey was completed by sample of 157 Facebook users. This thesis shows that tie strength, attitude towards the product and Facebook behavior affects the purchase intention of a particular product. Although variables like income and product class play a little role, Facebook activity, attitude towards the product and tie strength significantly affects the consumer purchase intention.

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## **Chapter 1: Introduction**

### **Problem Statement**

Many people are active on social media nowadays. “Social media refer to the means of interactions among people in which they create, share, and exchange information and ideas in virtual communities and networks (Ahlqvist et al, 2008)”.

An overview of social media in the Netherlands:

*7,9 million* people have a Facebook account;

*7,1 million* people visit Youtube;

*3,9 million* people have a LinkedIn account;

*3,3 million* are active on Twitter;

*2 million* people are active on Google+;

and *1,2 million* people in the Netherland use Hyves<sup>1</sup>.

Nowhere in Europe is such a large proportion of the population active social media as in the Netherlands. Almost 100 percent of the Dutch population between 16 and 24 years old posted in the last year messages on Facebook, Twitter and LinkedIn (RTL, 2013)

The online social network application analyzed in this article, Facebook, enables its users to present themselves in an online profile. Their “friends” can post comments on each other’s pages, and view each other’s profiles. Facebook members can also join groups based on common interests or projects, see what classes they have in common, and learn each other’s hobbies, interests, musical tastes, and relationship status through the profiles and shared content.

Facebook users share different kinds of content every day. People share holiday pictures, favorite music, blogs they have written, but also their consumption episodes. This can have an impact on future purchases of people within their network. Status and prestige considerations

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<sup>1</sup> Marketingfacts.nl , 18 February 2013

are significant parts in shaping preferences for many products which may appear to be purchased for their direct utility, but which in fact serve only as a means of displaying wealth and purchasing power (Page, 1992). One important motive influencing modern consumers is the desire to gain status or social prestige through acquisition and consumption of goods (Goldsmith et al., 1996) . Generally, consumers use conspicuous goods to enhance their prestige in society, which can be achieved through public demonstration signaling wealth and communicating affluence to others (O'Cass & McEwen, 2004). Status and social prestige among friends can be easily gained on Facebook by getting likes and comments on the post with the displayed purchased product.

If network connections will influence the purchase behavior of other connections, what will be the difference in influencing a friend, acquaintance or even a person you never heard of? Facebook treats all users the same and a clear distinction is not drawn between different types of Facebook friends.

The purpose of this study is to investigate the extent to which social ties, focused on Facebook, influence the online purchase intention. Furthermore I will discuss the role of Facebook activity, the product involvement and the height of the net monthly income.

My problem statement is as follows: *What is impact of Facebook tie strength and behavior on purchase intention?*

Specifically, I wish to answer the following questions in my research:

- What is the relationship between social ties and purchase intention ?
- Does product involvement moderate the effect of tie strength on purchase intention?

- Which social media behavior can be distinguished and how do they influence purchase behavior?

### **Academic Relevance**

Research on social networks has captured the effect of social influence on consumers' purchase decisions across a variety of contexts. Such an effect has been variously termed as bandwagon effect (Leibenstein, 1950), peer influence (Duncan et al, 1968), neighborhood effect (Singer and Spilerman, 1983), conformity (Bernheim, 1994), contagion (Van den Bulte and Lilien, 2001) and social proof (Cialdini, 2001). Prior research shows that people can be influenced by their peers (and ties) in different ways. Katz and Lazarsfeld (1955) found that WOM was the most important source of influence in the purchase of household goods and food products. It was seven times as effective as newspapers and magazines, four times as effective as personal selling, and twice as effective as radio advertising in influencing consumers to switch brands. Arndt (1967) showed that respondents who received positive WOM about a new food product were much more likely to purchase it compared to those who received negative WOM.

It has been shown that weak ties, as opposed to strong ones, benefit job-seekers (Granovetter, 1973) However, socioeconomic class reverses this effect: job-seekers from lower socioeconomic backgrounds often rely heavily on strong ties to other firms tend to get better financial deals (Granovetter, 1983)

Previous theory has developed several dimensions of tie strength and many manifestations. In practice, relatively simple proxies have substituted for it: communication reciprocity (Friedkin, 1980) possessing at least one mutual friend (Shi et al, 2007) recency of communication (Lin et al, 1978) and interaction frequency (Granovetter, 1973). In a

1984 study, Peter Marsden used survey data from three metropolitan areas to precisely unpack the predictors of tie strength. Marsden pointed out a key limitation of his work: the survey asked participants to recall only their three closest friends along with less than ten characteristics of the friendship (Marsden, 1990)

These studies have contributed to the understanding of Worth of Mouth behavior and tie strength.

Prior Worth of Mouth literature shows that five different segments can be distinguished (Riegner, 2007). Despite substantial investigation into these segments, a gap in the literature is that it does not investigate the purchase intention between different types of Facebook activity. This study addresses this gap by proposing and testing a conceptual framework model with the discussed major effects.

Limited research is done about the relationship between purchase intention and product involvement. Previous research (Petty et al, 1983) has developed two different routes to characterize the persuasion process. A thoughtful consideration of issue-relevant arguments and product relevant attributes (central route) or from associating the object with various positive and negative cues and operating with simple decision rules (peripheral route).

Despite the need to understand what drives people decisions, a lot previous research is based on theory. This research will have an empirical focus on how social ties can affect the purchase intention on Facebook.



## **Managerial Relevance**

Social media marketers get insight how to influence their consumers on Facebook. I believe that Facebook is a powerful medium to influence customers, because an average Dutch habitant spends 237 minutes a month on Facebook (Oosterveer, 2012). Lots of companies already discovered the advantages of Facebook by spending budget on Facebook advertisements and hiring social media staff to manage the particular brands page. These pages post daily- or weekly updates to get in touch with their fans and to make indirect promotion. But these posts are based on general or product specific information which is not personal involved. People who notice the Facebook posts of their friends are more involved to read it and to engage with it. These kinds of promotions have already been used in the traditional marketing. Big companies, such as Red Bull, hire students to function as an ambassador and to promote their product, because Word of Mouth plays an important role in shaping consumers attitude. But do those Facebook posts also affect the purchase intention? Furthermore, I this research I want to provide recommendation to managers how to do effective sales promotions. Companies come up with Facebook promotions to attract potential buyers for this product. It is still not clear for what kind of product involvement Facebook promotions are most effective. I hope to discover which products are effective to promote on Facebook and which not.

The paper is organized as follows. The research begins with the discussion of the hypotheses and the related literature. Secondly, the methodology will be described. Furthermore, the results and conclusions will be discussed in the last chapters.

## **Chapter 2 Theory**

### **Worth of Mouth**

To understand the research, it is important to have some background knowledge. Worth of Mouth can be defined as “all informal communications directed at other consumers about the ownership, usage or characteristics of particular goods or their sellers” (Westbrook, 1987). This research will focus on 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 et al., 2004). eWOM can take place in many ways and different media, such as online forums and social media channels.

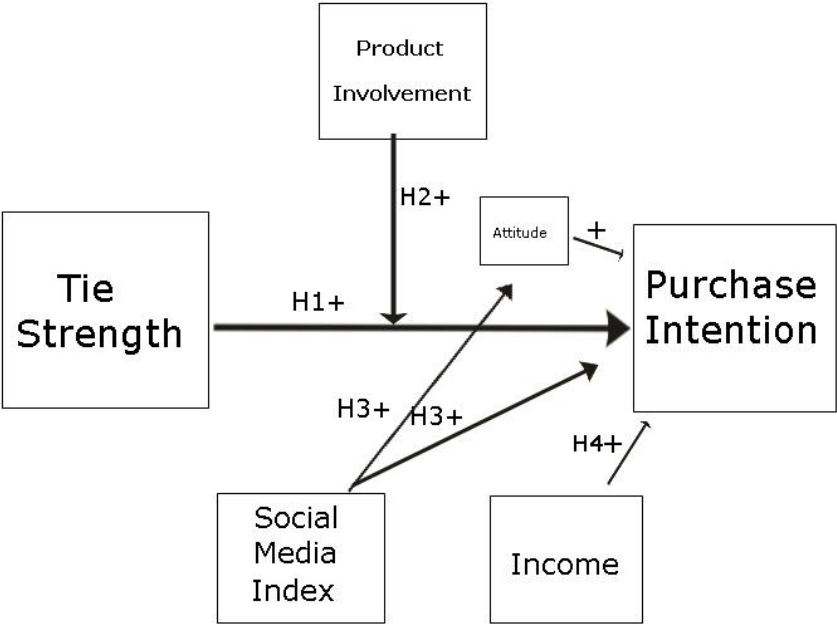
Historically, many of the Internet applications of WOM focused on product ratings.

Consumers appear to have a high level of comfort using web sites like eBay, Amazon, CNET and Epinions to seek product information from other consumers. Most of the academic research into eWOM has focused on online information research related to tangible product purchase (e.g. Ratchford et al., 2003; Klein and Ford, 2003). While consumers have little difficulty evaluating the quality of most search goods, determining experience goods' quality is more complicated. Therefore the availability of trustworthy WOM information for experience goods, including nearly all services, becomes critically important for consumers seeking to minimize risk in experience good consumption (Steffes, Burgee, 2008).

Why should WOM influence product judgments? The accessibility/ diagnosticity theory states that the influence of a particular piece of information depends on the relative accessibility of that information in one's memory and the diagnosticity of that information when predicting actual performance (Feldman and Lynch, 1988). Accessibility is high whenever information is

easy for the consumer to retrieve. In our research Facebook is an information source which is very accessible. Members on Facebook can easily find information through scrolling down their timeline and view different posts which are accessible for their friends. The prediction of the research is that Facebook is one of the instruments to influence product judgments with Worth of Mouth.

The model of this research consists of six different variables. The hypothesis is that the dependent variable purchase intention will be positively affected by the examined variables tie strength, product class and social media segment. The attitude towards the product and the net monthly income are control variables.



**The proposed model and its effects**

## **Social Ties**

The tie strength can be defined as the level of intensity of the social relationship between consumers. Consumers generally have a wide range of relationship ties within their social network ranging from strong primary ties such as those with close friends and family members to weak secondary ties such as those with acquaintances rarely seen to nonexistent ties with complete strangers (Steffes et al, 2008). If the sender is labeled a relative, friend, or neighbor, the tie is classified as "strong." If the sender is identified as merely an acquaintance or a neighbor but primarily an acquaintance, the tie is classified as "weak." (Brown et al, 1987).

Can we describe a friend with a lot of common characteristics as a strong tie? Rogers (1983) suggests that homophily is the level to which pairs of individuals share similarities in attributes such as age, gender, education and social status. While some may suggest that tie strength and homophily are synonymous (e.g. Gatignon and Robertson, 1985; Rogers, 1983), we view tie strength and homophily as related but separate constructs in line with (Brown et al, 1987). A difference between the concepts is that while homophily refers to the similarities in characteristics of individuals in relationships, tie strength is a property of the strength of the relationship itself. Stated alternately, an individual could have a very high level of homophily with a stranger of the same socio-economic background, yet their tie strength would be non-existent.

Granovetter classifies weak ties as those that are characterized by occasional contact and a lack of emotional bonding ` for example a colleague met at a yearly conference ` and strong ties as those between close friends and family. This is because we are more likely to already be familiar with the ideas of people in our clique. Facebook allows friends and followers to express themselves openly in the public domain and they provide users with channels to voice views which, once posted, remain on the internet forever with their likes or comments.

Strong ties interact more frequently, but (Brown et al, 1987) show in their research that weak ties could have a strong persuading impact than strong ties, because not every strong tie is necessarily a relevant source of information. If persons A and B were in a strong-tie social relation at the time of A's WOM behavior related to piano teachers, but B's information acquisition behavior occurred at a later point in time, B could not have been a potential source of information for A. In this case, communicating weak ties with specific knowledge about piano teachers can affect the purchase intention more.

However, strong ties are more likely to be activated for the flow of information than weak ties. Strong ties activated for the flow of information are also perceived by receivers as more influential than weak ties in decision-making. Consistent with the results obtained by Weimann (1983), an important implication of this finding is that the bridging function of weak ties is more conducive to the flow of information, whereas strong ties are more crucial to the flow of influence. This may be explained by source credibility. It is likely that a strong tie may be perceived as a more credible source of information than a weak tie (Weimann, 1983). Information from strong-tie referral sources is perceived as more influential in receivers' decision making than is information obtained from weak-tie referral sources. And consumers with joint membership in a subgroup of referral actors for one good are more likely to prefer the same brand for other goods than are those consumers who belong to a different or to no subgroup. The existing literature on social ties and WOM communication finds that active information seeking is more likely to occur from strong tie than from weak tie sources (Brown and Reingen, 1987). My research should investigate if these results can be applied on Facebook.

Thus, it is proposed that

**H1:** *Strong ties on Facebook will influence online purchase intention more than weak ties on Facebook.*

### **Involvement**

One important motive influencing modern consumers is the desire to gain status or social prestige through acquisition and consumption of goods (Goldsmith et al., 1996) . Generally, consumers use conspicuous goods to enhance their prestige in society, which can be achieved through public demonstration signaling wealth and communicating affluence to others (O'Cass & McEwen, 2004).

It is likely that intention to purchase online will vary for different products. Alba et al. (1997) argue that quality of information and a consumer's ability to predict post-purchase satisfaction with products will be more accurate predictors of a product's suitability for online purchase. Although they offer a more complex product classification alternative, their message is clear – certain products are more likely to be bought online than others.

For many years it has been assumed in marketing theory that there are important differences in the way consumer's process information between high- and low-involvement situations. Engel et al. (1986) have also suggested that it is the level of involvement that mediates between extended decision making (for high involvement) and limited problem solving (for low involvement). Engel et al. (1986) were instrumental in developing the idea that involvement affects the style of decision processing when consumers select brands or products.

The definition of low involvement is a product that an individual frequently purchases the product with less contemplation and effort, having not a major impact on their expenses, lifestyle and self-concept. These products are normally low-priced and that is the reason that consumers pay less attention and habitually pick the item to buy it for daily use such as soap,

milk, bread, pen etc. A high involvement product is highly priced and also reflects a major deal for one's lifestyle and self-concept. Other way of understanding the high-involvement products are that they are also for a longer period of time and consumers want their products to be durable and reliable to compensate the price paid for it and the marketers also proffer the similar strategy while attracting their customers to purchase high involvement products. The instances for such products are a home, car, electrical appliance like television, IPADs etc. (Subhani et al, 2010).

Petty et al (1983) have developed two different routes to characterize the persuasion process. A thoughtful consideration of issue-relevant arguments and product relevant attributes (central route) or from associating the object with various positive and negative cues and operating with simple decision rules (peripheral route). The researchers have shown that an advertisement was based on a low involvement product; the celebrity status of product endorsers was a determinant of the perceived attitude about the product. When the advertisement was based on a high involvement product, the celebrity status of the product endorsers had no effect on the product attitude. It supports the view that different features of an advertisement may be more or less effective. With low involvement products, peripheral cues are more important and under high involvement the opposite is true. In other words, people who tend to buy high involvement products have already made their choice with issue-relevant argumentation. People who tend to buy low involvement product have not made their choice yet and can be persuaded by peripheral cues.

Thus, it is proposed that

**H2:** *Social ties on Social Media affect the purchase intention more for a low involvement luxury good.*

## **Social Media Behavior Segment**

Individual's shopping orientation can influence purchase intention. Shopping orientation refers to the degree to which an individual sees themselves as a shopper and takes pleasure or personal satisfaction from the act of shopping. Shopping orientation has been found to be among the most influential predictors of consumer patronage behavior (Darden and Howell, 1987). For some customers, shopping is a pleasurable activity and an important part of the person's life. Facebook is a social medium which is also being used for pleasurable activity and is for many people an significant part of their life. However, others do not enjoy shopping or using Facebook. What is the relationship between different Facebook behaviors and their purchase intention?

Five different behaviors and attitudes can be distinguished in behaviors on the web Riegner (2007).

A first group relies on the internet to maintain relationships with friends and family, and to seek out new ones, a socially orientated group. Their main online activity consists of communication. This can be communicating with friends, creating personal pages, commenting on blogs or posts or chatting. These people function as a key influencer for products they are involved with. They do not belong to the early adopter, but they vocalize their preferences more readily than other users, influencing friends and family indirectly through their personal pages, posts, and chats. Riegner (2007) calls this group "Social Clickers".

A second group is more holistic in their use of the internet and spends just as much time on communication activities as Social Clickers. This group also consists of online shoppers who frequently add their opinion via product ratings and reviews. They are very influential, early adopters and often communicate their preferences. Riegner (2007) calls this group "Online Insiders".



The typical characteristics of the third group are young, male, and addicted to online entertainment. They do not spend a lot of time on online communication. When these people communicate, it is in an effective way to achieve their ultimate goal of finding more ways to have fun on the web. Riegner (2007) calls this group “Content Kings”.

A fourth group participates in activities that relate to online shopping. They are heavily involved in online banking, finance and investing. Their monthly online spending is more than average with \$97 per month online (\$10 more than the average). Riegner (2007) calls this group “Everyday Pros”.

The last group Riegner discussed are interested in using the internet to meet their immediate need, such as checking the news, weather, or sports, to spend much time communicating or participating with others. This is a group that wants to "get on and get off" quickly, acting primarily as receivers of information rather than creators or producers. Riegner (2007) calls this group “Fast Trackers”.

A footnote is that the data will consist of people within my own network. This will lead to relative small (about 150 respondents) while the data of Riegner consisted of more than 4000 people. The question is if I am able to recognize the five clear social media groups described by Riegner due to the smaller dataset. If so, I will describe the specific social media groups. If not, I will make a Facebook index in which is an average of all the surveyed Facebook activities.

Thus it is proposed that:

**H3:** *The higher the Facebook activity, the higher the purchase intention and attitude towards the product with strong ties.*

## **Income effect**

If the prices of goods, tastes and preferences of the consumer remain constant and there is a change in his income, it will directly affect consumer's demand. This effect on the purchase due to change in income is called the income effect. A high involvement product is highly priced and also reflects a major deal for one's lifestyle and self-concept (Subhani et al, 2010). In other words: purchasing high involvement products contains an extended purchase decision process. This process consists of five different stages John Dewey (1910):

1. Problem/Need Recognition: in this phase is the need triggered by internal stimuli (e.g. hunger, thirst) or external stimuli (advertising).
2. Information Search: in this phase searches the consumer for information related to the buying decision.
3. Evaluation of Alternatives: in this stage different product attributes and consumer benefits are evaluated by the consumers.
4. Purchase Decision: in the fourth stage the actual decision occurs.
5. Post-Purchase Behavior: in last phase consumers compare the purchased product to other products and are either satisfied or dissatisfied.

The last hypothesis is based on the third and fourth stage. Having enough money and having a positive attitude towards the products saves time to consider if the products attributes will benefit you. A consumer with high income has to sacrifice relative fewer efforts/ budget than people with low incomes. Previous research has already shown that participants with higher incomes were willing to spend more money on sport equipment compared to lower income level categories (Casper, 2008).

Thus, it is proposed that

**H4:** *People with higher income have more intention to purchase high involvement products*

## **Chapter 3 Methodology**

In scientific research we can distinguish three different forms of research (exploratory, constructive and empirical). For this research an empirical type will be used. This research is based on empirical evidence which is a source of knowledge acquired by means of observation or experimentation. In the empiricist view, one can only claim to have knowledge when one has a true belief based on empirical evidence. This stands in contrast to the rationalist view under which reason or reflection alone is considered to be evidence for the truth or falsity of some propositions (Feldman, 1999).

There are two major types of research design: qualitative research and quantitative research. My research design will consist of a quantitative research which is a systematic empirical investigation of quantitative properties and phenomena and their relationships. Asking a narrow question and collecting numerical data to analyze utilizing statistical methods. The quantitative research designs are experimental and correlational (Creswell, 2008).

One of the most common types of quantitative research is a survey. The research will be fulfilled by selecting specific Facebook users which are able to fill in the survey.

### **Research Setting**

The who-told-whom networks of information flow were based on four different people and ties. I have selected two different Facebook friends: Person X en Person Y. I asked the permission of Person X to use her Facebook profile picture. X is a 22 years old woman, living in Rotterdam and studying the same programme, the specialization Marketing in the Master programme of Economics and Business Economics. I have selected this woman, because a lot of her friends belong to the same Facebook group of the Marketing programme. This group consists of 156 members and most of them are Marketing students. Since Karin is a very social person, lots of these members should know Karin.

I asked the permission of Person Y to use his profile picture, because we have a lot of mutual friends. He is a 22 years old man, living in Arnhem and we share the same sport preferences (Cycling).

The weak ties of this research can be divided into two different groups. The first weak tie can be Person X or Person Y, because not all of the approached people know these persons very well. The second weak tie is based on a real Facebook post of the particular product.

Three products are involved in the different surveys. The luxury products I have chosen should have a high brand awareness and enhance their prestige in society. The selected low involvement product is Red Bull. This is an energy drink and a very popular product among young consumers. The costs of a Red Bull vary between 1-2 euros a can. The consideration of purchasing a Red Bull does not demand a lot of time and it entails little effort to purchase to product, because the product is obtainable in several stores.

The selected high involvement products are a Breitling watch for both sexes and a Garmin bike computer. The Breitling watch is a luxury product and the costs of this watch are about 2000 euros. The consideration of purchasing this Breitling watch demands time and carefulness.

The Garmin bike computer is a luxury product among sporty people. The touchscreen Edge 510 is designed for the competitive cyclist who seeks the most accurate and comprehensive ride data. It offers connected features through your smartphone include live tracking, social media sharing and weather. It measures your distance, speed, heart rate, power and GPS position. The Garmin Edge costs about 250 euros. The consideration of purchasing this product demands time and carefulness.

Since I have selected specific products for different groups and approached different 'influencers', a four-phase method for collecting the data was required

### **Survey 1 Subjects and Procedure**

The initial population (n=156) of the first survey consisted of the Marketing students who are members of the Facebook group “ESE Marketing 2012-2013. One half (n=78) received the survey per Facebook Personal Message and 29 (n=29) people answered the survey. After a short introduction and explanation, the first survey consisted of two Facebook posts; a post of a high involvement luxury product (Breitling watch) analyzed by a person within the respondents’ network (Person Y) and a post of a low involvement luxury product (Red Bull energy drink) analyzed by a person outside the respondents’ network, a Facebook member who actually commented on the real post of Red Bulls Facebook page. In both Facebook posts the ties were presented in the comments and were acting as a user of a product. The sentiment of their comment was positive to encourage their peers to purchase the product. After noticing the two different Facebook posts the respondents were asked their attitude and purchase intention of the particular products, the judgment of the tie strength and a few questions about their Facebook behavior and their monthly net income. The survey ended with a word of thankfulness.

The other half (n=78) also received the survey per Facebook Personal Message. The difference was that in this survey a post of a high involvement luxury product (Breitling watch) was analyzed by a person outside their network, Facebook member who actually commented on the real post of Breitling Facebook page and a post of a low involvement luxury product (Red Bull energy drink) analyzed by a person within their network (Person X)

The response rate of these surveys was  $65 / 154 \times 100\% = 41,7\%$

### **Survey 2 Subjects and Procedure**

Before the start of my data collection of survey two I made use of the collection of a Facebook friend. The initial population (n=225) of the second survey consisted of mutual friends between Person X and myself. The procedure of data collection in the second survey

was similar to the first survey. One half received (n=113) the survey per Facebook Personal Message and 47 (n=47) people answered the survey. The response rate of this survey was  $47/113= 42\%$

After a short introduction and explanation, the first survey consisted of two Facebook posts; a post of a high involvement luxury product (Garmin bike computer) analyzed by a person outside the respondents' network, Facebook member who actually commented on the real post of Garmin Facebook page, and a post of a low involvement luxury product (Red Bull energy drink) analyzed by a person within the respondents' network (Person X). In both Facebook posts the ties were presented in the comments and were acting as a user of a product. The sentiment of their comment was positive to encourage their peers to purchase the product. After noticing the two different Facebook posts the respondents were asked their attitude and purchase intention of the particular products, the judgment of the tie strength and a few questions about their Facebook behavior and their monthly net income. The survey ended with a word of thankfulness.

The other half (n=112) also received the survey per Facebook Personal Message and 49 (n=49) people answered the survey. The response rate of this survey was  $49/112= 44\%$

The difference was that this survey consisted of two Facebook posts; a post of a high involvement luxury product (Garmin bike computer) analyzed by a person within the respondents' network (Person X) and a post of a low involvement luxury product (Red Bull energy drink) analyzed by a person outside the respondents' network, a Facebook member who actually commented on the real post of Garmin Facebook page. The response rate of these surveys were  $96/225 \times 100\% = 42.7 \%$

One hundred and fifty-nine Facebook users participated in the experiential survey study where they spent about five minutes to complete the survey. This will give a total response rate of  $159/381 = 42\%$ .

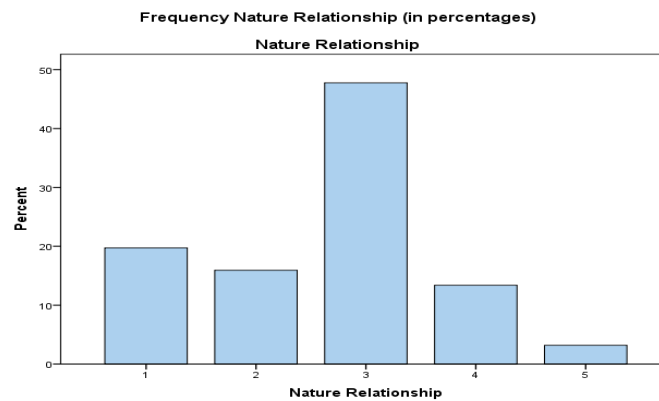
## ***Measures and Descriptives***

### ***Tie strength***

Respondents were asked to indicate the type of nurture of the relationship with ‘strong tie’ who commented on the specific post. The friendship scale was based on the scale used on Facebook (Cohen, 2013) to determine your friendship, but expressed a bit different.

1. I don’t know this person
2. Not a Friend
3. Acquaintance
4. Good Friend
5. Best Friend

The average nature of relationship of the person within the respondents’ network is 2.64 and the most common relationship (n=75) is acquaintance (coded as 3).`



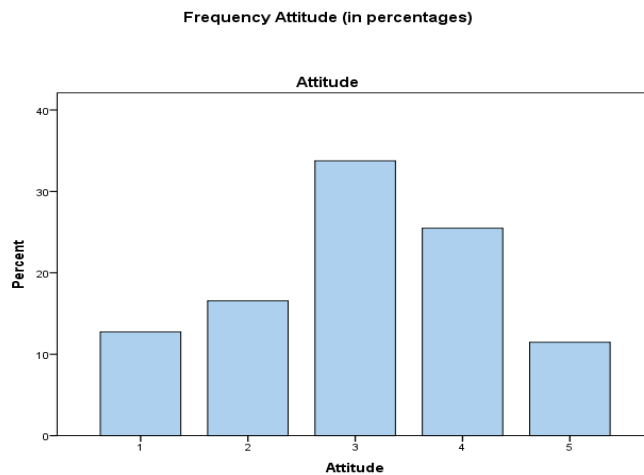
### ***Attitude***

To investigate the attitude towards the product, respondents were asked what their attitude was about both the low-involvement luxury good and the high-involvement luxury good. The five point scale was based on a national survey of practicing psychologists' attitudes (Berndt et al, 1986) in a functional relevant expression.



1. Strongly negative
2. Somewhat negative
3. Neutral
4. Somewhat positive
5. Strongly positive

The average attitude towards the specific product was 3.06 and the most common answer was “neutral” (coded as 3)

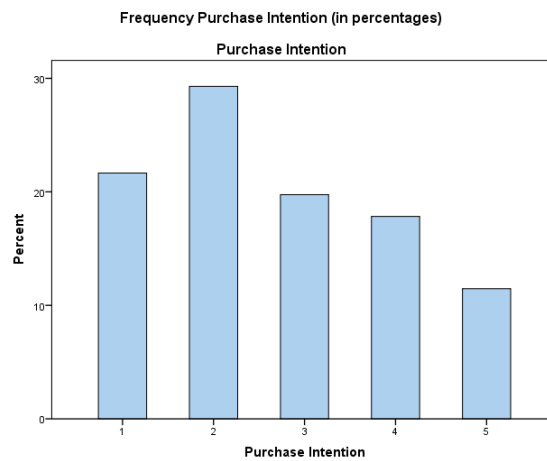


### ***Purchase Intention***

Respondents rated on a five point scale how likely it was to purchase both of the products with the following five point scale. The scale was based on previous research about consumer purchase intention (Brewer et al, 2001).

1. Definitely wouldn't buy
2. Probably wouldn't buy
3. Might buy product
4. Probably would buy
5. Definitely would buy

The average purchase intention of all the investigated products was 2.36 and the most common answer (n=46) is “might buy the product” (coded as 2)



### ***Facebook behavior***

To investigate the Facebook behavior, respondent were asked to rate their Facebook activities and their online review behavior. They were asked how often they like, comment, post, chat, play Facebook games, use the Facebook mobile app and review products online. Respondents rated on a five point scale how often they were involved with these kinds of activities. The five possible answers are punctuated in a Likert Scale used in general surveys about behavior (Parra et al, 2000).

1. Never
2. Rarely
3. Sometimes
4. Often
5. Always.

The Facebook index is the sum of all the Facebook activities. A low Facebook index (at least a score of seven) indicates that the respondent does not use Facebook often. A high Facebook index (indicates that the respondent is quite active on this social medium.

The mean of the Facebook index was 25.10 with a standard deviation of 5.44. The median was 25 which says that the most common activity is “often”. The minimum was 8 and the maximum perceived value was 37.

### ***Income***

The last measurement is income. In the last question respondents were asked to give an estimation of their net monthly income. This question was asked in the form of an open question, so people were able to answer what they want (although their answers were completely anonymous).

Most of the respondents have filled in their income. However, a few people answered this question with “Not enough” or “I am a student”.

With a mean of 1030, 63 euro with a standard deviation of 1068.22 euro, income among respondents was quite different. Due to the fact that a large number of the respondents was a student the minimum and common value (n=28) was 0. The highest net monthly income was 7000 euro.

## **Chapter 4: Results**

### **Overall**

The results will be discussed into four parts, where each of the hypotheses will be analyzed and supported by the SPSS output.

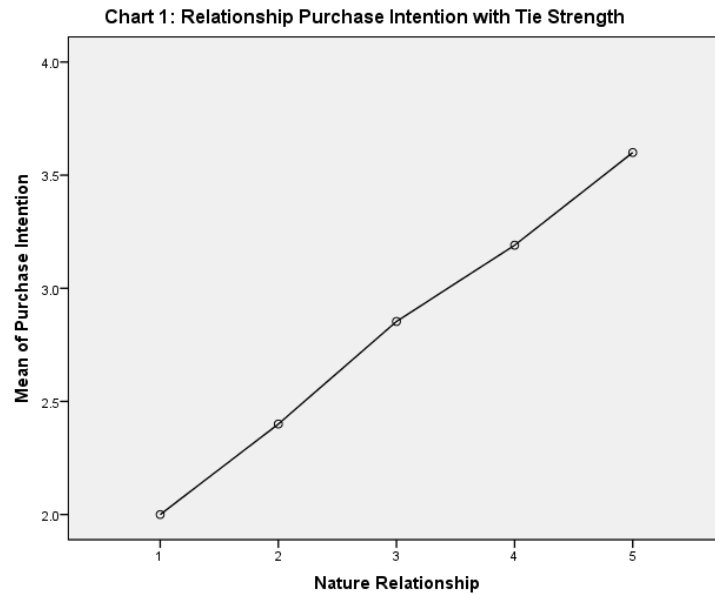
### **Hypothesis 1: Strong ties on Facebook affect online purchase intention more than weak ties on Facebook.**

To test the first hypothesis I use two different tests: the one-way ANOVA and the Kruskal Wallis test.

In the one-way ANOVA test I have selected all the purchase intentions of the respondents and used them for the dependent variable. The factor is a collection of all the different natures of relationship related to the specific purchase intention.

The test shows a F-value of 4.550 with a significance level of 0.002. With these results I may conclude that the means of the five different groups are not the same. The means between the different natures of relationship differ significantly from each other in purchase intention. I can say that as the nature of relationship increases from an unknown person to a best friend, the purchase intention increases significantly.

In Chart 1, the relationship between tie strength and purchase intention has been drawn. A positive slope of the graph is perceived between the two variables. The higher the tie strength, the higher the purchase intention will be.



The Kruskal Wallis test is used when you have one independent variable with two or more levels and an ordinal dependent variable. The test is based on ranked data (Field, 2009).

In the test I have selected all the purchase intentions of the respondents and coded them as “Test Variable List” for Kruskal-Wallis. The grouping variable consisted of all the different natures of relationship related to the specific purchase intention with a minimum of 1 and a maximum of 5.

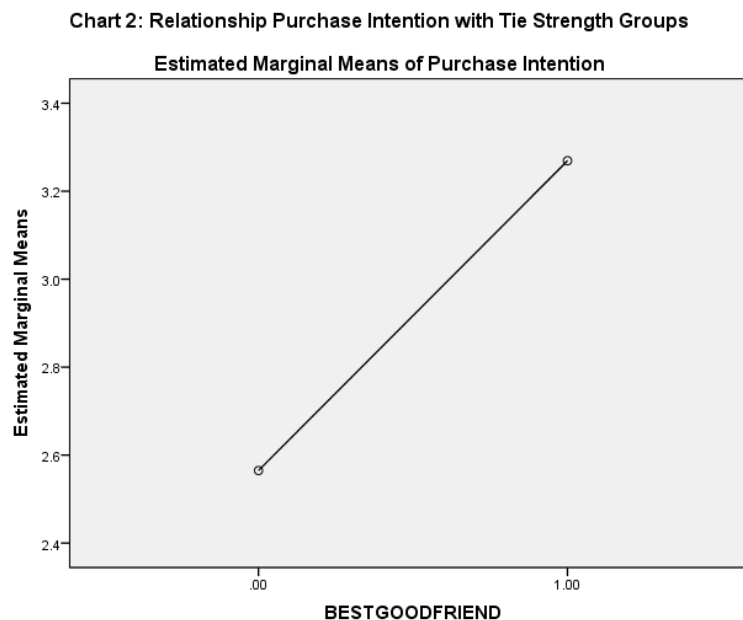
However, the test shows a significant result of our hypothesis. In the test, we can report that there was a statistically significant difference between the different relationships. Chi-Square = 16.459  $p = 0.002$ , with a mean rank of 55.16 for 1 (I don't know this person), 70.60 for 2 (Not a friend) and 84.91 for 3 (Acquaintance), 96.38 for 4 (Good friend) and 107.20 for 5 (Best friend). Based on the Kruskal Wallis, I also may conclude that as the nature of relationship increases from an unknown person to a best friend, the purchase intention increases significantly.

To make a clear separation between weak and strong ties I divided the different nature of relationships into two different groups:

1. Group 0 (WEAK): I do not know this person, Not a Friend and Acquaintance
2. Group 1 (STRONG) : Good Friend and Best Friend

In the dataset 131 people are coded as WEAK and 26 people are coded as STRONG. The two-Way ANOVA test shows a significant positive effect between the two different groups. The F-value is 6.534 with a significance level of 0.012. The means between the different natures of relationship differ significantly from each other in purchase intention. Based on the two- way ANOVA test, I may say that as the nature of relationship increases from a weak to a strong tie, the purchase intention increases significantly.

In chart 2 we can see a positive slope of the graph which confirms our results. In this chart the starting point is at 2.56 (between “Might not buy” and Neutral”). This point indicates the average purchase intention of the 0 group, the weak ties. The end point is at a 3.27, the estimated marginal mean of the purchase intention of the strong ties. A purchase intention of 3.27 lies between “Neutral” and “Might buy the product”.



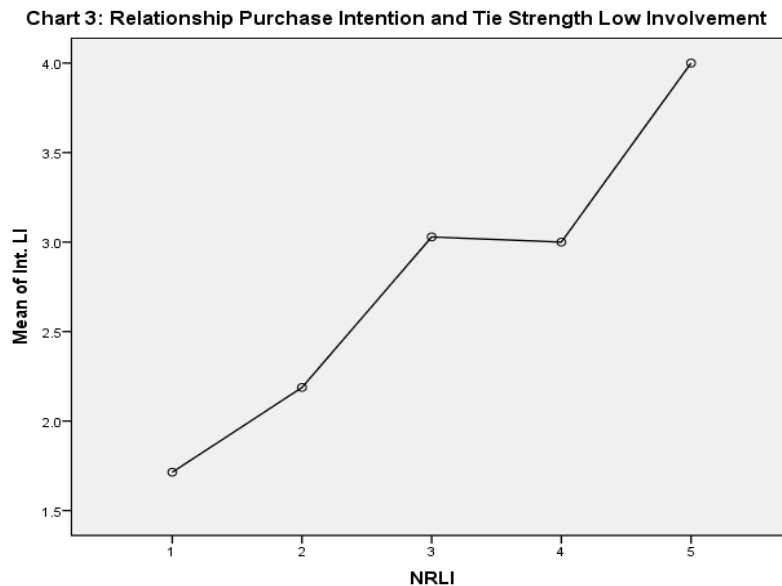
The Post Hoc test has looked at whether the test performs well when the group sizes are different, when the population variance are very different, and when data are not normally distributed (Field, 2009). The sample sizes are very different, so I make use of the Gabriel's post-hoc test. In the Post Hoc test the independent variable "Nature Relationship" is compared with each of the other levels. The independent variable has five different groups. The results show that the mean difference of -0.400 between "I don't know this person" and "Not a friend" significantly not differ. So, the two groups have the similar mean. The means of Acquaintance, Good friend and Best friend are significantly different in purchase intention compared to the mean of an unknown person. The means between Acquaintance and an unknown person are one of the few significant compared means in this analysis. However, the tests are still biased due to unequal sample sizes. If the sample sizes would be larger, more means would be significantly differ from each other.

**Hypothesis 2: Social ties on Social Media affect the purchase intention more for a low involvement luxury good.**

To investigate if social ties affect the purchase intention more for low involvement goods, several one- way ANOVA tests and a Kruskal Wallis test have been done.

In the first ANOVA test I have selected all the purchase intentions of the respondents who saw a low involvement product analyzed by a person within their network and used them as a dependent variable. The factor is a collection of all the different natures of relationship related to the specific purchase intention. The test shows a significant F-value of 4.958. This means that the means of purchase intention between the five stages of relationships are significantly different for the low involvement product. I can say the as the nature of relationship increases from an unknown person to a best friend, the purchase intention for low involvement products

increases significantly. Chart 3 shows the plot of this ANOVA test. In this chart we can see a positive slope. However, in this test a difference between the relationships “Acquaintances” and “Good Friends” is not perceived.



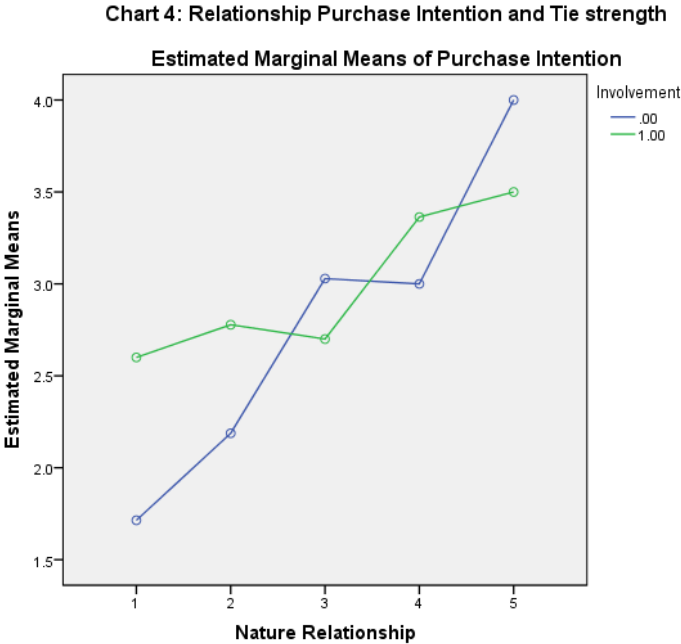
The second ANOVA test is based on the purchase intention for high involvement products (Breitling watch and Garmin bike computer). In the test I have selected all the purchase intentions of the respondents who saw a high involvement product in the survey analyzed by a person within their network and used them as a dependent variable. The factor is a collection of all the different natures of relationship related to the specific purchase intention.

However, the F-value of .932 is not significant which means that the means between the different natures of relationships do not differ. The nature of relationship does not affect the purchase intention for the two high involvement luxury products in our survey. Furthermore, the ANOVA tests for the separate high involvement luxury products do not show a significant value as well.

In chart 4 we can see a plot of the two variables nature of relationship and purchase intention. The green graph stands for the high involvement products analyzed by persons within their



respondents' network, the values 1. The blue line stands for the low involvement products analyzed by persons within their network, the values 0. Both product types have a positive slope in common. On average the purchase intention increases, when the nature of relationship increases. However, the slope of the low involvement group is more positive which means that that the means between the natured of relationships within the low involvement group are more significant.



The second test I have done is the Kruskal Wallis test. In the test I have selected all the purchase intentions of the respondents who saw a high involvement product in the survey analyzed by a person within their network and coded them as “Test Variable List” for Kruskal-Wallis. The same has been done for the low involvement products analyzed by a person within their network. The grouping variable consisted of all the different natures of relationship related to the specific purchase intention with a minimum of 1 and a maximum of 5.

However, the Kruskal Wallis test shows a significant result for the low involvement product group (Chi square 16.196 with a significance level 0.03), it does not show a significant level for the high involvement group (Chi Square 3.408 with a significance level of 0.492). I can report that there was a statistically significant difference between the means of purchase intention in the five stages of relationships for people who saw a low involvement product. The test shows a mean rank of 26.98 for 1 (I don't know this person), 36.94 for 2 (Not a friend) and 50.34 for 3 (Acquaintance), 49.85 for 4 (Good friend) and 68.00 for 5 (Best friend) for respondents who saw the a low involvement luxury product (Red Bull) analyzed by a person within their network.

The correlation analysis shows a similar result. Table 1 provides a matrix of the correlation coefficients for the two variables “Intention Low Involvement” ,which stands for the purchase intention of the low involvement luxury good (Red Bull), and “Nature Relationship Low Involvement” which stands for the tie strength. The purchase intention for low involvement product is positively related to the tie strength with a Pearson correlation coefficient of  $r=0.427$  and a significance level less than 0.001, so a genuine relationship consists between the purchase intention for Red Bull and tie strength. If the nature of relationship becomes better, the purchase intention for a low involvement product increases.

The correlation analysis between the variables “Intention High Involvement” and “Nature Relationship High Involvement” does not show a significant result (similar to the ANOVA and Kruskal Wallis tests).

**TABLE 1. Correlations**

|  |                     | Intention Low<br>Involvement | Nature<br>Relationship Low<br>Involvement |
|--|---------------------|------------------------------|---|
| Intention Low Involvement              | Pearson Correlation | 1                            | .427**                                    |
|  | Sig. (2-tailed)     |                              | .000                                      |
|  | N                   | 83                           | 83  |
| Nature Relationship Low<br>Involvement | Pearson Correlation | .427**                       | 1   |
|  | Sig. (2-tailed)     | .000                         |   |
|  | N                   | 83                           | 83  |

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Hypothesis 3: The higher the Facebook activity, the higher the purchase intention and attitude towards the product with strong ties.**

During the analysis of the data for hypothesis three I discovered the phenomenon of multicollinearity. This occurs when two or more predictors in the model are correlated and provide redundant information about the response.” In the regression a lot of predictors are correlated.

By doing a correlation between the different activities, I notice that the following variables are highly correlated with each other (R close to 1 or -1):

- “Product Attitude” and “Purchase Intention”
- “Posting on Facebook” and “Liking on Facebook”
- “Posting on Facebook” and “Commenting on Facebook”
- “Commenting on Facebook” and “Liking on Facebook”

A way to detect multicollinearity is to remove one of the two correlated predictors from the model.

To test hypothesis three, I remove the following variables

- “Post on Facebook”
- “Comment Posts”

The regression analysis with the dependent variable “Purchase Intention” shows only a significant result for the variable “#Facebook friends”. If I should predict the purchase intention based on this regression, only the number of Facebook friends will affect the purchase intention with a value of 0.166. In my dataset of 157 respondents is hard to describe the social segments. A difference can be made between the group with the lowest attitude and purchase intention and the remaining attitudes and purchase intention. The group with less Facebook- and online activity can be described as Fast Trackers. This is a group that wants to "get on and get off" quickly, acting primarily as receivers of information rather than creators or producers (Riegner, 2007). The remaining groups with attitudes and purchase intention can be broadly defined as “Online Insiders”. This group also consists of online shoppers who frequently add their opinion via product ratings and reviews. They are very influential, the first to adopt new products and to vocalize their preference (Riegner, 2007). Other segments like the so called “Social Clickers”, “Everyday Pros” and “Content Kings” cannot be found within our respondents.

It is hard to recognize the five social segment in my relative small dataset (n=157).

However, to make a clear discussion for hypothesis 3 I have created the extra variable Facebook index (the sum of all the Facebook activities). To investigate if the Facebook index affects the purchase intention and attitude, I used the one-way ANOVA, regression and correlation tests.

Table 2 provides a matrix of the correlation coefficients for the three variables “Attitude Product”, which stands for the attitude towards the perceived product, “Facebook Index” and “Purchase Intention”. The purchase intention for all products is positively related to the Facebook index with a Pearson correlation coefficient of  $r = 0.269$  and a significance level of 0.001 (Table 2), so a genuine relationship consists between the purchase intention and the Facebook activity. If the Facebook activity increases, the purchase intention increases.

The attitude towards the product is positively related to the Facebook index with a Pearson correlation coefficient of  $r = 0.279$  and a significance level of less than 0.001, so a genuine relationship consists between attitude towards the product and the Facebook activity also exists. If the attitude towards the product becomes more positive, the Facebook activity increases.

**TABLE 2: Correlations**

|                    |                     | Attitude Product | Facebook Index | Purchase Intention |
|--------------------|---------------------|------------------|----------------|--------------------|
| Attitude Product   | Pearson Correlation | 1                | .279**         | .604**             |
|                    | Sig. (2-tailed)     |                  | .000           | .000               |
|                    | N                   | 162              | 157            | 157                |
| Facebook Index     | Pearson Correlation | .279**           | 1              | .269**             |
|                    | Sig. (2-tailed)     | .000             |                | .001               |
|                    | N                   | 157              | 157            | 157                |
| Purchase Intention | Pearson Correlation | .604**           | .269**         | 1                  |
|                    | Sig. (2-tailed)     | .000             | .001           |                    |
|                    | N                   | 157              | 157            | 157                |

\*\* . Correlation is significant at the 0.01 level (2-tailed).

To make a clear conclusion, an extra test has been used: the linear regression. The regression analysis with the dependent variable purchase intention and an independent variable Facebook Index shows a significant t-value of 3.483 (Table 3). Based on this regression the activity of Facebook increases the purchase intention with 0.065. This means that if the predictor

variable X, Facebook activity, is increased by one unit my model predicts an average increase of 0.065 in purchase intention. If X=0, the model predicts a purchase intention of 1.059 (Definitely not buy the product). The regression model is as follows:

$$\text{Purchase Intention} = 1.059 + 0.065\text{FacebookIndex}$$

However, a Facebook activity of 0 is not possible in our dataset. The lowest Facebook activity is in reality 8 with a purchase intention of 1 (Definitely not buy the product). If I follow the predictive model, the purchase intention should be:

$$\text{Purchase Intention} = 1.059 + 0.065 * 8 = 1.579$$

**TABLE 3: REGRESSION**

| Model          | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig. |
|----------------|-----------------------------|------------|---------------------------|-------|------|
|                | B                           | Std. Error | Beta                      |       |      |
| 1 (Constant)   | 1.059                       | .477       |                           | 2.223 | .028 |
| Facebook Index | .065                        | .019       | .269                      | 3.483 | .001 |

a. Dependent Variable: Purchase Intention

#### **Hypothesis 4: People with higher income have more intention to purchase high involvement products**

To investigate if the relationship between income and purchase intention of high involvement products consists, I made use of two different linear regression analyses.

The first regression analysis with the dependent variable “Intention Low Involvement”, which stands for the level of purchase intention of the low involvement luxury product, shows a significant result for the variable “Net monthly income”. Based on this regression the net monthly income increases the purchase intention with 0.000. This means that if the predictor variable X, Net Monthly income, is increased by one unit my model predicts an average increase of 0.000 in purchase intention for the low involvement products. However the value of 0.000 is significant, the real value is negligible. If X=0, the model predicts a purchase intention of 2.398 (value between “Might Buy and “Neutral”). The regression model is as follows:

$$\text{Purchase Intention} = 2.398 + 0.000 \text{NetMonthlyIncome}$$

The role of income has a very small negative impact on the purchase intention of the low involvement luxury product.

Secondly, the linear regression with the dependent variable “Intention High Involvement”, which stands for the level of purchase intention of the high involvement luxury products, does not show a significant result for the variable “Net monthly income”. Based on these results we cannot support hypothesis 4.

## Test of total model

The main goal of this thesis is to build a framework with predictors which are supposed to affect the purchase intention. To make this framework I make use of a linear regression analysis with purchase intention as dependent variable and Attitude, Income, Nature Relationship, Facebook Index, Involvement (dummy variable) and the interaction variable InvolvRelation as independent variables. InvolvRelation is a multiplication of the variable Involvement and Nature of Relationship.

The regression (Table 4) shows significant results for the variables Attitude, Nature Relationship and Facebook Index. If the significant predictor variables Attitude, Nature Relationship and Facebook Index are increased by one unit my model predicts an average increase of respectively 0.317, 0.431 and 0.074 in the purchase intention. However, the variables Income, Involvement and the interaction variable InvolvRelation are not significant. I am not able to build a framework as was anticipated before the result analysis.

Based on this regression the prediction model is as follows:

Purchase Intention=  $-0.962 + 0.317\text{Attitude} + 0.431\text{ Nature Relationship} + 0.074\text{ Facebook Index}$

**TABLE 4 Coefficients<sup>a</sup>**

| Model |                     | Unstandardized Coefficients |            | Standardized Coefficients | t      | Sig. |
|-------|---------------------|-----------------------------|------------|---------------------------|--------|------|
|       |                     | B                           | Std. Error | Beta                      |        |      |
| 1     | (Constant)          | -.962                       | .642       |                           | -1.498 | .136 |
|       | Attitude            | .317                        | .084       | .287                      | 3.776  | .000 |
|       | Income              | .000                        | .000       | -.116                     | -1.616 | .108 |
|       | Nature Relationship | .431                        | .125       | .345                      | 3.453  | .001 |
|       | Facebook Index      | .074                        | .028       | .310                      | 2.677  | .008 |
|       | Involvement         | -.050                       | .585       | -.019                     | -.086  | .932 |
|       | InvolvRelation      | -.124                       | .183       | -.152                     | -.681  | .497 |

a. Dependent Variable: Purchase Intention



If I do not take account with the insignificant variables, a very positive attitude (5) of your best friend (5) with the highest perceived Facebook activity (34) has the following result:

Purchase Intention=  $-0.962+0.317*5+0.431*5+0.074*34= 5$ = definitely would buy the product.

## **Chapter 5: General Discussion**

In the offline and online world tie strength is already perceived by receivers as more influential in decision making. This research shows that tie strength has a substantial impact as well on Facebook.

In this paper, I tried to build a conceptual framework with predictors which were supposed to affect the purchase intention.

Specifically, three different research questions have guided this thesis.

### **What is the relationship between social ties and purchase intention?**

It was anticipated that strong ties are more likely to be activated for the flow of information than weak ties. Information from strong-tie referral sources is perceived as more influential in receivers' decision making than information obtained from weak tie referral sources (Brown and Reingen, 1987). Several tests in this research indicate the relationship between tie strength and purchase intention. Tie strength significantly affects purchase intention. Based on the tests, I may conclude that a strong difference in purchase intention exists between the Facebook comment of a person you don't know and a person who is your best friend. Even if the (positive) recommendation has been done by an acquaintance, a difference in purchase intention still exists. The higher the tie strength, the higher the purchase intention will be.

### **Does product involvement moderate the effect of tie strength on purchase intention?**

Yes, product involvement moderates the effect of tie strength on purchase intention. In this research three different products were involved: a low involvement luxury product (Red Bull) and two high involvement luxury products (Breitling and Red Bull). It was anticipated that with low involvement products peripheral cues are more important and under high involvement the opposite is true. People who tend to buy high involvement products have

already made their choice with issue-relevant argumentation. People who tend to buy low involvement products have not made their choice yet and can be persuaded by peripheral cues. This thesis shows that purchase intention for low involvement products is positively related to the tie strength. A genuine relationship consists between the purchase intention for Red Bull and tie strength. If the nature of relationship becomes better, the purchase intention for a low involvement product increases. However, the test for high involvement was not significant so I am not able to compare the two different products categories.

### **Which social media behavior can be distinguished and how do they influence purchase behavior?**

It was anticipated that I could recognize five different social media behaviors in my dataset, the so called Online Insiders, Content Kings, Social Clickers, Everyday Pros and the Fast Trackers (Riegner, 2007). However, my data consisted of people within my own network and was relative small (n=157). Due to the small dataset I was not able to recognize the five different segments. The purchase intention for all products is positively related to the Facebook index, so a genuine relationship consists between purchase intention and Facebook activity. If the Facebook activity increases, the purchase intention increases as well.

This thesis shows that tie strength and Facebook behavior affects the purchase intention.

Although variables like income and product class play a little role, Facebook activity and tie strength significantly affects the consumer purchase intention.

### **Implications**

However this thesis did not fully support the hypothesizes, it can still be important for managers.

At the moment, Facebook is testing with the introduction of tie strength in Facebook (Cohen, 2013) Facebook wants to know, so it can serve up the best content in your News Feed. When it separates the strong ties with your weak ties, only the persons Facebook activity which are important to you will be shown in the News Feed. For example, if the user indicates that Robert is one of his best friends, it is likely that more posts from Robert would start showing in his News Feed. On the other hand, if the user indicates that he does not know Robert fewer posts would likely show in News Feed.

Another way to implicate the thesis' results into practice is to hire people who promote your (low involvement) product on Facebook. A website like Fiverr.com makes it possible to give people five dollars to promote your product on Facebook (or other social media) in a special post or comment. This post can be read by friends or people who liked a particular Facebook page. Based on the results, this way of promoting your product is more effective than just posting something on your company Facebook page as a brand manager. However, marketers who manage a brands company page should encourage their fans to give reviews as much as possible. It pays off to reward fans with their (positive) reviews. Word of Mouth has a huge impact both offline and online.

A third implication is based on the relationship between Facebook activity and purchase intention. This research shows that if the whether the activity on Facebook increases, the purchase intention increases as well. So people who are very active on Facebook are also sensitive for Facebook marketing and social media in general. More and more companies discover the advantages of social media marketing if you offer a product targeted at consumers. If your target group consists of people who are quite active on Facebook, an intense Facebook marketing campaign can be effective.

### **Limitations and further research**

This research has some limitations. I can distinguish the limitations into three different levels: pre-test limitations, test limitations and post-test limitations.

#### **Pre- test Limitations**

The survey was based on and applied to the social medium Facebook. This medium gave me accessible entry to data through Facebook groups or my own Facebook friends. So I am not able to apply the results on other social media like Pinterest, Twitter or Google Plus in which other friends can comment on posts.

#### **Test Limitations**

A test limitation was that tie strength is also measurable with the frequency friends communicate with each other (such as the amount of hours people communicate). If I asked this question to the respondents, this could give a more specific view. Based on this question, I could make my own relationship groups based on the amount of communicated hours. However, I have measured tie strength with the nature of your relationship to the person in the related post. The respondent could indicate by him- or herself what the nature of the relationship was.

#### **Post-test limitation**

A post-test limitation is based on the research design. To make the Facebook posts with the different ties I have selected different products (Red Bull, Breitling watch and Garmin Computer). The test does not only measure the purchase intention and the product attitude, but does also measure how popular the products are. If some people absolutely do not like energy drink, the tie will not influence them anymore in their purchase decision, because these people would not buy this product. To improve this research, I should have used more products related to the specific people. This limitation can be the culprit for hypothesis two: “Social ties on Social Media affect the purchase intention more for a low involvement luxury good”.

Another limitation is that the different natures of relationship were not homogeneous. Almost the half of the respondents has indicated the social tie as Acquaintance. The other groups consisted of fewer respondents and only five people indicated the social ties as best friend. This is obvious, because a person possesses in his life a few best friends. To improve this research and to get more homogenous sample a researcher should recode the nature of relationship “best friend” into “one of my best friends”. To make a brighter separation between the relationships “one of my best friends” and “good friend”, the last category should be recoded to “I know him well”.

The last limitation is based on hypothesis 4. It was anticipated that people with higher income have more positive attitude and intention toward the purchase of high involvement products. Our dataset did not meet this anticipation, so probably there is a hidden variable that the insignificant value explains. This problem can be similar to the limitation described for hypothesis two. The purchase intention for people with a high income was automatically higher than people for people with lower income. Probably the high income groups had enough budget to buy this product and had a positive attitude as well. However, it could be that this group already in the possession was of a bike computer or a watch. An extra variable such as “need” (a luxury product is not a need, but in consumers perspective it is) should give a more exact prediction of the model.

Further research can be done by researchers who are interested in the purchase behaviors of the remaining social media channels. At the moment Facebook is the most popular medium, but what about Twitter and Pinterest. These two social medium are completely different from Facebook. Twitter allows members to send ‘Tweets’ with a maximum of 140 characters. What is the impact of this restriction to persuasion of people? Pinterest is based on ‘pinning’ pictures to your board. This medium is less interactive than Facebook, but what is the impact of your board followers to their purchase intention? In future research more aspects (such as

consumer involvement) should be taken into consideration when the purchase intention on social media will be examined.

# Appendix

## Survey 1

### Sheet 1

**Survey Master Thesis 1**

Thank you for answering this survey. This survey will take around five minutes of your time.

In the following survey you will see two different Facebook posts. Please read these posts carefully and try to find the best suitable answers regarding these posts. Please be open and honest in your responding. The only thing that matters is your opinion. There are no right or wrong answers. This research is part of a master thesis at the Erasmus School of Economics about Social Media. All answers are anonymous, your answers will only be used for this study and not offered to third parties.

Many thanks and love for answering this survey,

Arian


[Volg](#)

Aangeboden door SurveyMonkey  
Maak nu uw gratis online enquête!

### Sheet 2

**Survey Master Thesis 1**

**Breitling Watch**



**Breitling**  
Liked · 24 June 2010

Hunting world for both sexes...

Like · Comment · Share

30 people like this.

1 share

**Cristian Si Mia Rognean** Yeah! I really wanna have this amazing watch!  
29 January 2011 at 10:45 · Like

[Vor](#) [Volg](#)


Aangeboden door SurveyMonkey  
Maak nu uw gratis online enquête!



# Sheet 3

Survey Master Thesis 1

Red Bull Drink



The image shows a can of Red Bull Energy Drink on the left. On the right, there is a screenshot of a Facebook post from the Red Bull page, dated 31 October 2012. The post text reads: "The classic edition...". Below the text are interaction statistics: "84,857 people like this.", "9,696 shares", and "106 of 1,050" previous comments. A comment from "Lerin van der Graaf" is visible, stating "red bull that is so nice" and dated 17 November 2012.

# Sheet 4

Survey Master Thesis 1

**\*1. What is your attitude about Breitling?**

Strongly negative     Somewhat negative     Neutral     Somewhat positive     Strongly positive

**\*2. What is your intention to purchase the Breitling watch?**

Definitely wouldn't buy     Probably wouldn't buy     Might buy product     Probably would buy     Definitely would buy

**\*3. What is your attitude about Red Bull?**

Strongly negative     Somewhat negative     Neutral     Somewhat positive     Strongly positive

**\*4. What is your intention to purchase Red Bull energy drink the next month?**

Definitely wouldn't buy     Probably wouldn't buy     Might buy     Probably would buy     Definitely would buy

**\*5. Please indicate the nature of your relationship to the person in the Red Bull post.**

1= I don't know this person     2= Not a friend     3= Acquaintance     4= Good friend     5= Best Friend

**6. Rate the following Facebook activities you are involved with.**

|  | Never                 | Rarely                | Sometimes             | Often                 | Always                |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| How often do you post on Facebook?                       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| How often do you "like" posts of your friends/pages?     | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| How often do you comment on posts of your friends/pages? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| How often do you chat on Facebook?                       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| How often do you use the Facebook Mobile Application?    | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| How often do you participate in Facebook games?          | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| How often do you review products online?                 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

**\*7. How many Facebook friends do you have?**

0<100     101<200     201<300     301<400     401<500     >500

**\*8. Please give an estimation of your net monthly income.**

Vor.    Volg.

Angeboten door SurveyMonkey  
[www.surveymonkey.com](http://www.surveymonkey.com)

## Sheet 5

---

Many thanks for participating!

[Vor.](#) [Gereed](#)

[Aangeboden door SurveyMonkey](#)  
[Maak nu uw gratis online enquête!](#)

## Survey 2

### Sheet 1

#### Survey Master Thesis 1

---

Thank you for answering this survey. This survey will take around five minutes of your time.

In the following survey you will see two different Facebook posts. Please read these posts carefully and try to find the best suitable answers regarding these posts. Please be open and honest in your responding. The only thing that matters is your opinion. There are no right or wrong answers. This research is part of a master thesis at the Erasmus School of Economics about Social Media. All answers are anonymous, your answers will only be used for this study and not offered to third parties.

Many thanks and love for answering this survey,

Arian

[Volg.](#)

[Aangeboden door SurveyMonkey](#)  
[Maak nu uw gratis online enquête!](#)

## Sheet 2

### Survey Master Thesis 2

#### Red Bull Energy Drink



**Red Bull**  
Liked · 23 October 2012 · 4h

The classic edition...

Like · Comment · Share

84,867 people like this.

9,696 photos

View previous comments

186 of 1,050

**Habella Trueman** yumm red bull that is so nice  
17 November 2012 at 04:04 · Like

## Sheet 3

### Survey Master Thesis 2

#### Breitling Watch



**Breitling**  
Liked · 25 June 2010 · 4h

Hunting world for both sexes...

Like · Comment · Share

30 people like this.

1 share

**Karin van der Graaf** Yeah I really want to have this amazing watch.  
29 January 2011 at 18:45 · Like

Ver

Volg

Aangevraagd door SurveyMonkey  
Mak het nu voor gratis online enquêtes

## Sheet 4

### Survey Master Thesis 1

**\*1. What is your attitude about Breitling?**

- Strongly negative
  Somewhat negative
  Neutral
  Somewhat positive
  Strongly positive

**\*2. What is your intention to purchase the Breitling watch?**

- Definitely wouldn't buy
  Probably wouldn't buy
  Might buy product
  Probably would buy
  Definitely would buy

**\*3. What is your attitude about Red Bull?**

- Strongly negative
  Somewhat negative
  Neutral
  Somewhat positive
  Strongly positive

**\*4. What is your intention to purchase Red Bull energy drink the next month?**

- Definitely wouldn't buy
  Probably wouldn't buy
  Might buy
  Probably would buy
  Definitely would buy

**\*5. Please indicate the nature of your relationship to the person in the Red Bull post.**

- 1= I don't know this person
  2= Not a friend
  3= Acquaintance
  4= Good friend
  5= Best Friend

**6. Rate the following Facebook activities you are involved with.**

|  | Never                 | Rarely                | Sometimes             | Often                 | Always                |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| How often do you post on Facebook?                       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| How often do you "like" posts of your friends/pages?     | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| How often do you comment on posts of your friends/pages? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| How often do you chat on Facebook?                       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| How often do you use the Facebook Mobile Application?    | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| How often do you participate in Facebook games?          | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| How often do you review products online?                 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

**\*7. How many Facebook friends do you have?**

- 0<100
  101<200
  201<300
  301<400
  401<500
  >500

**\*8. Please give an estimation of your net monthly income.**

Vor. Volg.

Aangeboden door SurveyMonkey  
Maak nu uw gratis online enquête!

## Sheet 5

Many thanks for participating!

Vor. Gereed

Aangeboden door SurveyMonkey  
Maak nu uw gratis online enquête!

# Survey 3

## Sheet 1

### Survey Master Thesis 1 Sport

Hartelijk dank voor je deelname. Deze kort survey zal slechts enkele minuten duren.

In het volgend onderzoek zie je twee verschillende Facebook posts. Lees deze posts en het commentaar daarop aandachtig door en probeer het meest geschikte antwoord te vinden die hier betrekking op heeft. Wees alsjeblieft open en eerlijk in je beantwoording. Het enige wat telt is JOUW mening, dus er zijn geen goede of slechte antwoorden.

Dit onderzoek maakt deel uit van een masterscriptie over Social Media aan de Erasmus School of Economics. Alle antwoorden zijn volstrekt anoniem en zullen alleen worden gebruikt voor deze studie en niet voor derden.

Dank en liefde voor het beantwoorden van deze survey.

Arian Oosthoek

Volg.

[Aangeboden door SurveyMonkey](#)  
[Maak nu uw gratis online enquête!](#)

## Sheet 2

### Survey Master Thesis 1 Sport

#### Garmin Edge 500



**Garmin**  
Like This Page · 22 November 2010

Edge 500 is the sleek GPS-enabled training computer for cyclists who can't get enough data - both during and after the ride.

Like · Comment · Share

14 people like this.

2 shares

**Griffin Schwartz** I love mine.  
14 May 2011 at 01:40 · Like

Vor.

Volg.

[Aangeboden door SurveyMonkey](#)  
[Maak nu uw gratis online enquête!](#)

# Sheet 3

## Survey Master Thesis 1 Sport

Red Bull Drink



# Sheet 4

## Survey Master Thesis 1 Sport

\*1. Wat is jouw houding tegenover het merk Garmin?

- Sterk negatief     
  Enigszins negatief     
  Neutraal     
  Enigszins positief     
  Sterk positief

\*2. Hoe groot is jouw aankoopintentie van de Garmin Edge 500?

- Zeker niet     
  Waarschijnlijk niet     
  Misschien     
  Waarschijnlijk wel     
  Zeker wel

\*3. Wat is jouw houding tegenover het merk Red Bull?

- Sterk negatief     
  Enigszins negatief     
  Neutraal     
  Enigszins positief     
  Sterk positief

\*4. Hoe groot is jouw aankoopintentie van Red Bull Energy Drink de komende maand?

- Zeker niet     
  Waarschijnlijk niet     
  Misschien     
  Waarschijnlijk wel     
  Zeker wel

\*5. Geef de aard van de relatie met de persoon in de Red Bull post weer.

- 1= Onbekend     
  2= Geen vriend     
  3= Kennis     
  4= Vriend     
  5= Beste vriend

6. Beoordeel de volgende Facebook-activiteiten waarin je betrokken bent.

|  | Nooit                 | Zelden                | Soms                  | Vaak                  | Altijd (elke dag)     |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Hoe vaak post je op Facebook?                                | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Hoe vaak "like" je de updates van vrienden/pagina's?         | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Hoe vaak reageer je op de updates van vrienden/pagina's?     | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Hoe vaak chat je op Facebook?                                | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Hoe vaak maak je gebruik van de mobiele Facebook applicatie? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Hoe vaak speel je Facebook games?                            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Hoe vaak beoordeel je producten online?                      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

\*7. Hoeveel Facebook vrienden bezit je?

- 0<100     
  101<200     
  201<300     
  301<400     
  401<500     
  >500

\*8. Geef een schatting van je maandelijkse netto inkomen.

Vor. Volg.

Aangeboden door SurveyMonkey  
Maak nu uw gratis online enquête!

## Sheet 5

### Survey Master Thesis 1 Sport

Mijn dank is groot voor je deelname!

Vor. Gereed

Aangeboden door SurveyMonkey  
Maak nu uw gratis online enquête!

## Survey 4

### Sheet 1

#### Survey Master Thesis 1 Sport

Hartelijk dank voor je deelname. Deze kort survey zal slechts enkele minuten duren.

In het volgend onderzoek zie je twee verschillende Facebook posts. Lees deze posts en het commentaar daarop aandachtig door en probeer het meest geschikte antwoord te vinden die hier betrekking op heeft. Wees alsjeblieft open en eerlijk in je beantwoording. Het enige wat telt is JOUW mening, dus er zijn geen goede of slechte antwoorden.

Dit onderzoek maakt deel uit van een masterscriptie over Social Media aan de Erasmus School of Economics. Alle antwoorden zijn volstrekt anoniem en zullen alleen worden gebruikt voor deze studie en niet voor derden.

Dank en liefde voor het beantwoorden van deze survey.

Arian Oosthoek


Volg.

Aangeboden door SurveyMonkey  
Maak nu uw gratis online enquête!

## Sheet 2

Survey Master Thesis 2 Sport

Garmin Edge 500



Garmin  
Like This Page · 22 November 2010 ·

Edge 500 is the sleek GPS-enabled training computer for cyclists who can't get enough data - both during and after the ride.

Like · Comment · Share

14 people like this.

2 shares


Jasper Dickeloen · I love mine  
14 May 2011 at 01:40 · Like

Vor · Volg

## Sheet 3

Survey Master Thesis 2 Sport

Red Bull Drink



Red Bull  
Liked · 31 October 2012 ·

The classic edition...

Like · Comment · Share

84,867 people like this.

9,696 shares

[View previous comments](#) 106 of 1,050

Mabella Trueman · yummi red bull that is so nice  
17 November 2012 at 04:04 · Like



## Sheet 4

### Survey Master Thesis 1 Sport

**\* 1. Wat is jouw houding tegenover het merk Garmin?**

- Sterk negatief     
  Enigszins negatief     
  Neutraal     
  Enigszins positief     
  Sterk positief

**\* 2. Hoe groot is jouw aankoopintentie van de Garmin Edge 500?**

- Zeker niet     
  Waarschijnlijk niet     
  Misschien     
  Waarschijnlijk wel     
  Zeker wel

**\* 3. Wat is jouw houding tegenover het merk Red Bull?**

- Sterk negatief     
  Enigszins negatief     
  Neutraal     
  Enigszins positief     
  Sterk positief

**\* 4. Hoe groot is jouw aankoopintentie van Red Bull Energy Drink de komende maand?**

- Zeker niet     
  Waarschijnlijk niet     
  Misschien     
  Waarschijnlijk wel     
  Zeker wel

**\* 5. Geef de aard van de relatie met de persoon in de Red Bull post weer.**

- 1= Onbekend     
  2= Geen vriend     
  3= Kennis     
  4= Vriend     
  5= Beste vriend

**6. Beoordeel de volgende Facebook-activiteiten waarin je betrokken bent.**

|  | Nooit                 | Zelden                | Soms                  | Vaak                  | Altijd (elke dag)     |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Hoe vaak post je op Facebook?                                | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Hoe vaak "like" je de updates van vrienden/pagina's?         | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Hoe vaak reageer je op de updates van vrienden/pagina's?     | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Hoe vaak chat je op Facebook?                                | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Hoe vaak maak je gebruik van de mobiele Facebook applicatie? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Hoe vaak speel je Facebook games?                            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Hoe vaak beoordeel je producten online?                      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

**\* 7. Hoeveel Facebook vrienden bezit je?**

- 0<100     
  101<200     
  201<300     
  301<400     
  401<500     
  >500

**\* 8. Geef een schatting van je maandelijkse netto inkomen.**

Vor. Volg.

Aangeboden door SurveyMonkey  
Maak nu uw gratis online enquête!

## Sheet 5

### Survey Master Thesis 1 Sport

Mijn dank is groot voor je deelname!

Vor. Gereed

Aangeboden door SurveyMonkey  
Maak nu uw gratis online enquête!

## **Survey Participation Request**

Format Facebook Private Message

### **Survey 1 English**

Hey (name of respondent)

Please help me graduate! I will ask you for a little favor to answer this very short survey. You are my hero if you use 3 minutes of your time and answer these questions:

<https://www.surveymonkey.com/s/VJ6YRNT>

Love and gratitude in return!

Arian

### **Survey 2 English**

Hey (name of respondent)

Please help me graduate! I will ask you for a little favor to answer this very short survey. You are my hero if you use 3 minutes of your time and answer these questions:

<https://www.surveymonkey.com/s/VJCXD28>

Love and gratitude in return!

Arian

### **Survey 3 Dutch**

Hey

Help me alsjeblieft afstuderen! Je zou me enorm helpen als je deze korte survey beantwoordt. Je bent mijn held als je 3 minuten van je tijd inlevert om deze vraagjes te beantwoorden.

<https://www.surveymonkey.com/s/WPRG3GD>

Heel veel liefde en dank!

Arian

### **Survey 4 Dutch**

Hey

Help me alsjeblieft afstuderen! Je zou me enorm helpen als je deze korte survey beantwoordt .

Je bent mijn held als je 3 minuten van je tijd inlevert om deze vraagjes te beantwoorden.

<https://www.surveymonkey.com/s/SK2RS62>

Heel veel liefde en dank!

Arian

# SPSS OUTPUT

## Hypothesis 1

### TWO WAY ANOVA

#### Descriptive Statistics

Dependent Variable:Purchase Intention

| WEAK  | STRONG | Mean | Std. Deviation | N   |
|-------|--------|------|----------------|-----|
| .00   | 1.00   | 3.27 | 1.343          | 26  |
|       | Total  | 3.27 | 1.343          | 26  |
| 1.00  | .00    | 2.56 | 1.272          | 131 |
|       | Total  | 2.56 | 1.272          | 131 |
| Total | .00    | 2.56 | 1.272          | 131 |
|       | 1.00   | 3.27 | 1.343          | 26  |
|       | Total  | 2.68 | 1.306          | 157 |

#### Between-Subjects Factors

|        |      | N   |
|--------|------|-----|
| WEAK   | .00  | 26  |
|        | 1.00 | 131 |
| STRONG | .00  | 131 |
|        | 1.00 | 26  |

#### Tests of Between-Subjects Effects

Dependent Variable:Purchase Intention

| Source          | Type III Sum of Squares | df  | Mean Square | F       | Sig. |
|-----------------|-------------------------|-----|-------------|---------|------|
| Corrected Model | 10.763 <sup>a</sup>     | 1   | 10.763      | 6.534   | .012 |
| Intercept       | 738.406                 | 1   | 738.406     | 448.283 | .000 |
| WEAK            | .000                    | 0   | .           | .       | .    |
| STRONG          | .000                    | 0   | .           | .       | .    |
| WEAK * STRONG   | .000                    | 0   | .           | .       | .    |
| Error           | 255.314                 | 155 | 1.647       |         |      |

|                 |          |     |  |  |
|-----------------|----------|-----|--|--|
| Total           | 1395.000 | 157 |  |  |
| Corrected Total | 266.076  | 156 |  |  |

a. R Squared = .040 (Adjusted R Squared = .034)

### KRUSKAL WALLIS

**Ranks**

| Nature Relationship                |   | N   | Mean Rank |
|------------------------------------|---|-----|-----------|
| Purchase Intention with strong tie | 1 | 31  | 55.16     |
|                                    | 2 | 25  | 70.60     |
|                                    | 3 | 75  | 84.91     |
|                                    | 4 | 21  | 96.38     |
|                                    | 5 | 5   | 107.20    |
| Total                              |   | 157 |           |

### **Test Statistics<sup>a,b</sup>**

|             | Purchase Intention with strong tie |
|-------------|------------------------------------|
| Chi-Square  | 16.459                             |
| df          | 4                                  |
| Asymp. Sig. | .002                               |

a. Kruskal Wallis Test

b. Grouping Variable:  
Nature Relationship

## ONE WAY ANOVA

### ANOVA

Nature Relationship

|                | Sum of Squares | df  | Mean Square | F     | Sig. |
|----------------|----------------|-----|-------------|-------|------|
| Between Groups | 18.181         | 4   | 4.545       | 4.550 | .002 |
| Within Groups  | 151.845        | 152 | .999        |       |      |
| Total          | 170.025        | 156 |             |       |      |

## LINEAR REGRESSION

### Model Summary

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1     | .325 <sup>a</sup> | .106     | .100              | 1.239                      |

a. Predictors: (Constant), Nature Relationship

### ANOVA<sup>b</sup>

| Model |            | Sum of Squares | df  | Mean Square | F      | Sig.              |
|-------|------------|----------------|-----|-------------|--------|-------------------|
| 1     | Regression | 28.136         | 1   | 28.136      | 18.329 | .000 <sup>a</sup> |
|       | Residual   | 237.940        | 155 | 1.535       |        |                   |
|       | Total      | 266.076        | 156 |             |        |                   |

a. Predictors: (Constant), Nature Relationship

b. Dependent Variable: Purchase Intention

### Coefficients<sup>a</sup>

| Model |                     | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig. |
|-------|---------------------|-----------------------------|------------|---------------------------|-------|------|
|       |                     | B                           | Std. Error | Beta                      |       |      |
| 1     | (Constant)          | 1.606                       | .270       |                           | 5.951 | .000 |
|       | Nature Relationship | .407                        | .095       | .325                      | 4.281 | .000 |

a. Dependent Variable: Purchase Intention

## POST HOC TEST

### Post Hoc Tests

#### Multiple Comparisons

Purchase Intention  
Gabriel

| (I) Nature Relationship | (J) Nature Relationship | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval |             |
|-------------------------|-------------------------|-----------------------|------------|------|-------------------------|-------------|
|                         |                         |                       |            |      | Lower Bound             | Upper Bound |
| 1                       | 2                       | -.400                 | .336       | .928 | -1.35                   | .55         |
|                         | 3                       | -.853*                | .267       | .013 | -1.59                   | -.11        |
|                         | 4                       | -1.190*               | .354       | .009 | -2.19                   | -.19        |
|                         | 5                       | -1.600*               | .603       | .044 | -3.17                   | -.03        |
| 2                       | 1                       | .400                  | .336       | .928 | -.55                    | 1.35        |
|                         | 3                       | -.453                 | .289       | .668 | -1.25                   | .34         |
|                         | 4                       | -.790                 | .370       | .290 | -1.84                   | .26         |
| 3                       | 1                       | .853*                 | .267       | .013 | .11                     | 1.59        |
|                         | 2                       | .453                  | .289       | .668 | -.34                    | 1.25        |
|                         | 4                       | -.337                 | .309       | .944 | -1.17                   | .50         |
|                         | 5                       | -.747                 | .578       | .760 | -2.16                   | .67         |
| 4                       | 1                       | 1.190*                | .354       | .009 | .19                     | 2.19        |
|                         | 2                       | .790                  | .370       | .290 | -.26                    | 1.84        |
|                         | 3                       | .337                  | .309       | .944 | -.50                    | 1.17        |
|                         | 5                       | -.410                 | .622       | .999 | -2.08                   | 1.26        |
| 5                       | 1                       | 1.600*                | .603       | .044 | .03                     | 3.17        |
|                         | 2                       | 1.200                 | .613       | .315 | -.43                    | 2.83        |
|                         | 3                       | .747                  | .578       | .760 | -.67                    | 2.16        |
|                         | 4                       | .410                  | .622       | .999 | -1.26                   | 2.08        |

\*. The mean difference is significant at the 0.05 level.

## Homogeneous Subsets

### Purchase Intention

Gabriel<sup>a, b</sup>

| Nature Relationship | N  | Subset for alpha = 0.05 |      |
|---------------------|----|-------------------------|------|
|                     |    | 1                       | 2    |
| 1                   | 31 | 2.00                    |      |
| 2                   | 25 | 2.40                    | 2.40 |
| 3                   | 75 | 2.85                    | 2.85 |
| 4                   | 21 | 3.19                    | 3.19 |
| 5                   | 5  |                         | 3.60 |
| Sig.                |    | .095                    | .090 |

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 15.006.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

## Hypothesis 2

### ONE WAY ANOVA LOW INVOLVEMENT

#### Descriptives

Int. LI

|       | N  | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean |             | Minimum | Maximum |
|-------|----|------|----------------|------------|----------------------------------|-------------|---------|---------|
|       |    |      |                |            | Lower Bound                      | Upper Bound |         |         |
| 1     | 21 | 1.71 | .902           | .197       | 1.30                             | 2.13        | 1       | 4       |
| 2     | 16 | 2.19 | .981           | .245       | 1.66                             | 2.71        | 1       | 5       |
| 3     | 35 | 3.03 | 1.382          | .234       | 2.55                             | 3.50        | 1       | 5       |
| 4     | 10 | 3.00 | 1.414          | .447       | 1.99                             | 4.01        | 1       | 5       |
| 5     | 1  | 4.00 | .              | .          | .                                | .           | 4       | 4       |
| Total | 83 | 2.54 | 1.319          | .145       | 2.25                             | 2.83        | 1       | 5       |



**ANOVA**

Int. LI

|                | Sum of Squares | df | Mean Square | F     | Sig. |
|----------------|----------------|----|-------------|-------|------|
| Between Groups | 28.908         | 4  | 7.227       | 4.958 | .001 |
| Within Groups  | 113.695        | 78 | 1.458       |       |      |
| Total          | 142.602        | 82 |             |       |      |

ONE WAY ANOVA HIGH INVOLVEMENT

**Descriptives**

Int. HI

|       | N  | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean |             | Minimum | Maximum |
|-------|----|------|----------------|------------|----------------------------------|-------------|---------|---------|
|       |    |      |                |            | Lower Bound                      | Upper Bound |         |         |
| 1     | 10 | 2.60 | 1.430          | .452       | 1.58                             | 3.62        | 1       | 5       |
| 2     | 9  | 2.78 | 1.093          | .364       | 1.94                             | 3.62        | 1       | 4       |
| 3     | 40 | 2.70 | 1.244          | .197       | 2.30                             | 3.10        | 1       | 5       |
| 4     | 11 | 3.36 | 1.206          | .364       | 2.55                             | 4.17        | 2       | 5       |
| 5     | 4  | 3.50 | 1.915          | .957       | .45                              | 6.55        | 1       | 5       |
| Total | 74 | 2.84 | 1.282          | .149       | 2.54                             | 3.13        | 1       | 5       |

**ANOVA**

Int. HI

|                | Sum of Squares | df | Mean Square | F    | Sig. |
|----------------|----------------|----|-------------|------|------|
| Between Groups | 6.153          | 4  | 1.538       | .932 | .451 |
| Within Groups  | 113.901        | 69 | 1.651       |      |      |
| Total          | 120.054        | 73 |             |      |      |

# ONE WAY ANOVA PER PRODUCT

## BREITLING

### Descriptives

Int. Breitling

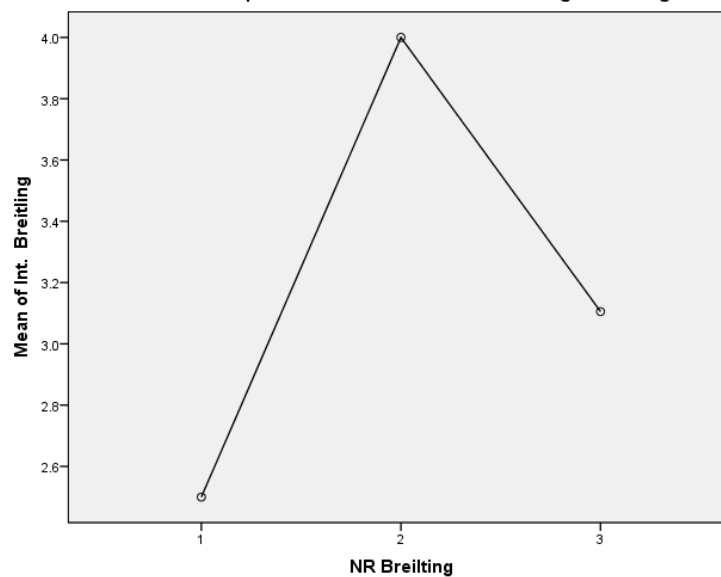
|       | N  | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean |             | Minimum | Maximum |
|-------|----|------|----------------|------------|----------------------------------|-------------|---------|---------|
|       |    |      |                |            | Lower Bound                      | Upper Bound |         |         |
| 1     | 8  | 2.50 | 1.195          | .423       | 1.50                             | 3.50        | 1       | 4       |
| 2     | 3  | 4.00 | .000           | .000       | 4.00                             | 4.00        | 4       | 4       |
| 3     | 19 | 3.11 | 1.449          | .332       | 2.41                             | 3.80        | 1       | 5       |
| Total | 30 | 3.03 | 1.351          | .247       | 2.53                             | 3.54        | 1       | 5       |

### ANOVA

Int. Breitling

|                | Sum of Squares | df | Mean Square | F     | Sig. |
|----------------|----------------|----|-------------|-------|------|
| Between Groups | 5.177          | 2  | 2.589       | 1.462 | .249 |
| Within Groups  | 47.789         | 27 | 1.770       |       |      |
| Total          | 52.967         | 29 |             |       |      |

Chart 6: Relationship Purchase Intention and Tie Strength Breitling



*GARMIN*

**Descriptives**

Int. Garmin

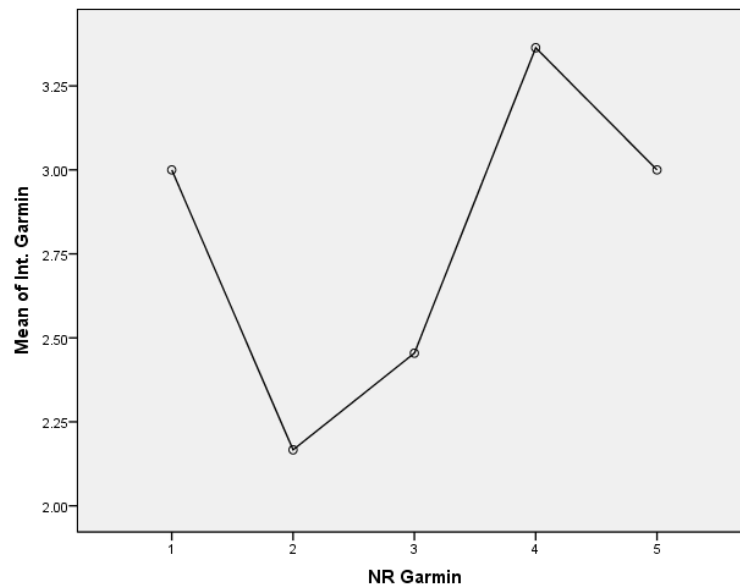
|       | N  | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean |             | Minimum | Maximum |
|-------|----|------|----------------|------------|----------------------------------|-------------|---------|---------|
|       |    |      |                |            | Lower Bound                      | Upper Bound |         |         |
| 1     | 2  | 3.00 | 2.828          | 2.000      | -22.41                           | 28.41       | 1       | 5       |
| 2     | 6  | 2.17 | .753           | .307       | 1.38                             | 2.96        | 1       | 3       |
| 3     | 22 | 2.45 | 1.057          | .225       | 1.99                             | 2.92        | 1       | 5       |
| 4     | 11 | 3.36 | 1.206          | .364       | 2.55                             | 4.17        | 2       | 5       |
| 5     | 3  | 3.00 | 2.000          | 1.155      | -1.97                            | 7.97        | 1       | 5       |
| Total | 44 | 2.70 | 1.231          | .186       | 2.33                             | 3.08        | 1       | 5       |

**ANOVA**

Int. Garmin

|                | Sum of Squares | df | Mean Square | F     | Sig. |
|----------------|----------------|----|-------------|-------|------|
| Between Groups | 8.326          | 4  | 2.081       | 1.428 | .243 |
| Within Groups  | 56.833         | 39 | 1.457       |       |      |
| Total          | 65.159         | 43 |             |       |      |

**Chart 5: Relationship Purchase Intention and Tie Strength Garmin**



\*Red Bull is the same as Low Involvement, because I have decided to use for all the surveys the same low involvement luxury product.

## KRUSKAL WALLIS

### *Low Involvement*

| <b>Ranks</b>              |                                     |    |           |
|---------------------------|-------------------------------------|----|-----------|
|                           | Nature Relationship Low Involvement | N  | Mean Rank |
| Intention Low Involvement | 1                                   | 21 | 26.98     |
|                           | 2                                   | 16 | 36.94     |
|                           | 3                                   | 35 | 50.34     |
|                           | 4                                   | 10 | 49.85     |
|                           | 5                                   | 1  | 68.00     |
|                           | Total                               | 83 |           |

| <b>Test Statistics<sup>a,b</sup></b> |                           |
|--------------------------------------|---------------------------|
|                                      | Intention Low Involvement |
| Chi-Square                           | 16.196                    |
| df                                   | 4                         |
| Asymp. Sig.                          | .003                      |

a. Kruskal Wallis Test

b. Grouping Variable: Nature Relationship Low Involvement

| <b>Jonckheere-Terpstra Test<sup>a</sup></b> |         |
|---|---------|
|   | Int. LI |
|   |         |

|                                 |          |
|---------------------------------|----------|
| Number of Levels in NRLI        | 5        |
| N                               | 83       |
| Observed J-T Statistic          | 1671.000 |
| Mean J-T Statistic              | 1216.500 |
| Std. Deviation of J-T Statistic | 116.886  |
| Std. J-T Statistic              | 3.888    |
| Asymp. Sig. (2-tailed)          | .000     |

a. Grouping Variable: NRLI

### *High Involvement*

| <b>Ranks</b>               |                                      |    |           |
|----------------------------|--------------------------------------|----|-----------|
|                            | Nature Relationship High Involvement | N  | Mean Rank |
| Intention High Involvement | 1                                    | 11 | 35.82     |
|                            | 2                                    | 9  | 37.17     |
|                            | 3                                    | 39 | 34.69     |
|                            | 4                                    | 11 | 45.95     |
|                            | 5                                    | 4  | 47.00     |
|                            | Total                                | 74 |           |

| <b>Test Statistics<sup>a,b</sup></b> |                            |
|--------------------------------------|----------------------------|
|                                      | Intention High Involvement |
| Chi-Square                           | 3.381                      |
| df                                   | 4                          |
| Asymp. Sig.                          | .496                       |

a. Kruskal Wallis Test

b. Grouping Variable: Nature

Relationship High Involvement

| <b>Jonckheere-Terpstra Test<sup>a</sup></b> |         |
|---|---------|
|   | Int. HI |

|                                 |          |
|---------------------------------|----------|
| Number of Levels in NRHI        | 5        |
| N                               | 74       |
| Observed J-T Statistic          | 1027.000 |
| Mean J-T Statistic              | 889.500  |
| Std. Deviation of J-T Statistic | 95.185   |
| Std. J-T Statistic              | 1.445    |
| Asymp. Sig. (2-tailed)          | .149     |

a. Grouping Variable: NRHI

## CORRELATION

### Correlations

|                                      |                     | Nature Relationship High Involvement | Intention High Involvement |
|--------------------------------------|---------------------|--------------------------------------|----------------------------|
| Nature Relationship High Involvement | Pearson Correlation | 1                                    | .145                       |
|                                      | Sig. (2-tailed)     |                                      | .217                       |
|                                      | N                   | 74                                   | 74                         |
| Intention High Involvement           | Pearson Correlation | .145                                 | 1                          |
|                                      | Sig. (2-tailed)     | .217                                 |                            |
|                                      | N                   | 74                                   | 74                         |

### Correlations

|                                     |                     | Intention Low Involvement | Nature Relationship Low Involvement |
|-------------------------------------|---------------------|---------------------------|-------------------------------------|
| Intention Low Involvement           | Pearson Correlation | 1                         | .427**                              |
|                                     | Sig. (2-tailed)     |                           | .000                                |
|                                     | N                   | 83                        | 83                                  |
| Nature Relationship Low Involvement | Pearson Correlation | .427**                    | 1                                   |
|                                     | Sig. (2-tailed)     | .000                      |                                     |
|                                     | N                   | 83                        | 83                                  |

\*\* . Correlation is significant at the 0.01 level (2-tailed).

### Hypothesis 3

#### REGRESSION:

| Model | Variables Entered | Variables Removed | Method |
|-------|-------------------|-------------------|--------|
| 1     | Facebook Index    | .                 | Enter  |

a. All requested variables entered.

b. Dependent Variable: Purchase Intention

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1     | .269 <sup>a</sup> | .073     | .067              | 1.262                      |

a. Predictors: (Constant), Facebook Index

**TABLE 3: REGRESSION**

| Model |                | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig. |
|-------|----------------|-----------------------------|------------|---------------------------|-------|------|
|       |                | B                           | Std. Error | Beta                      |       |      |
| 1     | (Constant)     | 1.059                       | .477       |                           | 2.223 | .028 |
|       | Facebook Index | .065                        | .019       | .269                      | 3.483 | .001 |

a. Dependent Variable: Purchase Intention

#### ONE WAY ANOVA

| Model | Sum of Squares | df | Mean Square | F | Sig. |
|-------|----------------|----|-------------|---|------|
|-------|----------------|----|-------------|---|------|

|   |            |         |     |        |        |                   |
|---|------------|---------|-----|--------|--------|-------------------|
| 1 | Regression | 19.315  | 1   | 19.315 | 12.133 | .001 <sup>a</sup> |
|   | Residual   | 246.761 | 155 | 1.592  |        |                   |
|   | Total      | 266.076 | 156 |        |        |                   |

a. Predictors: (Constant), Facebook Index

b. Dependent Variable: Purchase Intention

## CORRELATION

**TABLE 2: Correlations**

|                    |                     | Attitude Product | Facebook Index | Purchase Intention |
|--------------------|---------------------|------------------|----------------|--------------------|
| Attitude Product   | Pearson Correlation | 1                | .279**         | .604**             |
|                    | Sig. (2-tailed)     |                  | .000           | .000               |
|                    | N                   | 162              | 157            | 157                |
| Facebook Index     | Pearson Correlation | .279**           | 1              | .269**             |
|                    | Sig. (2-tailed)     | .000             |                | .001               |
|                    | N                   | 157              | 157            | 157                |
| Purchase Intention | Pearson Correlation | .604**           | .269**         | 1                  |
|                    | Sig. (2-tailed)     | .000             | .001           |                    |
|                    | N                   | 157              | 157            | 157                |

\*\* . Correlation is significant at the 0.01 level (2-tailed).

## REGRESSION WITH MULTICOLLINEARITY

**Coefficients<sup>a</sup>**

| Model | Unstandardized Coefficients | Standardized | t | Sig. |
|-------|-----------------------------|--------------|---|------|
|-------|-----------------------------|--------------|---|------|



|   |                     |       |            | Coefficients |  |        |      |
|---|---------------------|-------|------------|--------------|--|--------|------|
|   |                     | B     | Std. Error | Beta         |  |        |      |
| 1 | (Constant)          | .854  | .491       |              |  | 1.740  | .084 |
|   | Post on Facebook    | -.187 | .153       | -.135        |  | -1.217 | .226 |
|   | "Like" posts        | .274  | .176       | .196         |  | 1.555  | .122 |
|   | Comment posts       | -.060 | .183       | -.044        |  | -.330  | .742 |
|   | Chat                | .093  | .101       | .081         |  | .915   | .361 |
|   | Use Facebook Mobile | .119  | .080       | .130         |  | 1.499  | .136 |
|   | Facebook games      | .004  | .105       | .003         |  | .034   | .973 |
|   | #Facebook friends   | .188  | .073       | .214         |  | 2.586  | .011 |

a. Dependent Variable: Purchase Intention Product

Correlations

|                            |                     | Attitude Product | Purchase Intention Product | Post on Facebook | "Like" posts | Comment posts | Chat   | Use Facebook Mobile | Facebook games | #Facebook friends | Review products online |
|----------------------------|---------------------|------------------|----------------------------|------------------|--------------|---------------|--------|---------------------|----------------|-------------------|------------------------|
| Attitude Product           | Pearson Correlation | 1                | .604**                     | .090             | .266**       | .190*         | .145   | .218**              | .094           | .284**            | .036                   |
|                            | Sig. (2-tailed)     |                  | .000                       | .261             | .001         | .017          | .069   | .006                | .241           | .000              | .656                   |
|                            | N                   | 157              | 157                        | 157              | 157          | 157           | 157    | 155                 | 157            | 157               | 156                    |
| Purchase Intention Product | Pearson Correlation | .604**           | 1                          | .088             | .211**       | .144          | .190*  | .214**              | .079           | .249**            | .116                   |
|                            | Sig. (2-tailed)     | .000             |                            | .272             | .008         | .072          | .017   | .008                | .325           | .002              | .148                   |
|                            | N                   | 157              | 157                        | 157              | 157          | 157           | 157    | 155                 | 157            | 157               | 156                    |
| Post on Facebook           | Pearson Correlation | .090             | .088                       | 1                | .624**       | .691**        | .375** | .304**              | .198*          | .289**            | .209**                 |
|                            | Sig. (2-tailed)     | .261             | .272                       |                  | .000         | .000          | .000   | .000                | .013           | .000              | .009                   |
|                            | N                   | 157              | 157                        | 157              | 157          | 157           | 157    | 155                 | 157            | 157               | 156                    |
| "Like" posts               | Pearson Correlation | .266**           | .211**                     | .624**           | 1            | .756**        | .349** | .412**              | .239**         | .259**            | .307**                 |
|                            | Sig. (2-tailed)     | .001             | .008                       | .000             |              | .000          | .000   | .000                | .003           | .001              | .000                   |
|                            | N                   | 157              | 157                        | 157              | 157          | 157           | 157    | 155                 | 157            | 157               | 156                    |
| Comment posts              | Pearson Correlation | .190*            | .144                       | .691**           | .756**       | 1             | .410** | .325**              | .190*          | .274**            | .250**                 |
|                            | Sig. (2-tailed)     | .017             | .072                       | .000             | .000         |               | .000   | .000                | .017           | .001              | .002                   |
|                            | N                   | 157              | 157                        | 157              | 157          | 157           | 157    | 155                 | 157            | 157               | 156                    |
| Chat                       | Pearson Correlation | .145             | .190*                      | .375**           | .349**       | .410**        | 1      | .304**              | .156           | .270**            | .163*                  |
|                            | Sig. (2-tailed)     | .069             | .017                       | .000             | .000         | .000          |        | .000                | .051           | .001              | .042                   |
|                            | N                   | 157              | 157                        | 157              | 157          | 157           | 157    | 155                 | 157            | 157               | 156                    |
| Use Facebook Mobile        | Pearson Correlation | .218**           | .214**                     | .304**           | .412**       | .325**        | .304** | 1                   | .173*          | .158*             | .162*                  |
|                            | Sig. (2-tailed)     | .006             | .008                       | .000             | .000         | .000          | .000   |                     | .031           | .049              | .045                   |
|                            | N                   | 155              | 155                        | 155              | 155          | 155           | 155    | 155                 | 155            | 155               | 154                    |
| Facebook games             | Pearson Correlation | .094             | .079                       | .198*            | .239**       | .190*         | .156   | .173*               | 1              | .116              | .231**                 |
|                            | Sig. (2-tailed)     | .241             | .325                       | .013             | .003         | .017          | .051   | .031                |                | .148              | .004                   |
|                            | N                   | 157              | 157                        | 157              | 157          | 157           | 157    | 155                 | 157            | 157               | 156                    |
| #Facebook friends          | Pearson Correlation | .284**           | .249**                     | .289**           | .259**       | .274**        | .270** | .158*               | .116           | 1                 | .106                   |
|                            | Sig. (2-tailed)     | .000             | .002                       | .000             | .001         | .001          | .001   | .049                | .148           |                   | .189                   |
|                            | N                   | 157              | 157                        | 157              | 157          | 157           | 157    | 155                 | 157            | 157               | 156                    |
| Review products online     | Pearson Correlation | .036             | .116                       | .209**           | .307**       | .250**        | .163*  | .162*               | .231**         | .106              | 1                      |
|                            | Sig. (2-tailed)     | .656             | .148                       | .009             | .000         | .002          | .042   | .045                | .004           | .189              |                        |
|                            | N                   | 156              | 156                        | 156              | 156          | 156           | 156    | 154                 | 156            | 156               | 156                    |

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

## CORRECT REGRESSION (WITHOUT MULTICOLLINEARITY)

Coefficients<sup>a</sup>

| Model |                        | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig. |
|-------|------------------------|-----------------------------|------------|---------------------------|-------|------|
|       |                        | B                           | Std. Error | Beta                      |       |      |
| 1     | (Constant)             | .791                        | .493       |                           | 1.606 | .110 |
|       | "Like" posts           | .123                        | .129       | .089                      | .956  | .340 |
|       | Chat                   | .058                        | .098       | .051                      | .587  | .558 |
|       | Use Facebook Mobile    | .109                        | .080       | .119                      | 1.368 | .173 |
|       | Facebook games         | -.029                       | .107       | -.023                     | -.276 | .783 |
|       | #Facebook friends      | .166                        | .072       | .189                      | 2.294 | .023 |
|       | Review products online | .067                        | .106       | .053                      | .634  | .527 |

a. Dependent Variable: Purchase Intention Product

## Hypothesis 4

### Coefficients<sup>a</sup>

| Model |                    | Unstandardized Coefficients |            | Standardized Coefficients | T      | Sig. |
|-------|--------------------|-----------------------------|------------|---------------------------|--------|------|
|       |                    | B                           | Std. Error | Beta                      |        |      |
| 1     | (Constant)         | 3.170                       | .203       |                           | 15.613 | .000 |
|       | Net monthly income | .000                        | .000       | -.265                     | -2.332 | .022 |

a. Dependent Variable: Intention High Involvement

### Coefficients<sup>a</sup>

| Model |                    | Unstandardized Coefficients |            | Standardized Coefficients | t      | Sig. |
|-------|--------------------|-----------------------------|------------|---------------------------|--------|------|
|       |                    | B                           | Std. Error | Beta                      |        |      |
| 1     | (Constant)         | 2.398                       | .200       |                           | 11.987 | .000 |
|       | Net monthly income | .000                        | .000       | .115                      | 1.046  | .299 |

a. Dependent Variable: Intention Low Involvement

## GENERAL MODEL

### Regression

**Descriptive Statistics**

|                     | Mean    | Std. Deviation | N   |
|---------------------|---------|----------------|-----|
| Purchase Intention  | 2.68    | 1.306          | 157 |
| Attitude            | 3.06    | 1.180          | 157 |
| Income              | 1030.63 | 1069.422       | 157 |
| Nature Relationship | 2.64    | 1.044          | 157 |
| Facebook Index      | 25.10   | 5.443          | 157 |
| Involvement         | .4713   | .50078         | 157 |
| InvolvRelation      | 1.3503  | 1.59272        | 157 |

**Variables Entered/Removed<sup>b</sup>**

| Model | Variables Entered  | Variables Removed | Method |
|-------|--|-------------------|--------|
| 1     | InvolvRelation, Income, Attitude, Nature Relationship, Facebook Index, Involvement | .                 | Enter  |

a. All requested variables entered.

b. Dependent Variable: Purchase Intention

**Model Summary**

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1     | .531 <sup>a</sup> | .282     | .253              | 1.129                      |

a. Predictors: (Constant), InvolvRelation, Income, Attitude, Nature Relationship, Facebook Index, Involvement

**ANOVA<sup>b</sup>**

| Model | Sum of Squares | df | Mean Square | F | Sig. |
|-------|----------------|----|-------------|---|------|
|-------|----------------|----|-------------|---|------|

|   |            |         |     |        |       |                   |
|---|------------|---------|-----|--------|-------|-------------------|
| 1 | Regression | 74.901  | 6   | 12.484 | 9.795 | .000 <sup>a</sup> |
|   | Residual   | 191.175 | 150 | 1.275  |       |                   |
|   | Total      | 266.076 | 156 |        |       |                   |

a. Predictors: (Constant), Involvement, Income, Attitude, Nature Relationship, Facebook Index, Involvement

b. Dependent Variable: Purchase Intention

**Coefficients<sup>a</sup>**

| Model |                     | Unstandardized Coefficients |            | Standardized Coefficients | t      | Sig. |
|-------|---------------------|-----------------------------|------------|---------------------------|--------|------|
|       |                     | B                           | Std. Error | Beta                      |        |      |
| 1     | (Constant)          | -.962                       | .642       |                           | -1.498 | .136 |
|       | Attitude            | .317                        | .084       | .287                      | 3.776  | .000 |
|       | Income              | .000                        | .000       | -.116                     | -1.616 | .108 |
|       | Nature Relationship | .431                        | .125       | .345                      | 3.453  | .001 |
|       | Facebook Index      | .074                        | .028       | .310                      | 2.677  | .008 |
|       | Involvement         | -.050                       | .585       | -.019                     | -.086  | .932 |
|       | Involvement         | -.124                       | .183       | -.152                     | -.681  | .497 |

a. Dependent Variable: Purchase Intention

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