

Explaining media usage and media behavior – A comparison of social psychological determinants between the usage of online and traditional print newspapers

BACHELOR THESIS

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Abstract

The study compared the determinants of the *model of media attendance* regarding reading online newspapers and traditional print newspapers. For this purpose an online survey has been created with partially already existing items. Usage of the medium was the dependent variable which was supposed to be influenced by the other determinants of the model, which are experience, expected outcomes, self-efficacy, habit strength, and deficient self-regulation. Research questions were in how far the determinants of the model differ between both groups and in how far the model explains the variance in usage of both media. Therefore, differences between readers of online (n=146) and traditional (n=90) newspapers were investigated as well as in how far the model fits for explaining the usage of online and traditional newspapers. The survey, which was used for this purpose, included general questions regarding demographics and media consumption, as well as Likert-scale items that were supposed to measure the variables expected outcomes consisting of six incentives which are social, activity, monetary, self-reactive, information and usability outcomes, as well as the determinants self-efficacy, habit strength and deficient self-regulation. Results of linear regression show that the model significantly predicted the dependent variable usage. The explained variance in usage of traditional newspapers was higher (37.4%) than the explained variance in usage of online newspapers (28.1%). With the help of the Mann-Whitney rank sum test, as well as Pearson's Chi-Square test, significant differences between the groups were found in expected monetary outcomes, experience, and habit strength, as well as in the choice of the channel when reading an online newspaper and the number of purchases of traditional newspapers.

Samenvatting

Deze studie heeft de determinanten van het *model of media attendance* vergeleken met betrekking tot het lezen van online kranten en traditionele kranten. Voor dit doel was een online enquête gemaakt met items die al gedeeltelijk bestaan. *Usage* van het medium was de afhankelijke variabele. Er werd verondersteld dat deze wordt beïnvloed door de andere determinanten van het model. Deze determinanten zijn *experience*, *expected outcomes*, *self-efficacy*, *habit strength*, and *deficient self-regulation*. Onderzoeksvragen waren in hoeverre de determinanten van het model verschillen tussen beide groepen en in hoeverre het model de variantie in het gebruik van beide media verklaart. Daarom werden de verschillen tussen lezers van online (n=146) en traditionele kranten (n=90) onderzocht, als ook in hoeverre het model klopt bij het verklaren van het gebruik van online en traditionele kranten. De enquête die was gebruikt voor dit doel bevatte algemene vragen over demografische factoren en de algemene mediaconsumptie, als ook Likert-schaal items. Van deze items werd verwacht dat zij de variabelen *expected outcomes*, bestaande uit zes stimuli, die zijn *social*, *activity*, *monetary*, *self-reactive*, *information* en *usability outcomes* meten, alsmede de determinanten *self-efficacy*, *habit strength* en *deficient self-regulation*. Resultaten van lineaire regressie lieten zien dat het model de afhankelijke variabele significant voorspelde. De verklaarde variantie in het gebruik van de traditionele kranten was hoger (37.4%) dan de verklaarde variantie in het gebruik van online kranten (28.1%). Met behulp van zowel de Mann-Whitney rangsomtoets als Pearson's Chi-kwadraat toets werden significante verschillen gevonden in de *expected monetary outcomes*, *experience*, en *habit strength* als in de keuze van het kanaal bij het lezen van een online krant en het aantal aankopen van de traditionele kranten.

1. Introduction

1.1 Online and traditional newspapers

The traditional newspaper is one of the oldest elements in our contemporary media environment (Boczkowski, 2004) and it has long been viewed as the main information delivery tool (McQuail, 1994). The written press exists almost 400 years and since then, many changes took place regarding the development of news media (Dans, 2000). Especially the Internet is the latest and heaviest challenge to traditional news media (Dans, 2000; Chung, 2008). As a consequence, traditional print newspapers are increasingly available on the Internet and the number has been especially growing in the late nineties (Dans, 2000) although the first online newspaper was already published in 1994 (Carlson, 1994). Since then, the number of online newspapers' audience increased from about 22 million daily visitors in 2010 to about 25 million daily users in 2011 and 2012 in the United States of America (Newspaper Association of America, 2012).

Not surprisingly, many authors have conducted research about the phenomenon of online newspapers and whether they will supplement or substitute the traditional news media such as printed newspapers (Rathmann, 2002; de Waal, Schönbach & Lauf, 2004; Gaskins & Jerit, 2012; Flavián & Gurrea, 2007a) as well as general research on the rise of online newspapers (Harper, 1996) or if Internet news would probably replace traditional news media outlets (Gaskins & Jerit, 2012). Further points of interest are the motivation for users to choose online newspapers instead of the traditional media (Flavián & Gurrea, 2007b) or the motivational factors that lead to the usage of online news media (Flavián & Gurrea, 2006). Other pieces of research investigate and describe the differences between the online and the traditional version of newspapers (see a. o. Sparks, 2000; De Waal, Schönbach & Lauf, 2004), as well as differences in reader consumption and recall of the news in online and print newspapers (D'Haenens, Jankowski & Heuvelman, 2004).

Interestingly, the consumption of online newspapers has steadily increased, although the traditional print version is still more popular among a great number of users of news media when asked for their personal opinion. Only younger users seem to prefer the online version as a representative study in the Netherlands suggests (De Waal, Schönbach & Lauf, 2004). On the contrary, users of online newspapers use other information channels to better fulfill their needs;

especially they prefer the printed version over the online version to fulfill information needs (De Waal, Schönbach & Lauf, 2004).

To understand why there is a great interest in scientific literature regarding the consumption of online newspapers and the traditional print version, data on media usage in the Netherlands and Germany are given, first. This is done according to the purpose of this paper which outlines research among the Dutch and German population concerning the usage of online and traditional newspapers.

In the Netherlands the access to the Internet increased from 83% to 94% of all households from 2005 until 2012 (CBS, 2012). In Germany the effect is similar. In 2003, 52% of the population from the age of 10 years had access to the World Wide Web, whereas in 2011, 76% of the population from the age of 10 years had access to the Internet (Destatis, 2012).

When it comes to newspaper consumption, data from the Central Bureau of Statistics (CBS) in the Netherlands suggest that in 1997 62% of the households had a newspaper subscription, whereas in 2008 only 50% subscribed to a newspaper (CBS, 2009a).

Additionally, the number of the daily usage of newspapers decreased from 65% to 59% from 1997 until 2007 (CBS, 2009a). Also, the number of copies decreased between 2002 and 2008 from 4,3 million to 3,6 million, which is a percentage of 16% (CBS, 2009b).

In contrast, digital newspapers are increasingly popular among all ages (CBS, 2009b).

In sum, the digital newspaper seems to become increasingly interesting for the average media user, although many users still prefer the printed over the online version for several reasons (De Waal, Schönbach & Lauf, 2004). De Waal et al. (2004) also concluded that the users of an online version are still younger, highly educated and male. Another finding was that younger users spend more time on reading online papers, the longer they also use other news sites on the Internet.

The time for reading print newspapers does not show any special relationship with the time for reading online newspapers in any of the different age groups. The negative impact of reading online newspapers on reading the printed version is limited to reading them at all, especially among the younger users (De Waal, Schönbach & Lauf, 2004).

1.2 Understanding media behavior

In the following section, three theoretical perspectives are described that search to explain and predict media behavior. In this paper one of these models, the model of media attendance (LaRose & Eastin, 2004), is used as a point of reference and guideline to explain the (online) newspaper usage. Therefore, the other two models are described in brief, while special attention is paid to the model of media attendance.

Much research has been done to investigate media consumption and media effects. Most of the research used the expectancy-value perspective on uses and gratifications (Dimmick, Chen & Li, 2004; Eighmey & McCord, 1998; Kaye & Johnson, 2004; LaRose & Eastin, 2004; LaRose, Mastro & Eastin, 2001.). The uses and gratification perspective assumes that the media user himself is actively searching for media that will fulfill his personal needs and expectations (Katz, Gurevitch & Haas, 1973 in Heuvelman, Fennis & Peters, 2009) and it is often used to investigate motives for individual media usage (Heuvelman, Fennis & Peters, 2009). The uses and gratifications that play a role in choosing a certain medium are factors such as entertainment, information, personal identity, personal relationships and social interaction (McQuail, 1987). Depending on the research purpose, different gratifications can be studied, such as gratifications sought, gratifications obtained and experienced consequences of media use, e.g. (Peters, 2007, pp.29f).

Another theoretical perspective is the unified theory of acceptance and use of technology (Venkatesh et al, 2003) which is a combination of the theory of reasoned action (Fishbein & Ajzen, 1975), the technology acceptance model (Davis, 1989), the motivational model (Davis, Bagozzi & Warshaw, 1989), the theory of planned behavior (Ajzen, 1991), a model combining the technology acceptance model and the theory of planned behavior (Taylor & Todd, 1995), the model of PC utilization (Thompson, Higgins, & Howell, 1991), the diffusion of innovations theory (Rogers, 2003), and the social cognitive theory (Bandura, 1986). This unified model contains four determinants, which are performance expectancy, effort expectancy, social influence, and facilitating conditions and four moderators that are gender, age, experience, and voluntariness of use (Venkatesh et al). According to Venkatesh et al. (2003), this unified model assesses “the likelihood of success for new technology introductions and helps to understand the

drivers of acceptance [...] (Peters, 2009 p.37)” of the technology and adopting and using the new systems. The unified theory of acceptance and use of technology has been examined in several studies regarding media behavior (see a. o. Legris, Ingham & Collorette, 2003; Shih, 2004).

In this paper the model of media attendance (LaRose & Eastin, 2004) plays a special role. In contrast to the two models described above, which originate from the theory of planned behavior (Ajzen, 1991), the model of media attendance originates from Bandura’s Social Cognitive Theory (Peters, 2009), which is also known as Social Learning Theory (Bandura, 2001, e.g.).

This theory has been used to investigate the mobile phone use and adoption of mobile technology (Peters, 2009, e.g.). In the same context, it was also compared with the two models previously mentioned (Peters, 2007).

The core of the model of media attendance contains five variables which are experience, self-efficacy, outcome expectations, habit strength, and (deficient) self-regulation. These five variables influence each other while also predicting the use and adoption of a certain medium (Heuvelman, Peters & Fennis, 2009). Experience describes in how far a user is already consuming a certain medium, or how long he has already been using it. Self-efficacy is the personal belief about one’s own ability of performing a certain media behavior (Bandura, 1997). LaRose and Eastin (2004) claim that self-efficacy is directly related to media usage through expected outcomes whereas prior experience usually leads to higher levels of self-efficacy. This has already been postulated by Bandura (1986), who stated that enactive learning leads to better self-efficacy. The outcome expectations consist of six basic incentives which include monetary, social, status, novel, activity and internal incentives (Bandura, 1986) but can be, and have been, specifically adapted according to the research purpose. The construct habit strength is a measure for the degree of the self-monitoring sub function of self-regulation; the stronger the habit strength, the less is one able to monitor one’s self-regulation (LaRose & Eastin, 2004). The construct self-regulation (Bandura, 1986) “describes how individuals monitor their own behavior, judge it in relation to personal and social standards, and apply self-reactive incentives to moderate their behavior (Peters, 2009, p.34)”. Deficient self-regulation means that one is not attentive, which can be a result of habitual behavior (LaRose & Eastin, 2004).

The five determinants are supposed to explain and predict media behavior (LaRose & Eastin, 2004).

The model of media attendance seems to be the best theory-driven model because it “is most in accordance with and faithful to its background theory from which it is derived (Peters, 2009, p.120)”. The variable outcome expectations, e.g., “is organized around six basic types of incentives for human behavior [that] are theoretically constructed on the basis of social cognitive theory (Bandura, 1986), rather than statistically derived from exploratory factor analysis (LaRose & Eastin, 2004) as is the case with expectancy-value judgments (Peters, 2009, p.120)”. The same is true for the variables self-efficacy, habit strength, and deficient self-regulation (Peters, 2009). In sum, the model of media attendance explicitly describes the dynamics among the variables in the model based on the background theory from which the model is derived, namely social cognitive or social learning theory. LaRose and Eastin (2004) also concluded that the model extends the uses and gratifications theory by using outcome expectations instead of gratifications sought. This better fits with social cognitive theory (La Rose & Eastin, 2004).

In this paper the model of media attendance is used as a point of reference and as a guideline because it has some advantages compared to the other two described theoretical perspectives: Peters (2009) concludes in his research that the model of media attendance is more complex and more adequate because the interrelated theoretical mechanisms are included in the model, as well as the variables that are thought to be independent of the other variables which are part of the model (Peters, 2009). Another advantage is that the model focuses more on behavioral mechanisms such as outcome expectations, habit strength, and self-regulation that influence the media use (Peters, 2009). The model is the most elaborated model in terms of expressing underlying causal mechanisms that seem to influence media behavior (Peters, 2009).

Furthermore, the percentage explained variance accounted for by the model of media attendance was 76% and therefore higher than when using one of the other two models.

A disadvantage is that the constructs in the model of media attendance are theoretically rather than statistically derived.

Prior research, using the model of media attendance, has yielded the following results; concerning the usage of a medium, habit strength is a stronger predictor than outcome expectations, whereas for the adoption of a medium the opposite is the case (Peters, 2009). Especially, activity, status, and monetary outcome expectations are strong predictors of future adoption of a medium (Peters, 2009), especially when the use of mobile technology is being examined.

Other research areas, in which the model has been applied, are the downloading and file sharing behavior (LaRose, Lai, Lange, Love & Wu, 2005) and the downloading behavior of movies (Jacobs, Heuvelman, Tan & Peters, 2012).

Results of the first study contain that expected positive outcomes partially influence the current downloading activity as well as the future downloading intentions, whereas expected negative outcomes only negatively influence future downloading intentions. The file sharing as well as the coping self-efficacy is in both cases positively related to the downloading behavior. Deficient self-regulation is only a predictor of future downloading intentions (LaRose, Lai, Lange, Love & Wu, 2005).

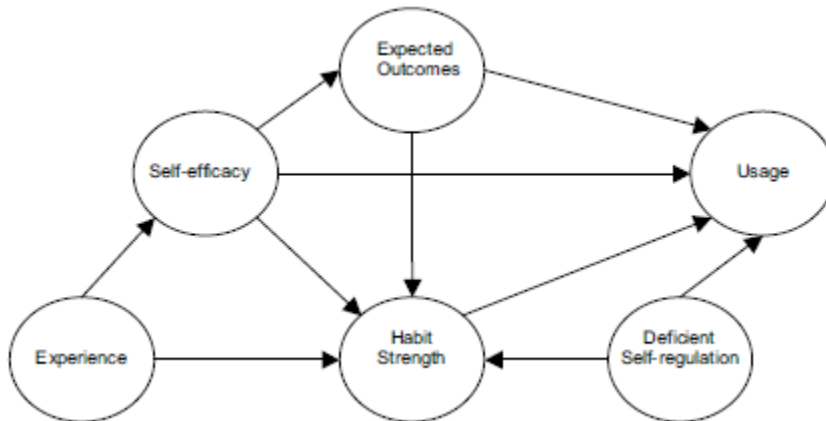
The second study finds that deficient self-regulation is directly and positively related to the number of downloads, as well as are descriptive norms, all measured outcome expectations and the social environment. Moral justification and self-efficacy do not seem to be related to the number of downloads (Jacobs, Heuvelman, Tan & Peters, 2012).

The aim of this study is to provide insight in some of the factors that influence the usage of online and traditional newspapers. For this aim, the model of media attendance serves as a guideline and it will be examined to what degree the model will explain online and traditional newspaper usage. In short, differences for the usage of the online and the traditional version are supposed to be investigated as well as it is supposed to be tested, in how far the model is correctly explaining the dependent variable in both groups. Details about the research questions are given in the next paragraph.

However, in prior research, the following underlying relations between the five variables are hypothesized and tested: Experience, as an independent variable, is supposed to influence the self-efficacy and habit strength. Habit strength is also influenced by self-efficacy and by expected outcomes and, in turn, it is supposed to directly influence the usage, as well as expected outcomes, which are also influenced by self-efficacy.

Self-efficacy is also supposed to have an influence on the usage, directly. Deficient self-regulation is supposed to be an independent variable, affecting both, habit-strength and the usage, eventually. These underlying relations are presented in figure 1 (LaRose & Eastin, 2004).

Figure 1. Model of media attendance (LaRose & Eastin, 2004).



The hypotheses were tested in the context of mobile adoption and use of technology (Peters, 2009), but no concrete motives are given for hypothesizing underlying relations between the variables of the model for the purpose of explaining the usage of online and print newspapers, because no piece of research until now has studied in how far the model and the determinants explain the usage of online and traditional print newspapers. Therefore, there is no reason to make assumptions as a consequence of prior research for the purpose of this study. As a conclusion, no hypotheses were tested, but two research questions were investigated.

To go on, first a definition about what can be understood as a typical online newspaper is given. Online newspapers, or web newspapers, are “online editions of the newspapers available on the web, with special characteristics such as navigation support, advertisement, and style of presenting the news (Panda & Swain, 2011, p.55)”, e.g. *De Telegraaf*, *NRC Handelsblad*, *Süddeutsche Zeitung*, *Die Welt*.

In the following section, the research questions of this study are explained.

1.3 Research questions

As Heuvelman, Peters and Fennis (2009) state, the use and adoption of a certain medium is dependent on the stadium in which a medium is in, e.g., a medium that is fully adopted or a medium that is still new on the market. Intentions and habit play a crucial role in explaining an already accepted medium, whereas outcome expectations are of great importance in the adoption of a new medium (Heuvelman, Peters & Fennis, 2009). The traditional newspaper exists around

400 years; the online newspaper is a relatively modern medium which exists since the early nineties. Concerning the data (cp. CSB 2008, 2009a, 2009b, 2011), the recent use of both media and the motivation to use one of the media, controversies were found, as mentioned above. Furthermore, the traditional version has longer been used and predicted to be substituted increasingly by several authors (e.g. Kaye & Johnson, 2003, De Waal, Schönbach & Lauf, 2004). Both media seem to be fully accepted, however. Therefore, the focus of this study lies on explaining current media usage because the adoption of both media has already taken place. This study is supposed to point out the different factors for using the online or the traditional version of newspapers, as well as in how far the determinants of the model predict the dependent variable usage.

In sum, the goal of this study is to examine the differences between the factors that might explain the usage of online and traditional newspapers, as well as the differences in explained variance for both purposes. From this goal the two following research questions are derived:

RQ1: In how far do the social psychological determinants of the model of media attendance, which are the expected outcomes, as well as experience, self-efficacy, habit strength and deficient self-regulation, differ between readers of online newspapers and readers of traditional print newspapers?

RQ2: In how far does the variance in usage, explained by the model, differ for both groups; online and traditional readers?

Regarding the first research question, the expected outcomes, which play a role in this study, are social, activity, monetary, self-reactive, information, comfort, and usability outcomes. Expected monetary outcomes can be seen as financial consequences or the financial effort that has to be taken to purchase or read a newspaper. Comfort outcomes describe how easy or comfortable it might be to read a newspaper. Self-reactive outcomes refer to what degree reading a newspaper is an activity to pass free time. To get a better understanding of the constructs, an overview of the items, which were used in this study, is given in tables 2 and 3.

2. Method

2.1 Procedure and respondents

Gathering data from the respondents, a cross-sectional design has been used, which means that data were collected at one point of time (Vos, 2009). Respondents were approached via the personal social network, as well as via the snowball sampling technique, in which respondents, who receive the link to the questionnaire, were asked to further distribute and share the link to their personal network. The social network Facebook was used to reach as many people as possible. Messages, containing the link to the questionnaire, were sent to most of the contacts. People were asked to fill in the questionnaire and further distribute the link to friends and relatives. Study related groups on Facebook have also been used to share the link. Purposive sampling was used for possibly reaching online users, considering newspapers' comment functions where the link is placed, hoping that some of the users would react to the link. Furthermore the link has been distributed via mail to the researcher's personal network. Additionally, the e-mail distributor of the University of Twente was used to reach students enrolled in courses related to media psychology, hoping that some of them would return filled-in questionnaires or further distribute the link to others.

The questionnaire was started 252 times. However, 16 questionnaires were incomplete or not appropriately filled in. Some respondents did not indicate their gender or even omitted larger parts of the questionnaire, e.g. All data from respondents with missing data have been removed from the dataset. In total, 236 (N=236) complete questionnaires were part of the dataset.

The mean age of the respondents was 24.8 years and the age of all respondents ranged from 17 years to 67 years.

41.5% of the respondents is male, 58.5% female. Regarding the educational level, 0.4% (N=1) go to Primary or Elementary School, 17.4% (N=41) to Secondary or High School, and 79.2% (N=187) reach the College or University level. 3% (N=7) says they have another educational level than the three options. 26.7% of the respondents is Dutch (N=63), 63.6% German (N=150) and 9.7% (N=23) report a different nationality than Dutch or German. An overview of these results is given in table 1.

Regarding the usage of the two different media, online and traditional newspapers, 61.6%

(N1=146) said they spend more time reading online newspapers, whereas 38.4% (N2=90) spend more time reading traditional print newspapers. These two groups are compared in regard of their media behavior as well as the determinants that are supposed to influence media usage.

Regarding the group who more often reads online newspapers, it can be said that 45.2% is male and 54.8% female. The mean age is 23.2 years. 16.4% indicate having a Secondary School degree and 80.1% a College or University degree. 27.4% of the online newspaper readers is Dutch, 63.7% German, and 8.9% do have another nationality. When reading an online newspaper, 70.5% use a personal computer, laptop, or netbook, 7.5% a tablet computer, and 20.5% a mobile or smart phone. 32.9% states having subscribed to a newspaper, 4.8% purchase a traditional newspaper a few days a week, and 28.1% a few days a month. An overview of these results can be found in table 1.

Regarding the group which contains respondents who more often read traditional newspapers, it can be said that 35.6% is male and 64.4% female. The mean age is 27.4 years. 1.1% indicates Elementary School as their educational level, 18.9% Secondary School, and 77.8% College or University. 25.6% is Dutch, 63.3% German, and 11.1% has another nationality than Dutch or German. When consuming an online version of a newspaper, the traditional users are reading on a personal computer, laptop, or net book (73.3%), PDA (1.1%), tablet computer (1.1%), or a mobile or smart phone (16.7%). 60% of the readers of traditional newspapers has a newspaper subscription, 12.2% buy one a few days a week, and 15.6% a few days a month. An overview of these results is also given in table 1. Details about possible significant differences between both groups regarding these factors are given in the results section in the following paragraphs.

2.2 Questionnaire

The link to the questionnaire was provided online. The website program *Thesistools* was used to create the questionnaire, as well as make possible the distribution of the link to the online survey. The questionnaire included nine pages, in total. An introduction to the questionnaire, as well as some explanation information, was given on the first page.

On the second page, demographic information (gender, age, educational level, and nationality) was asked as well as two general questions about using online and traditional newspapers (a question about how users read the newspaper; on the computer, via a tablet PC, e.g. or for the traditional version, how often they get one, or if the respondent has a subscription to a

newspaper, e.g.). The last general question was if the respondent spends more time on reading an online newspaper or a traditional newspaper. When he or she answered he spent more time on reading online newspapers, he was directed to page three of the questionnaire on which one item measured the experience and two items the degree of usage. On page four and five the respondent had to answer statements about reading online newspapers by choosing the degree of agreement on a seven point Likert-scale. After finishing the statements, the respondent was directed to the end of the questionnaire. An overview of the items, which were used for online newspaper readers, is given in table 2.

When he or she indicated spending more time on reading traditional newspapers, he or she was directed to page six of the questionnaire, on which one item measured the experience and two items the degree of usage of traditional newspapers. On page seven and eight the respondent had to answer statements about reading traditional print newspapers by choosing the degree of agreement on a seven point Likert-scale. After finishing the statements, the respondent also was directed to the end of the questionnaire. An overview of the items, which were used for traditional newspaper readers, is given in table 3.

The online survey has thus been designed for two groups; the group spending more time on online newspapers and the group spending more time reading traditional print newspapers. Therefore, seven identical items have been presented to both groups, whereas the remaining items were provided for just one of the two groups, depending on whether they spend more time reading online or traditional newspapers.

In total, each version of both questionnaires contained 30 items with statements that searched to measure each of the four determinants, which are expected outcomes, self-efficacy, habit strength and deficient self-regulation. Expected outcomes in this study consisted of seven incentives, which were the same for both, online and traditional newspapers. The incentives were social, activity, monetary, self-reactive, information, comfort, and usability outcomes. Only the items of the incentives monetary and usability outcomes differ for both purposes. Each construct was measured by three items that were stated differently, but were supposed to measure the same construct.

The items regarding the determinants of the model of media attendance have already been used in prior research, partially (cp. Jacobs, Heuvelman, Tan & Peters, 2012 and LaRose & Kim, 2007).

LaRose and Kim (2007) studied many of the same factors. Therefore, several items were adopted from their study whereas others were made more specific to the purpose of this study. Some factors were new, however. Therefore, original items were created by the researcher, such as the items of the expected comfort and usability outcomes, which have been adapted to the purpose of this study, to make sure that the basic incentives of the expected outcomes fit to the usage of the online or traditional newspaper, respectively. For the determinants expected outcomes, self-efficacy, habit strength and deficient self-regulation, a 7-point Likert scale was used that ranged from ‘totally disagree’ to ‘totally agree’ to allow for greater variance resolution. Because the respondent had seven possible levels of agreement, the respondent gets a score between one and seven (Vos, 2009, p.100).

In sum, the questionnaire for one respondent consisted of 40 items, of which 30 items had to be answered on a seven point Likert-scale and nine items have to be answered through choosing checkbox answers, where only one answer is possible for each item. Eight times a polytomous format has been used in which each item has more than two alternatives (Kaplan & Saccuzzo, 2009, p.159) and one dichotomous format in which the item has two answer alternatives, gender, e.g. (Kaplan & Saccuzzo, 2009, p.159). The item about the age used an open question to make sure that the respondents could fill in their true age.

An overview of the items, regarding demographics and general newspaper consumption, can be found in table 1, as well as the three items, which are supposed to measure the determinant experience and the dependent variable usage. An overview of the items regarding the remaining variables of the model of media attendance is given in table 2 (online newspapers) and table 3 (traditional newspapers). The whole questionnaire can be found in the appendix.

2.3 Operational definitions

One important definition, which is the basis for the purpose of this study, has already been mentioned in the previous section. Nevertheless, it is also important to point out the assumptions that underlie this study. In this study, a categorization has been made with the help of one item, containing the question on which medium the user spends more time reading; an online newspaper or a traditional print newspaper. Based on the answer on this question, two groups are created; one group in which the members spend more time reading an online newspaper, and one

group in which the members spend more time reading traditional print newspapers. This is the basis for this piece of research, in which the social psychological determinants shall be compared for using online, respectively traditional newspapers. Therefore, we speak of two independent samples which will be compared to each other regarding demographics and determinants of the model of media attendance.

Another important definition is needed for the variable experience, which is also one of the social psychological determinants that are supposed to explain the usage of a medium. In this study, the variable experience was measured by an item that asked how long the respondent has already been using the medium of consideration.

The actual usage of the medium was measured with the help of two items. One item measured how often a user reads an online or traditional newspaper, the second item measured how much time a user spends while reading a newspaper, at once. A product variable has been made by multiplying the values of both items. More about this can be found in the following section.

2.4 Data analysis

In this study, the program IBM SPSS Statistics 20 was used to run all analyses.

All analyses are based on the fact that there are two independent samples. Descriptive statistics such as means and standard deviations are calculated, as well as a reliability analysis of the (sub) scales and the Mann-Whitney rank sum test to investigate differences between the two groups regarding the determinants that are assumed to explain the dependent variable. A chi-square test is done for the same purpose but containing categorical data, instead of the scale- items of the determinants expected outcomes, self-efficacy, habit strength, and deficient self-regulation. These tests are supposed to answer the first research question (RQ1), stated in the previous section. Furthermore, a linear regression analysis was run to investigate the second research question (RQ2) as well as the general influence of the single determinants on the dependent variable. Mann-Whitney rank sum tests and Chi-square tests were also calculated for additional analyses besides the two research questions.

First of all, modifications have been made to prepare the dataset for further analysis. Respondents with missing values have been excluded, and negatively stated items have been re-coded in such a way that they are suitable for further analysis. The two items that are supposed to represent the

dependent variable usage were multiplied with each other to get one product variable. The items of consideration are “How often do you read online newspapers?” and “How long do you stay reading an online newspaper on the average visit of the newspaper’s page?” for the usage of the online medium and “How often do you read print newspapers?” and “How long do you stay reading a newspaper when you are using it, on average?” for the traditional medium. In both cases, the two items could be answered through five alternatives, so that the scores of this product variable could reach from 1 to 25. The higher the score, the more intense is the usage of the medium. The items of the sub scales have been added, to get a sum score of each subscale. Afterwards, mean scores were calculated for each construct by dividing each sum score through two or three, dependent on whether one item has been deleted to heighten the degree of reliability. Furthermore, analyses of reliability were run to measure the internal consistency of the subscales. Cronbach’s Alpha was calculated as a measure of the inter-item reliability (Vos, 2009, p.83). This procedure is suited for items with three or more answer options and therefore suitable for the items containing the seven point Likert- scales, the items of the subscales which are intended to measure the expected outcomes, self-efficacy, habit strength, and deficient self-regulation, e.g. With this analysis, it could be checked in how far the three different items of one subscale measure the same construct, which is supposed to be represented by the three similar, but not identical, items (Vos, 2009, p. 76). This procedure has been executed twice; one time for the sample of online newspaper readers and another time for the traditional print newspaper readers.

The results of the reliability analysis are summarized in table 2 and table 3 in the following section. In some of the constructs, one item has been deleted to heighten the degree of reliability. The items for which this was the case are marked in tables 2 and 3.

Also, a distribution test was done to check the distribution of the sample. Because there are two groups that are supposed to be compared in the context of this study, it was investigated whether the test variables in the two samples are normally distributed or not. Only a few variables were normally distributed. Because this was only the case in one of the two groups, non-parametric tests were used when there was the possibility of a non-parametric alternative of a statistical analysis. This was the result of normality plots with tests, including the levels of significance, which lead to the conclusion, to use non-parametric tests for the further investigation of the two groups.

Additionally, descriptive statistics were used to get a general overview of the whole sample, as well as the two groups of the sample (table 1).

Validity refers to the appropriateness, meaningfulness, and usefulness of the specific inferences made from measures; thus validity does not only belong to a measure, but depends on the fit between the measure and its label (Vos, 2009, p.76) This has already been tested by LaRose and Kim (2007) and therefore it is not of great importance in this study because the items are closely related to the original items used by LaRose and Kim (2007). For details, view the section “discussion”.

To get an insight in the possible differences between the social psychological determinants in users of online and traditional newspapers, the non-parametric Mann-Whitney Test for two independent samples was executed, as well as a Chi-Square Test for the variables containing categorical, instead of scale data.

Regression analyses were performed to investigate the possible single influences of each of the determinants on the dependent, as well as for answering the second research question.

In the following table, demographics, as well as general information are given to get an overview of the sample, especially regarding the characteristics of the two groups.

Table 1. Summary of demographics and general newspaper consumption.

The two groups have been chosen on the basis of the answer on the item “On which medium do you spend more time reading a newspaper?”. Indicated a respondent spending more time reading an online newspaper, he or she has been ascribed to the online newspaper group, indicating that he or she spends more time reading a traditional print newspaper, the respondent has been ascribed to the traditional newspaper group. (Percentages in brackets.)

	Online	Traditional	Total
N	146 (61,9)	90 (38,1)	236 (100,0)
Gender			
<i>Male</i>	66 (45,2)	32 (35,6)	98 (41,4)
<i>Female</i>	80 (54,8)	58 (64,4)	138 (58,8)
Age (<i>mean</i>)	23,2	27,4	24,8
Educational level			
<i>Primary School</i>	0	1 (1,1)	1 (0,4)
<i>Secondary School</i>	24 (16,4)	17 (18,9)	41 (17,4)
<i>College/ University</i>	117 (80,1)	70 (77,8)	187 (79,2)
<i>Other</i>	5 (3,5)	2 (2,2)	7 (3,0)
Nationality			
<i>Dutch</i>	40 (27,4)	23 (25,6)	63 (26,7)
<i>German</i>	93 (63,7)	57 (63,3)	150 (63,3)
<i>Other</i>	13 (8,9)	10 (11,1)	23 (9,7)
Channel Online Newspaper			
<i>PC, Laptop, Netbook</i>	103 (70,5)	66 (73,3)	169 (71,6)
<i>PDA</i>	0	1 (1,1)	1 (0,4)
<i>Tablet PC</i>	11 (7,5)	1 (1,1)	12 (5,1)
<i>Mobile/ Smart Phone</i>	30 (20,5)	15 (16,7)	45 (19,1)
<i>Other</i>	2 (1,4)	7 (7,8)	9 (3,8)
Purchase Traditional Newspaper			
<i>Newspaper Subscription</i>	48 (32,9)	54 (60,0)	102 (43,2)
<i>A few days a week</i>	7 (4,8)	11 (12,2)	18 (7,6)
<i>A few days a month</i>	41 (28,1)	14 (15,6)	55 (23,3)
<i>Other</i>	50 (34,2)	11 (12,2)	61 (25,8)
Experience			
<i>Up to one month</i>	3 (2,1)	1 (1,1)	4 (1,7)
<i>Up to a half year</i>	7 (4,8)	1 (1,1)	8 (3,4)
<i>Up to one year</i>	48 (32,9)	7 (7,8)	55 (23,3)
<i>Up to five years</i>	79 (54,1)	30 (33,3)	109 (46,2)
<i>Up to ten years or longer</i>	9 (6,2)	51 (56,7)	60 (25,4)
Usage 1			
<i>Once a month or less</i>	5 (3,4)	5 (5,6)	10 (4,2)
<i>Severals days a month</i>	10 (6,8)	18 (19,9)	28 (11,9)
<i>Once a week</i>	10 (6,8)	10 (11,1)	20 (8,5)
<i>Several days a week</i>	47 (32,2)	33 (36,7)	80 (33,9)
<i>Daily</i>	74 (50,7)	24 (26,7)	98 (41,5)
Usage 2			
<i>Up to 15 minutes</i>	91 (62,3)	27 (30,0)	118 (50,0)
<i>Up to half an hour</i>	41 (28,1)	53 (58,9)	94 (39,8)
<i>Up to one hour</i>	12 (8,2)	8 (8,9)	20 (8,5)
<i>Up to two hours</i>	2 (1,4)	2 (2,2)	4 (1,7)
<i>More than two hours</i>	0	0	0

3. Results

This paragraph contains detailed descriptions of the results of testing the research questions, as well as the results of the additional analyses.

First of all, table 2 and 3 give an overview of the determinants of the model of media attendance and the items used for each group and each determinant. Means and standard deviations are given, as well as the measures of reliability of the whole scale, parts of the scale and the sub scales. Also, measures of reliability are shown, when a certain item has been deleted from a sub scale. In cases, in which the measure of reliability was not sufficient enough, the whole construct, represented by the sub scale, was not taken into account in further analyses. This was the case for the expected comfort outcomes in both groups. The measure of reliability was not sufficient enough for the expected monetary outcomes in the group of readers of traditional print newspapers. However, in the other group, the measure reached a sufficient level of reliability and therefore was taken into account in further analyses. A sufficient level of reliability is mostly assumed when the value of Cronbach's Alpha is 0.7 (Cortina, 1993). In this study, this level of a sufficient degree of reliability is taken as a guideline. In some cases, an alpha value was regarded as sufficient when it is near the 0.7. More about reliability can be found in the section discussion. As a consequence of the results of the reliability analyses, in this study, six incentives of expected outcomes were used instead of seven as assumed in the beginning of the research procedure. Therefore, analyses have only taken into account the social, activity, monetary, self-reactive, information and usability outcomes, as well as the determinants experience, self-efficacy, habit strength, and deficient self-regulation.

Afterwards, the results of analyzing the two research questions are given in the following section. Overviews of these results are given in table 4, regarding the first research question (RQ1), and in table 5, regarding the second research question (RQ2).

Additional analyses are also performed, of which the results are presented in tables 6-15.

Table 2. Items used in survey about reading online newspapers. Included are the values of Cronbach's Alpha as measures of reliability, means and standard deviations.

(Sub)scale/ item (Cronbach's Alpha)	Mean	SD
Full scale ($\alpha=0,89$, comfort outcomes are not taken into account)		
<i>Expected outcomes</i> ($\alpha=0,84$)	4,93	0,79
Social outcomes ($\alpha=0,59$)	3,01	1,21
I read online newspapers because I can talk about it with others	3,58	1,79
I read online newspapers because it is important for my social life	3,51	1,73
When I do not read a print newspaper, my social contacts will suffer	1,92	1,35
Activity outcomes ($\alpha=0,88$)	5,24	1,23
I read an online newspaper because I like it	5,63	1,38
Reading an online newspaper is a pleasure to me	4,93	1,38
Reading an online newspaper is a nice activity	5,17	1,36
Monetary outcomes ($\alpha=0,71$)	5,40	1,32
Reading an online newspaper is cost-efficient	5,62	1,55
Reading an online newspaper saves money	5,59	1,61
I like reading online newspapers because they are for free	5,01	1,81
Self-reactive outcomes ($\alpha=0,68$)	4,68	1,32
I read online newspapers to relax	4,39	1,65
I read online newspapers to pass time	4,82	1,62
I read online newspapers when there is nothing else to do	4,84	1,79
Information outcomes ($\alpha=0,91$)	5,98	1,15
I read online newspapers to get informed	5,97	1,32
Reading an online newspaper is a good way to get important information	6,00	1,18
Reading an online newspaper is a good way to constantly stay informed	5,97	1,25
[Comfort outcomes ($\alpha=0,53$)]	(5,10)	(1,16)
[I read an online newspaper because it is comfortable reading it]	(4,93)	(1,53)
[I can read my newspaper where I want]	(5,10)	(1,74)
[I can easily stop reading it and continue later]	(5,27)	(1,59)
Usability outcomes ($\alpha=0,68$)	5,28	1,13
I can easily switch between articles of the online newspaper	5,69	1,35
I read an online newspaper because it is easy to navigate through its content	4,84	1,55
I can always find back information that seems interesting to me	5,27	1,45
<i>Self-efficacy</i> ($\alpha=0,91$)	6,45	1,11
I am able to read an online newspaper without the help of others	6,65	1,03
It is no problem for me to read an online newspaper	6,37	1,26
I have the skills to read an online newspaper	6,33	1,32
<i>Habit strength</i> ($\alpha=0,92$ ($\alpha=0,83$))	4,74	1,90
Reading an online newspaper is part of my daily routine	4,84	2,04
(Not to read an online newspaper is unimaginable for me)	(3,25)	(2,00)
I am used to read online newspapers routinely	4,64	1,91
<i>Deficient self-regulation</i> ($\alpha=0,86$)	2,05	1,33
I have a hard time keeping my online newspaper use under control	2,08	1,51
I feel my online newspaper use get out of hand	2,30	1,73
I have unsuccessfully tried to reduce my time spending on reading an online newspaper	1,77	1,26

Table 3. Items used in survey about reading traditional print newspapers. Included are the values of Cronbach's Alpha as measures of reliability, means and standard deviations.

(Sub)scale/ item (Cronbach's Alpha)	Mean	SD
Full scale ($\alpha=0,76$, comfort outcomes are not taken into account)		
<i>Expected outcomes</i> ($\alpha=0,72$)	4,75	0,59
Social outcomes ($\alpha=0,68$)	3,23	1,15
I read print newspapers because I can talk about it with others	3,96	1,61
I read print newspapers because it is important for my social life	3,96	1,75
When I do not read a print newspaper, my social contacts will suffer	1,93	1,11
Activity outcomes ($\alpha=0,88$)	5,47	1,17
I read a print newspaper because I like it	5,74	1,28
Reading a print newspaper is a pleasure to me	5,32	1,38
Reading a print newspaper is a nice activity	5,34	1,23
Monetary outcomes ($\alpha=0,53$ ($\alpha=0,19$))	4,27	1,14
The price I pay for my print newspaper is reasonable	4,90	1,40
Reading a print newspaper is cost-efficient	3,63	1,37
(If the price for reading a print newspaper was higher, I would not pay for it)	(4,48)	(1,50)
Self-reactive outcomes ($\alpha=0,65$ ($\alpha=0,54$))	4,33	1,55
(I read print newspapers to relax)	(4,77)	(1,42)
I read print newspapers to pass time	4,30	1,77
I read print newspapers when there is nothing else to do	4,36	1,83
Information outcomes ($\alpha=0,73$)	5,93	0,85
I read print newspapers to get informed	5,98	1,12
Reading a print newspaper is a good way to get important information	6,04	0,89
Reading a print newspaper is a good way to constantly stay informed	5,78	1,13
[Comfort outcomes ($\alpha=0,27$ ($\alpha=0,15$))]	(5,39)	(1,16)
[(I read a print newspaper because it is comfortable reading it)]	(4,84)	(1,36)
[I can read my newspaper where I want]	(5,21)	(1,60)
[I can easily stop reading it and continue later]	(5,58)	(1,45)
Usability outcomes ($\alpha=0,68$)	5,20	0,93
I can easily switch between articles of the print newspaper	5,19	1,40
I read a print newspaper because it is easy to go through its content	5,22	1,27
I can always find back information that seems interesting to me	5,19	1,06
<i>Self-efficacy</i> ($\alpha=0,71$ ($\alpha=0,65$))	6,37	0,80
(I am able to read a print newspaper without the help of others)	(6,51)	(1,10)
It is no problem for me to read a print newspaper	6,27	0,91
I have the skills to read a print newspaper	6,48	0,92
<i>Habit strength</i> ($\alpha=0,81$)	4,13	1,60
The use of a print newspaper is part of my daily routine	4,11	1,99
Not to read a print newspaper is unimaginable for me	3,48	1,90
I am used to read my print newspaper routinely	4,80	1,72
<i>Deficient self-regulation</i> ($\alpha=0,63$)	2,05	1,11
I have a hard time keeping my print newspaper use under control	1,86	1,28
I feel my print newspaper use get out of hand	1,96	1,41
I have unsuccessfully tried to reduce my time spending on reading a print newspaper	2,33	1,68

3.1 Investigating the research questions

Regarding the first research question (RQ1), in how far the determinants of the model differ between the two groups, the non-parametric Mann-Whitney rank sum test has been conducted for scale data, which are the six incentives of expected outcomes, experience, self-efficacy, habit strength, deficient self-regulation and the dependent variable usage. Table 4 gives an overview of the differences of the determinants between the two groups. Significant differences are found whenever the p-value is within the level of significance ($p \leq 0.05$).

This is the case with the expected monetary outcomes, the independent variable experience and the determinant habit strength. Expected monetary outcomes differ significantly between readers of online (Mdn=5.67) and traditional newspaper readers (4.00), $U=3183.50$, $z=-6.67$, $p<0.01$. Experience in using the medium differs significantly between the two groups (Mdn= 4.00 vs. Mdn=5.00), $U=2753.50$, $z=-8.023$, $p<0.01$. Levels of habit strength differ significantly between readers of online (Mdn=5.00) and traditional newspapers (4.00), $U= 5074.00$, $z=-2.95$, $p<0.01$. No significant differences are found between the two groups in the levels of expected social, activity, self-reactive, information, and usability outcomes, as well as in the determinants self-efficacy, deficient self-regulation, and the dependent variable usage.

Table 4. Results of the Mann-Whitney Test including median (Mdn), test statistic (U) effect size (z) and level of significance (p). Significance is reached when $p \leq 0.05$.

Variable	Mdn (Online)	Mdn (Traditional)	U	z	p
Social	3,00	3,33	5585,50	-1,94	>0,05
Activity	5,33	5,67	5780,00	-1,56	>0,10
Monetary	5,67	4,00	3183,50	-6,67	<0,01
Self-reactive	4,67	5,00	5818,50	-1,48	>0,10
Information	6,00	6,00	5882,50	-1,37	>0,10
Usability	5,33	5,33	6032,00	-1,06	>0,10
Experience	4,00	5,00	2752,50	-8,023	<0,01
Self-efficacy	7,00	6,50	5682,50	-1,91	>0,05
Habit strength	5,00	4,00	5074,00	-2,95	<0,01
Deficient self-regulation	1,67	1,67	6304,50	-0,54	>0,10
Usage	5,00	6,00	17032,50	-0,54	>0,10

Regarding the second research question (RQ2), a linear regression analysis was performed. The dependent variable usage is supposed to be influenced by the predictor experience, the six incentives of expected outcomes which are social, activity, monetary, information, self-reactive, and usability outcomes (comfort outcomes are not taken into account because of too low reliability), self-efficacy, deficient self-regulation, and habit strength.

Results of this test show that 28.1% of the variance in the dependent variable usage is explained by the model of media attendance, including all predictors. This is true for the group that reads online newspapers more often. This effect is significant ($p < 0.01$). For the group that reads traditional print newspapers more often, 37.4% of the variance in usage of the medium is explained by the determinants within significance level ($p < 0.01$). In short, the model predicts the usage of the two media significantly well. However, there have to be other factors that count for 71.9% of the variance in the usage of an online newspaper, and 62.6% of the variance in the usage of a traditional print newspaper. The numbers are summarized in table 5.

Table 5. Results of the linear regression analysis, testing to what degree the model of media attendance fits for both of the groups when explaining the dependent variable usage. Included are the values of R^2 and the significance level (p).

	Online		Traditional	
	R^2	p	R^2	p
Model of media attendance	0,281	<0,01	0,374	<0,01

3.2 Additional analyses

For differences between the two groups regarding categorical variables such as educational level, gender, nationality, or medium consumption and channel preference, which are not parts of the model of media attendance, a Chi-Square Test has been performed. The results of this test are shown in table 6, which presents an overview of the differences of the variables between the two groups. Significant differences between the types of newspaper readers are found the choice of the channel someone uses when reading an online newspaper $X^2(4) = 12.635$, $p < 0.05$, and the number of times someone buys a traditional newspaper $X^2(3) = 27.702$, $p < 0.01$. The differences

in the answer options per group are shown in table 7. No significant differences are found between the two groups regarding gender, educational level, or nationality.

Table 6. Results of the Pearson Chi-Square test including Pearson’s chi-square test statistic (X^2) and level of significance (p). Significance is reached when $p \leq 0.05$.

Variable	X^2	p
Gender	2,135	>0,10
Educational Level	2,125	>0,10
Nationality	0,350	>0,10
Channel used when reading an online newspaper	12,635	<0,05
Times someone buys a traditional print newspaper	27,702	<0,01

Table 7. Differences in the answer options per group for the variables Channel used when reading an online newspaper and the purchase of a traditional newspaper. Included are total numbers and percentages (in brackets).

Variable	Online (N=146)	Traditional (N=90)
Channel Online Newspaper		
<i>PC, Laptop, Netbook</i>	103 (70,6)	66 (73,3)
<i>PDA</i>	0	1 (1,1)
<i>Tablet PC</i>	11 (7,5)	1 (1,1)
<i>Mobile/ Smart Phone</i>	30 (20,6)	15 (16,7)
<i>Other</i>	2 (1,4)	7 (7,8)
Purchase Traditional Newspaper		
<i>Newspaper Subscription</i>	48 (32,9)	54 (60,0)
<i>A few days a week</i>	7 (4,8)	11 (12,2)
<i>A few days a month</i>	41 (28,1)	14 (15,6)
<i>Other</i>	50 (34,3)	11 (12,2)

To answer the second research question, a common linear regression analysis was performed to investigate to what degree the model explains the dependent variable. Also through performing regression analyses, but this time separately for each of the variables of the model, the influence of each single determinant on the dependent variable usage can be calculated. The results of these analyses are shown in table 8, which gives an overview about the separate influences of each individual variable. However, the influences of each variable as a part of the whole model are not investigated. There might be overlap among the variables of the model in predicting the usage by the various variables of the model. Details about this can be found in the section limitations.

Table 8. Results of separate linear regression analyses for each predictor, including values for R², beta and level of significance (p). Significance is reached when p ≤ 0.05. The dependent variable is usage which is supposed to be influenced by the different variables of the model separately.

Variable	R ²	Online		R ²	Traditional	
		Beta	p		Beta	p
Expected outcomes						
Social	0,053	0,230	<0,01	0,116	0,341	<0,01
Activity	0,038	0,194	<0,05	0,103	0,321	<0,01
Monetary	0,000	0,001	>0,10	0,017	0,132	>0,10
Self-reactive	0,025	0,158	>0,05	0,067	-0,259	<0,05
Information	0,024	0,156	>0,05	0,089	0,298	<0,01
Usability	0,003	0,053	>0,10	0,141	0,539	>0,10
Self-efficacy	0,005	0,070	>0,10	0,021	0,146	>0,10
Habit strength	0,230	0,479	<0,01	0,330	0,575	<0,01
Deficient self-regulation	0,029	0,170	<0,05	0,011	0,106	>0,10
Experience	0,077	0,278	<0,01	0,064	0,253	<0,05

The table shows the influences of each single variable on the usage of each of the both media; the online newspaper, as well as the traditional print newspaper.

Significant influences on the dependent variable are found in expected social (5.3%, p<0.01) and activity outcomes (3.8%, p<0.05) for explaining the usage of an online newspaper. Another significant influence was found in the predictor habit strength (23%, p<0.01) and deficient self-regulation (2,9%, p<0.05) which seem to significantly predict the usage of an online newspaper. Also experience in using a certain medium seems to play a significant role in predicting the usage of a medium (7,7%, p<0.01).

For the usage of a traditional print newspaper, the following significant influences are found; the influence of expected social outcomes seems to be 11.6% (p<0.01), the influence of expected activity outcomes 10.3% (p<0.01), the influence of expected self-reactive outcomes 6.7% (p<0.05), and of expected information outcomes 8.9% (p<0.01). Habit strength has an influence of 3.3% of the variance in usage (p<0.01) and experience an influence of 6.4% (p<0.05).

Influences of the other expected outcomes and determinants of the model of media attendance are not significant. However, it must be taken into consideration, that the single variables do have significant influences on the dependent variable, although the influence of each single variable was not investigated when they were part of the whole model.

Because of the great number of respondents in the different sub-groups of the sample, additional analyses can be performed regarding differences between the nationalities, educational levels, and gender.

To test whether there are differences between men and women regarding the determinants of the model, the Mann-Whitney rank sum test is performed. To test whether there is a difference in the medium choice between online and traditional newspapers, a Chi-Square test is performed. With the same test, it was also investigated if there are differences in the choice of the channel when reading an online newspaper, the purchase of a traditional newspaper, and the experience with the medium. The results are summarized in tables 9 and 10.

Table 9. Results of the Mann-Whitney rank sum test for comparing men and women regarding the determinants of the model of media attendance. Included are medians, the Mann-Whitney U, test size z , and p values as the significance level.

Variable	Mdn (Men)	Mdn (Women)	U	z	p
Social	3,00	3,33	6200,50	-1,09	>0,10
Activity	5,67	5,67	6710,50	-0,10	>0,10
Monetary	5,33	4,67	5740,50	-1,98	<0,05
Self-reactive	5,00	4,67	6312,00	-0,87	>0,10
Information	6,33	6,00	6517,00	-0,48	>0,10
Usability	5,67	5,33	6040,00	-1,41	>0,10
Experience	4,00	4,00	5936,00	-1,71	>0,10
Self-efficacy	7,00	7,00	6731,00	-0,07	>0,10
Habit strength	5,00	4,33	5362,50	-2,72	<0,01
Deficient self-regulation	2,00	1,33	5694,00	-2,12	<0,05
Usage	5,00	5,00	4991,00	-3,48	<0,01

Significant differences between men (Mdn=5.33) and women (Mdn=4.67) are found in the expected monetary outcomes ($U=5740.50$, $z=-1.98$, $p<0.05$), as well as the habit strength (men: Mdn =5.00, women: Mdn=4.33, $U=5362.50$, $z=-2.72$, $p<0.01$), deficient self-regulation (men: Mdn= 2.00, women: Mdn=1.33, $U=5694.00$, $z=-2.12$, $p<0.05$), and in the actual usage of the medium ($U=4991.00$, $z=-3.48$, $p<0.01$). Regarding the last difference, the medians for men and women are equal, but when having a look at the mean values, the significant difference becomes clear. Men have a mean value of 7.29 and women one of 5.79.

Table 10 shows that there are no significant differences between men and women in the choice of the medium, the channel used when reading an online newspaper, the purchase of a traditional

print newspaper, or the experience with the medium.

Table 10. Results of the Pearson Chi-Square test for differences between men and women. Included are Pearson's chi-square test statistics (X^2) and levels of significance (p). Significance is reached when $p \leq 0.05$.

Variable	X^2	p
Medium	2,135	>0,10
Channel used when reading online newspapers	2,51	>0,10
Times someone buys a traditional print newspaper	3,55	>0,10
Experience	4,50	>0,10

To test whether there are differences between Dutch and German people regarding the determinants of the model, the Mann-Whitney rank sum test is performed. To test whether there are differences between the two nationalities in the medium choice, the choice of the channel when reading an online newspaper, how often one purchases a traditional newspaper, or the experience using a medium, a Chi-Square test is performed. The 11 people who are neither Dutch, nor German are not taken into consideration.

The results regarding the comparison of Dutch and German respondents are summarized in tables 11 and 12.

Table 11. Results of the Mann-Whitney rank sum test for comparing Dutch and German respondents regarding the determinants of the model of media attendance. Included are medians, the Mann-Whitney U, test size z, and p values as the significance level.

Variable	Mdn (Dutch)	Mdn (German)	U	z	p
Social	2,67	3,33	3624,00	-2,69	<0,01
Activity	5,67	5,67	4550,00	-0,43	>0,10
Monetary	4,67	5,00	4402,00	-0,79	>0,10
Self-reactive	5,00	4,67	4251,50	-1,16	>0,10
Information	6,00	6,33	3633,50	-2,69	<0,01
Usability	5,33	5,33	4419,00	-0,75	>0,10
Experience	4,00	4,00	4539,00	-0,49	>0,10
Self-efficacy	6,67	7,00	4208,50	-1,39	>0,10
Habit strength	4,33	5,00	4418,50	-0,75	>0,10
Deficient self-regulation	1,67	1,33	4615,50	-0,28	>0,10
Usage	5,00	5,00	4298,00	-1,06	>0,10

The only significant differences between Dutch and Germans are found in expected social outcomes ($U=3624.00$, $z=-2.69$, $p<0.01$) and in expected information outcomes ($U=3633.50$, $z=-2.69$, $p<0.01$). Regarding the social outcomes, Germans ($Mdn=3.33$) seem to score higher than Dutch newspaper readers ($Mdn=2.67$). The same is true for expected information outcomes. Dutch respondents have a median of 6.00, whereas Germans have a median of 6.33. Furthermore, there seems to be a significant difference in the channels used, when Dutch and Germans read an online newspaper ($X^2=35.692$, $p<0.01$). This is shown in table 12. The exact differences between both groups can be found in table 13.

Table 12. Results of the Pearson Chi-Square test for differences between Dutch and German respondents. Included are Pearson's chi-square test statistics (X^2) and levels of significance (p). Significance is reached when $p \leq 0,05$.

Variable	X^2	p
Medium	0,042	>0,50
Channel used when reading online newspapers	35,692	<0,01
Times someone buys a traditional print newspaper	5,495	>0,10
Experience	0,511	>0,50

Table 13. Differences in the answer options per group for the variable Channel used when reading an online newspaper. Included are total numbers and percentages (in brackets).

Variable	Dutch (N=63)	German (N=150)
Channel used when reading online newspapers		
<i>PC, Laptop, Netbook</i>	27 (42,9)	122 (81,3)
<i>PDA</i>	0	1 (0,7)
<i>Tablet PC</i>	7 (11,1)	4 (2,7)
<i>Mobile/ Smart Phone</i>	26 (41,3)	17 (11,3)
<i>Other</i>	3 (4,7)	6 (4,00)

To test, whether there are differences in the determinants of the model between people with different educational levels, the Mann-Whitney rank sum test is performed. To test, whether there is a difference in the medium choice between people with different educational levels, a Chi-Square test is performed. The same test is performed to investigate the differences regarding channel choice when reading an online newspaper and how often on purchases a traditional newspaper. The tests are only performed for the people who indicated Secondary/ High School

and College/ University as their educational level. The one person who goes to Primary School is not taken into consideration. The results regarding the comparison of respondents with the two different educational levels are summarized in tables 14 and 15.

Table 14. Results of the Mann-Whitney rank sum test for comparing the two groups with different educational levels regarding the determinants of the model of media attendance. Included are medians, the Mann-Whitney U, test size z, and p values as the significance level.

Variable	Mdn (Secondary/ High School)	Mdn (College/ University)	U	z	p
Social	3,00	3,33	3622,50	-0,55	>0,10
Activity	5,33	5,67	3759,00	-0,20	>0,50
Monetary	4,67	5,00	3619,00	-0,56	>0,50
Self-reactive	4,33	5,00	3060,50	-2,03	<0,05
Information	6,33	6,00	3498,50	-0,89	>0,10
Usability	5,33	5,33	3127,50	-1,86	>0,05
Experience	4,00	4,00	3552,00	-0,79	>0,10
Self-efficacy	7,00	7,00	3428,50	-1,17	>0,10
Habit strength	4,50	5,00	3675,00	-0,42	>0,50
Deficient self-regulation	1,67	1,67	3618,00	-0,58	>0,50
Usage	8,00	5,00	3325,50	-1,35	>0,10

One significant difference seems to occur between people of the two educational levels regarding expected self-reactive outcomes ($U=3060.50$, $z=-2.03$, $p<0.05$). People who indicated College or University as their educational level scored significantly higher ($Mdn=5.00$) on expected self-reactive outcomes than those who indicated Secondary or High School as their educational level ($Mdn=4.33$). No significant differences between the two groups were found regarding the variables medium choice, the channel used when reading an online newspaper, the purchase of a traditional newspaper, or the level of experience with the medium. These results are shown in table 15.

Table 15. Results of the Pearson Chi-Square test for differences between the two groups with different educational levels. Included are Pearson's chi-square test statistics (X^2) and levels of significance (p). Significance is reached when $p\leq 0,05$.

Variable	X^2	p
Medium	1,840	>0,10
Channel used when reading online newspapers	3,607	>0,10
Times someone buys a traditional print newspaper	4,616	>0,10
Experience	7,465	>0,10

4. Discussion

In the following paragraphs a conclusion about the findings from the previous section will be given. The findings from this study will be compared to results from prior research. Also, limitations of this study will be discussed. Furthermore, recommendations for future research in the broader context of online and traditional newspapers will be given.

4.1 Conclusion

Regarding the first research question, significant differences between the two groups are found in expected monetary outcomes, experience, and in habit strength. One possible explanation for the difference regarding monetary outcomes might be that the online version of a newspaper is mostly cost free whereas a print newspaper has to be purchased, which leads to the conclusion that people who read an online newspaper are more motivated to use an online newspaper, simply because no purchase is necessary. For readers of traditional print newspapers, on the contrary, monetary outcomes might not be that important and other factors might play a role for choosing the medium although it is not cost-free. However, the interpretation must be taken carefully, as the reliability of the sub scale is not quite satisfying for the group consisting of readers of traditional newspapers and therefore the result might be mistaken. Details about this insufficiency can be found in the section limitations. An interpretation for the difference in the level of experience might simply be that traditional newspapers already exist longer than the online version, and therefore users might have read it for a longer period of time which, indeed, was measured as the level of experience, in this study. However, habit strength seems to play a more important role for reading online newspapers than for reading traditional newspapers. This is contrary to the finding that experience levels are higher in the group reading traditional newspapers. The model of media attendance hypothesizes that the higher the level of experience, the more it influences the habit strength (LaRose & Eastin, 2004). The result of the study on hand does not support the assumption in this regard, because the level of experience seems to be higher in traditional online newspapers, whereas the habit strength seems to be higher in reading online newspapers. However, the influence of habit strength on the dependent variable usage is quite high in comparison to the remaining determinants. This effect is found in both groups.

Regarding the second research question, it can be said that the model fits slightly better for the group of readers of traditional newspapers. The explained variance in usage is significant in both

groups, although there have to be other factors than explained by the model that count for 28.1% respectively, 37.4% of the variance in usage. In consequence, there must be other factors, the model does not take into account, that explain the remaining 71.9% of the variance in the usage of online newspapers and 62.6% of the variance in the usage of traditional print newspapers. One possible explanation for the higher percentage in the variance of the usage of traditional newspapers might be that the single influence of habit strength is higher in this group (33%) than in the group reading online newspapers (23%). Habit strength seems to be a predictor that takes the most part in the explained variance for both uses, online and traditional newspapers. Remaining factors, which are not taken into consideration by the model, might be personal preference due to factors as style or layout, how users got to know from the newspapers they read and content matters of the newspaper of consideration, e.g. However, the model of media attendance served as a guideline in this study. The model focuses on behavioral mechanisms. Probably there are other factors than behavioral mechanisms that explain the usage of online and traditional newspapers. More about this can be found in the recommendations section. Additional analyses showed that significant differences are also found in the channel choice when reading an online newspaper. Readers of online newspapers more often used a personal computer or laptop, a tablet computer or a smart phone while readers of traditional newspapers mainly used a personal computer, laptop or a smart phone. Readers of traditional newspapers also had more often newspaper subscriptions and more often purchased printed newspapers. This goes hand in hand with the division into the two groups, made on the basis of the question, on which medium they spend more time reading. Regarding differences between men and women, it can be said that men scored significantly higher on expected monetary outcomes, on habit strength, deficient self-regulation and in the actual usage of a medium. Men seem to read newspapers more often. Significant differences between Dutch and Germans are found in activity and information outcomes, on which Germans seem to score higher, as well as in the channel choice when reading an online newspaper. Dutch seem to more often use a laptop or personal computer, tablet computer or a smart phone, whereas Germans used most often a personal computer or laptop. One significant difference was found between the two educational levels; people with a college or university degree significantly scored higher on self-reactive outcomes than respondents with a secondary or high school degree. One possible explanation might be that higher educated people

are more likely to spend their leisure time with reading newspapers than lower educated respondents.

Comparing the results of this study to already existing scientific literature is difficult, because no such study existed before. Studies containing the model of media attendance mainly focused on the use and adoption of mobile technology (Peters, 2009), downloading behavior (Jacobs, Heuvelman, Tan & Peters, 2012 and LaRose, Lai, Lange, Love & Wu, 2005), or file sharing behavior (LaRose & Kim, 2007). However, Peters (2009) concluded that habit strength is a stronger predictor for the usage of a medium than expected outcomes, which was also the case in this study. This is true for both, the usage of online as well as traditional newspapers.

Furthermore, in his study, the model explained 76% of the variance in mobile phone usage, whereas in this study the percentage was smaller for both, the usage of online and traditional newspapers. Jacobs, Heuvelman, Tan & Peters (2012) concluded that deficient self-regulation directly influences downloading behavior. In this study, the result was similar; deficient self-regulation significantly increased the usage of online newspapers, although this effect is quite small (2,9%). However, a significant influence of deficient self-regulation was not found for the usage of traditional newspapers. Self-efficacy did not seem to be related to the number of downloads (Jacobs, Heuvelman, Tan & Peters (2012). Similar to this finding, self-efficacy does not seem to have an influence on the usage of online or traditional newspapers. Furthermore, Jacobs, Heuvelman, Tan & Peters (2012) used a refined and specified model of the social cognitive theory (Bandura, 1986) which explained about 23% of the variance in the number of downloaded movies. In this study, the model explains 28.1% of the variance in the usage of online newspapers and even 37.4% of the variance of the usage of traditional newspapers. LaRose, Lai, Lange, Love and Wu (2005) concluded that expected outcomes influence the current media usage, which was the downloading activity. In the current study, an influence of expected outcomes was found in social and activity outcomes for the usage of online newspapers, as well as of social, activity, self-reactive and information outcomes for the usage of traditional newspapers. Furthermore, they found that self-efficacy is related to downloading behavior (LaRose, Lai, Lange, Love & Wu, 2005). In this study, self-efficacy has not a significant influence on newspaper usage. Deficient self-regulation was found to be a predictor of future intentions, whereas in this study, deficient self-regulation was found to be a significant predictor

of current usage of online newspapers.

The studies about the usage of online and traditional newspapers (D'Haenens, Jankowski, & Heuvelman, 2004, e.g.) did not apply the model of media attendance, but focused on other factors. D'Haenens, Jankowski, and Heuvelman (2004) concentrated on differences in reader consumption and recall. One finding was that readers of the traditional version did not read more than readers of an online version. A similar result was found in this study, as the scores in usage were not significantly higher in readers of the traditional newspaper than in readers of online newspapers. However, in this study, no specific newspaper has been tested, as was the case in the study of D'Haenens, Jankowski, and Heuvelman (2004). Flavián and Gurrea (2007) also compared digital and traditional newspapers, but focused on the reading motivations. The results are difficult to compare, because the studies focused on different factors.

4.2 Limitations

Because this is the first study in which the model of media attendance is applied for comparing different factors in the usage of online and traditional newspapers, there are obviously some limitations. One of the major limitations is that there were low alpha values in some of the sub scales. This is the case in the items of the construct comfort outcomes in both groups, as well as for monetary outcomes in the group of readers of traditional newspapers. Because the sub scale comfort outcomes has got low alpha values in both groups ($\alpha=0.53$ vs. $\alpha=0.27$), the construct has not been taken into consideration during all analyses. However, the construct monetary outcomes has been taken into account, because the alpha value was quite satisfying in the group of online newspaper readers ($\alpha=0.71$). However, when making statements about the results, one has to be careful in comparing monetary outcomes between the two groups. Future research might concentrate on item construction for concepts that are new or different from the original model. More about this can be read in the following paragraph.

Another point of critique in this regard is that the whole scale was tested for reliability on the basis of the division into two groups; online and traditional newspaper readers. However, for the additional analyses, reliability has not been tested. The focus in these additional analyses did not lie in the reliability of the sub (scales) but more on how various factors differ between other groups; nationalities, genders and educational levels, e.g. However, for the actual purpose of this study, which was to compare online and traditional newspaper readers, the reliability of the sub

(scales) has been tested. The reliability of the whole scale is quite satisfying in both groups ($\alpha=0.89$ vs. $\alpha=0.76$).

Furthermore, the number of respondents in this study is questionable, regarding statistical analyses. Literature suggests different rules of thumb. When comparing two groups, Dijkstra and Smit (1999) suggest a number of five to ten respondents in each subgroup. Cohen, Manion and Morrison (2011) suggest a minimum sample size of 30 respondents when it comes to analyses with statistical programs. According to these criteria, the minimum number of respondents would have been reached. Following a rule of thumb (Vos, 2009), a sample size of a total of 300 respondents would be desirable, because in an ideal case, both groups would contain 150 respondents because there are 30 items. Assuming that five to ten persons per item would be sufficient, a minimum number of 150 respondents in each group would be desirable. In total, 252 respondents answered the questionnaire, of which 236 completely filled in questionnaires were returned. This number does not reach the desired minimum but for the scope of this study, in which data was gathered in a period of 14 days, the number of respondents is quite sufficient. Regarding the respondents, it must be noticed that the sample is not representative for the Dutch and German population. Probability sampling, in which everyone has the same chance to be chosen to take part in the study, as a form of random sampling, better results in a sample that is representative for the population (Vos, 2009). However, in this study purposive sampling and the snowball-technique have been used to reach possible respondents. Therefore, the results of this study cannot be generalized. This can be seen in the educational level of participants, e.g. Another limitation refers to the depth of the analyses. Although regression analyses have been performed, the actual influence of each single variable of the model on the dependent variable has not been tested. For this purpose, multiple stepwise regression analyses have to be performed, applying the “next”-method of linear regression. However, the model contains too many variables that might overlap. The overlap of the variables among them can be investigated in future research, to test the influence of the different variables of the model and all possible combinations of the variables to search for influences on the dependent variable. Although the separate influences of each variable are shown in table 8, the influences of the variables as a part of one common model are not tested. This could be accomplished in further research by applying structural equation modeling. This method is able to test and estimate causal relations by using statistical data as well as qualitative causal assumptions (Pearl, 2000).

4.3 Recommendations

This has been the first study which applied the model of media attendance to the purpose of comparing factors that might influence the usage of online or traditional newspapers. Therefore, only some aspects were tested. The focus in this study was to get an insight in differences between the groups regarding the variables of the model, as well as to test in how far the model explains the dependent variable in both groups. Because the research area in this field is broader than the scope of this study allows investigating, there are several recommendations for future research. More factors or constructs might be explored and adequate items that measure these constructs have to be created. The results of the regression analysis suggest that there have to be different factors that count for 71.9% of the variance in usage of online newspapers, and 62.6% of the variance in the usage of traditional newspapers. The variance explained by the model is therefore not that high, which means that there are obviously other factors than those included in the model of media attendance. Possible factors might be gender, age, educational level, occupation, and personal interests, e.g. When it comes to explaining media behavior, the specific medium of consideration might also play a role. In this regard, media efficacy and media literacy might also be important factors that were not taken into consideration by the model of media attendance. However, the model of media attendance, which served as a guideline in this study, mainly focuses on behavioral mechanisms. Other factors might be explored in qualitative studies, e.g. with the help of structured or unstructured interviews to get a deeper insight in the peoples' motivations for using a certain medium. Afterwards, categories or constructs might be created, as well as adequate items that might test the new constructs and the scales can be validated. The existing scales could be adapted or complemented by new constructs, also using new items or more items for measuring one single construct to heighten the reliability and internal consistency. Furthermore, this would also overcome one of the limitations of this study, namely the low degrees of reliability of two of the sub scales of expected comfort outcomes and monetary outcomes. Possibly, different items might have to be created for measuring these constructs. Future research might also focus on other research areas than these two media. Also social networks such as Facebook, blogs, forums, e.g. might be investigated when it comes to motivations and factors that influence media usage, especially the usage of information or news media. The model of media attendance might play a role in explaining the usage and consumption of these media, as well.

Studies like these, as well as this study might be useful when it comes to designing media or launching new products, e.g. When the motivations of people and factors that lead to media consumption are known, the product could be adapted to the needs. Also, insight would be given in peoples' motivations and usage criteria that might explain why the usage of a certain medium declines, or another medium becomes more and more important for users. When understanding the peoples' reasons of why they prefer a certain medium instead of another, the process of why and how media develop through certain phases would be better understood. This might be important for, among others, media psychologists and media designers, as well as for editors of (online) newspapers or other information media. Media designers and editors could further investigate what factors of their medium they themselves could influence that lead to stronger reading habits, which in turn, might lead to a more intensive consumption of their media. As results of this study suggest, habit strength is a significant predictor of both, reading an online newspaper as well as a traditional newspaper. However, readers of online newspapers seem to score higher on habit strength, although habit strength seems to stronger explain the usage of traditional newspapers. Media psychologists might study if this effect is shown in similar contexts and media designers and editors could use the results to make their media more attractive for habitual usage, as this seems to be one of the most important factors of explaining newspaper usage.

However, this study explains current media usage and does not predict any future use. Therefore, no predictions can be made for future developments or trends and nothing can be said about a possible replacement of traditional newspapers by online newspapers. To make statements about practical consequences like such developments and trends, research has to be conducted that searches to predict future media behavior or usage intentions instead of explaining current media usage. However, making such predictions is quite difficult and often has been tried in prior research (Rathmann, 2002; de Waal, Schönbach & Lauf, 2004; Gaskins & Jerit, 2012; Flavián & Gurrea, 2007a).

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Appendix

Questionnaire as it was provided online

[Page 1]

Dear newspaper reader,

First of all, thank you for participating in my study about the usage of online newspapers and traditional print newspapers. In the context of my bachelor thesis at the University of Twente, I'm doing research about different factors that influence people's media behavior.

This questionnaire contains statements about your consumption of online newspapers and traditional print newspapers.

Per question you can only choose one answer. You will be asked to select the answer which best fits your personal opinion. This means that there are no wrong answers. I kindly ask you to answer each question as honestly as possible. Of course, all answers are treated confidentially and anonymously.

Filling in the questionnaire will take 5 to 10 minutes.

Kind regards,
Arlette

[Page 2]

To get started, please fill in some general information about you. Please select the answer, which most appropriately describes your personal situation.

What is your gender?

- Male
- Female

What is your age?

[_ _]

What is your highest educational level (which you have completed by now)?

- Primary/ Elementary School
- Secondary/ Junior & Senior High School
- College/ University
- Other

What is your nationality?

- Dutch
- German
- Other

When reading an online newspaper, which channel do you use? (When you use more than one, please select the one on which you spend most of your time reading an online newspaper.)

- Personal computer, laptop or net book
- Personal Digital Assistant (PDA)
- Tablet PC
- E-reader
- Mobile phone/ Smart phone
- Other

When reading a traditional print newspaper, how often do you get one? (Please select the answer which fits best for you.)

- I (or my family/ flat) have/ has got a newspaper subscription
- A few days a week
- A few days a month
- Other

On which medium do you spend more time reading?

- An online version of a newspaper (*automatically go to [Page 3]*)
- A printed paper version of a newspaper (*automatically go to [Page 6]*)

[Page 3]

Online Newspapers:

According to the previous question, you spend more time reading an online newspaper.

The following questions are related to your usage of online newspapers. Please select the answer, which most appropriately describes your personal situation.

How long have you been reading online newspapers?

- up to one month
- up to a half year
- up to one year
- up to five years
- up to ten years or longer

How often do you read online newspapers?

- daily
- several days a week
- once a week
- several days a month
- once a month or less

How long do you stay reading an online newspaper on the average visit of the newspaper's page?

- up to 15 minutes
- up to half an hour
- up to one hour
- up to two hours
- more than two hours

[Page 4]

The following items contain statements about reading online newspapers. Answering these items, you can choose between 7 options per item. Please give an indication of how much the statements apply to you. The options range from totally disagree to totally agree. If you neither disagree nor agree, please select the center option.

1 = totally disagree

2 = disagree

3 = moderately disagree

4 = neither disagree nor agree

5 = moderately agree

6 = agree

7 = totally agree

I read online newspapers because I can talk about it with others [1- - - - -7]

Reading an online newspaper is a pleasure to me [1- - - - -7]

I read online newspapers when there is nothing else to do [1- - - - -7]

When I do not read an online newspaper, my social contacts will suffer [1- - - - -7]

I read online newspapers because it is important for my social life [1- - - - -7]

I read an online newspaper because I like it [1- - - - -7]

Reading an online newspaper is a nice activity [1- - - - -7]

Reading an online newspaper is cost-efficient [1- - - - -7]

I read online newspapers to relax [1- - - - -7]

Reading an online newspaper is a good way to get important information [1- - - - -7]

Reading an online newspaper saves money [1- - - - -7]

I like reading online newspapers because they are for free [1- - - - -7]

I read online newspapers to pass time [1- - - - -7]

I read an online newspaper because it is easy to navigate through its content [1- - - - -7]

I read an online newspaper because it is comfortable reading it [1- - - - -7]

I read online newspapers to get informed [1- - - - -7]

I can easily switch between articles of the online newspaper [1- - - - -7]

Reading an online newspaper is a good way to constantly stay informed [1- - - - -7]

I can read my newspaper where I want [1- - - - -7]

I can always find back information that seems interesting to me [1- - - - -7]

I can easily stop reading it and continue later [1- - - - -7]

[Page 5]

Again, the following items contain statements about reading online newspapers. Answering these items, you can choose between 7 options per item. Please give an indication of how much the statements apply to you. The options range from totally disagree to totally agree. If you neither disagree nor agree, please select the center option.

- 1 = totally disagree
- 2 = disagree
- 3 = moderately disagree
- 4 = neither disagree nor agree
- 5 = moderately agree
- 6 = agree
- 7 = totally agree

I am able to read an online newspaper without the help of others [1- - - - -7]

Reading an online newspaper is part of my daily routine [1- - - - -7]

It is no problem for me to read an online newspaper [1- - - - -7]

I feel my online newspaper use get out of hand [1- - - - -7]

I have the skills to read an online newspaper [1- - - - -7]

Not to read an online newspaper is unimaginable for me [1- - - - -7]

I am used to read online newspapers routinely [1- - - - -7]

I have a hard time keeping my online newspaper use under control [1- - - - -7]

I have unsuccessfully tried to reduce my time spending on reading an online newspaper [1- - - - -7]

This is the end of the questionnaire. Again, thank you for your participation!

If you would like to get informed about the results of this study, please enter your e-mail address.

Automatically directed to [Page 9]

[Page 6]

Print Newspapers:

According to the previous question, you spend more time reading a traditional print newspaper.

The following questions are related to your usage of print newspapers. Please select the answer, which most appropriately describes your personal situation.

How long have you been reading print newspapers?

- up to one month
- up to a half year
- up to one year
- up to five years
- up to ten years or longer

How often do you read print newspapers?

- daily
- several days a week
- once a week
- several days a month
- once a month or less

How long do you stay reading a newspaper when you are using it, on average?

- up to 15 minutes
- up to half an hour
- up to one hour
- up to two hours
- more than two hours

[Page 7]

The following items contain statements about reading print newspapers. Answering these items, you can choose between 7 options per item. Please give an indication of how much the statements apply to you. The options range from totally disagree to totally agree. If you neither disagree nor agree, please select the center option.

1 = totally disagree

2 = disagree

3 = moderately disagree

4 = neither disagree nor agree

5 = moderately agree

6 = agree

7 = totally agree

I read print newspapers because I can talk about it with others [1- - - - -7]

The price I pay for my print newspaper is reasonable [1- - - - -7]

I read print newspapers because it is important for my social life [1- - - - -7]

When I do not read a print newspaper, my social contacts will suffer [1- - - - -7]

I read a print newspaper because I like it [1- - - - -7]

Reading a print newspaper is a pleasure to me [1- - - - -7]

I read print newspapers to pass time [1- - - - -7]

I read print newspapers to get informed [1- - - - -7]

Reading a print newspaper is a nice activity [1- - - - -7]

Reading a print newspaper is cost-efficient [1- - - - -7]

If the price for reading a print newspaper was higher, I would not pay for it [1- - - - -7]

I read print newspapers to relax [1- - - - -7]

I can read my newspaper where I want [1- - - - -7]

I read print newspapers when there is nothing else to do [1- - - - -7]

Reading a print newspaper is a good way to get important information [1- - - - -7]

Reading a print newspaper is a good way to constantly stay informed [1- - - - -7]

I can always find back information that seems interesting to me [1- - - - -7]

I read a print newspaper because it is comfortable reading it [1- - - - -7]

I can easily stop reading it and continue later [1- - - - -7]

I read a print newspaper because it is easy to go through its content [1- - - - -7]

I can easily switch between articles of the print newspaper [1- - - - -7]

[Page 8]

Again, the following items contain statements about reading print newspapers. Answering these items, you can choose between 7 options per item. Please give an indication of how much the statements apply to you. The options range from totally disagree to totally agree. If you neither disagree nor agree, please select the center option.

- 1 = totally disagree
- 2 = disagree
- 3 = moderately disagree
- 4 = neither disagree nor agree
- 5 = moderately agree
- 6 = agree
- 7 = totally agree

It is no problem for me to read a print newspaper [1- - - - -7]

I am able to read a print newspaper without the help of others [1- - - - -7]

I have unsuccessfully tried to reduce my time spending on reading a print newspaper [1- - - - -7]

I have the skills to read a print newspaper [1- - - - -7]

Not to read a print newspaper is unimaginable for me [1- - - - -7]

I feel my print newspaper use get out of hand [1- - - - -7]

The use of a print newspaper is part of my daily routine [1- - - - -7]

I am used to read my print newspaper routinely [1- - - - -7]

I have a hard time keeping my print newspaper use under control [1- - - - -7]

This is the end of the questionnaire. Again, thank you for your participation!

If you would like to get informed about the results of this study, please enter your e-mail address.

[Page 9]

Automatically constructed end-page of the online program Thesistools, including note of thanks and possibility to enter the e-mail address to participate in more online surveys in the future.